

MEDIA RELEASE

17 outstanding firms and building projects recognised through inaugural BCA Integrated Digital Delivery Awards

- *BCA's Integrated Digital Delivery (IDD) Awards recognises leading firms and project teams for their efforts in applying IDD to achieve an increase of overall productivity and resiliency.*

Singapore, 8 September 2021 – Substantial savings in time, costs and resources and enabling work to carry on despite the ongoing pandemic – these are some of the benefits that firms and project teams have realised through adopting IDD in their processes from the onset. IDD also builds up a highly skilled workforce that can make use of the latest in architecture, engineering, construction and operations technologies.

Platinum Award firms: ONG&ONG Group and Woh Hup Pte. Ltd.

2 ONG&ONG Group is one of two Platinum award winners recognised for their exemplary implementation of IDD in their own organisation. In 2018, ONG&ONG Group initiated the workplace, workforce and workflow transformation for new technology adoption, cross-disciplinary integration, new breakthroughs and productivity gains. ONG&ONG Group invested in a cloud-based solution to shift towards a Common Data Environment (CDE) and enable remote working arrangements, which proved essential in limiting disruption to business operations during the COVID-19 pandemic. ONG&ONG Group was one of the few pioneers in Asia to attain the ISO 19650 certification for international BIM standards in 2020, opening business opportunities in both the local and international markets, even in the current pandemic climate.

3 The firm also set up a Digital Technology department, a centralised IDD driver to formulate IDD project execution strategy and conduct internal training programmes for staff to ensure all staff are equipped with the relevant knowledge and skillsets in BIM and Virtual Design and Construction (VDC). To further optimise IDD workflow, an in-house software development team was formed to develop BIM automation tools and customisation. Other in-house efforts such as digital campaigns, newsletters and induction programmes also helped to build interest and encourage a culture of continuous learning. A 'Digital Technology Support' online forum was set up to facilitate open discussions among staff to help address issues, challenges and share latest developments.

4 Said Mr. Ashvinkumar Kantilal, Group Chief Executive officer of ONG&ONG Group, "Some three years ago at our annual group corporate retreat, the theme was 'Disruptor vs Disrupted'. Collectively, all the directors in our Singapore and regional offices agreed that we will be the disruptors. This attitude resulted in greater work-related mobility through hot desking coupled with increased digitalisation using more automation tools, AR/VR solutions and being 100% on cloud platforms. The interconnectivity within the Group became seamless, and this investment has helped us to be better prepared and equipped to navigate the COVID-19 impact on our business and allowed us to continue to serve our clients and look after the projects with minimal disruption."

5 Woh Hup Pte. Ltd. ("Woh Hup") is the other Platinum award winner for their outstanding achievements made in adopting the use of IDD for large scale, complex projects such as C821A Kim Chuan Depot Extension, Punggol Digital District and the iconic Jewel Changi Airport. As one of the earlier adopters of IDD in the industry since the start of their journey in 2008, Woh Hup has nurtured their IDD capability over the years, beefing up their digital modelling team to almost 100 staff to date. More recently, digitalisation efforts enabled Woh Hup to tackle the COVID-19 pandemic without major disruptions in productivity and efficiency, particularly during the post-Circuit Breaker period when many in the construction industry were facing challenges to restart.

6 Woh Hup has demonstrated strong leadership in driving IDD adoption not just in their own firm, but they have also brought their supply chain and partners onboard. The firm has made an extensive effort in conceptualizing and implementing their own in-house IDD training programmes for their project teams and subcontractors, allowing their entire value chain to enjoy the benefits of digitalisation. Some examples of productivity gains arising from IDD adoption by Woh Hup include:

- Cutting down the time needed for modelling efforts with automation software by almost a third;
- Digitalised methods used to replace several manual processes on-site and off-site, enabling them to save a substantial two thirds of time required for inspections;
- Digital solutions used for defects management during project completion stage yielded time savings of approximately 44%.

Platinum Award building projects: Kallang Polyclinic and Paya Lebar Quarter

7 Two outstanding projects have clinched the Platinum award under the Project Category for the IDD awards. The first of two Platinum awards goes to the Kallang Polyclinic and Long-Term Care Facility as a showcase for IDD implementation in the design, fabrication, building and maintenance phases of the project. For example, the builder Tiong Seng Contractors Pte Ltd. deployed innovative solutions, such their in-house developed TS Connect solution, to digitally manage and optimise the design, scheduling and production of the project's Prefabricated, Pre-finished Volumetric Construction (PPVC) modules. This allowed 80% of the PPVC modules to achieve a 7-day production cycle. In addition, its Virtual Reality applications, also developed in-house, allowed project progress meetings to be done in an immersive 3D virtual environment, making key milestones like decision-making more efficient and resulting in a 30% improvement in overall time savings.

8 Adoption of digital technologies also took away the constraints of physical meetings particularly during the pandemic and allowed all parties to gain access to real-time updates and progress of the project remotely. By integrating IDD with productive construction methods including advanced precast and PPVC, the project

team was able to minimise the impact for time lost due to delays caused by the pandemic.

9 “BIM and IDD truly helped to elevate our level of collaboration and integration to the next level with all our stakeholders. What is even more exciting is that the IDD process we have kickstarted, is constantly improving and evolving, driven by the stakeholders themselves to ensure that it benefits all within the value chain,” said Edwin Lee, Business Unit Head, Tiong Seng Contractors Pte Ltd.

10 The second Platinum award goes to Paya Lebar Quarter (PLQ), a mixed-used development developed by Lendlease. With strong support and investment in the adoption of IDD among the project team, they were able to leverage on the benefits of digitalisation across the project lifecycle. For example, through efficient data exchange across the project parties – from digital design to fabrication, construction, and through to asset management. Post-construction, PLQ’s Smart Facility Management (FM) platform provides FM managers with an overview of total building performance with automation workflow, AI, and data analytics, enhancing overall operational efficiency and reducing cost, resulting in 30% energy savings within the first year of operations.

11 Said Mr. Richard Paine, Managing Director, Paya Lebar Quarter, Lendlease, “Lendlease is thrilled to have its IDD work acknowledged by the BCA with this award. The IDD approach on PLQ was fully leveraged by Lendlease’s integrated model and led to faster, safer and better-quality outcomes during construction. Additionally, it has set up an accurate data platform for our operational teams to capture insights and drive operational efficiency.”

12 Congratulating this year’s winners, BCA’s Chief Executive Officer, Mr. Kelvin Wong, said, “The benefits are clear - many projects which implemented IDD have reported increased time, cost, manpower and resource savings. We expect more of such results in the future, given the increasing number of firms and projects which are embracing IDD. This is not surprising as IDD allows entire project teams to better collaborate and paves the way for deeper cross-discipline interactions that brings the earlier said benefits. Experience in IDD adds a lot of value to an individual working in

the Built Environment sector and we foresee the demand for IDD job roles to grow in the next few years.”

About the BCA IDD Award

13 The BCA IDD award consists of winners from the firm category and the project category. The firm category recognises how firms adopt an IDD framework, technology and processes by establishing well-defined IDD value propositions, policies, standards and training roadmaps. The project category recognises outstanding project teams for their innovative use of IDD to streamline work processes and connect stakeholders through digital data, innovation and technology across the whole project life cycle.

14 The inaugural BCA IDD award comes during the International Built Environment Week (IBEW), running from 7-10 September 2021. Themed “Re-imagining the Future”, IBEW will focus on what’s next for the Built Environment sector and highlight the trends and opportunities that will facilitate business growth and resiliency through industry transformation. It will showcase the latest in digitalisation, sustainability, smart facilities management, innovations and technologies used in the Built Environment sector.

Annex A: Factsheet on BCA IDD Awards

Annex B: Listing of 2021 Award winners