



ACES Digital Delivery Seminar 2021

Date:	15 September 2021 (Wed)	Fee:	Free of Charge
Time:	12.00 noon to 2.05 pm	Delivery Mode:	Zoom Webinar
		CPD:	2 PDU

Register in advance for this webinar:

https://us02web.zoom.us/webinar/register/WN_dfR_BvQkTQmG59Ea9G8P3A



After registering, you will receive a confirmation email containing information about joining the webinar.

Synopsis

Continuing our series of seminars to help the industry appreciate the benefits of digitising the work processes. We are delighted to invite contractors from our industry to share the up-and-downs of their journey in digital delivery. The seminar hopes to hear from the contractors on what the consultants can adjust or improve on in order to streamline processes and avoid abortive design or construction work.

PROGRAMME OUTLINE

Time	Speaker	Company	Use case
1200	Mak Swee Chiang	ACES	Opening address
1205 (30 mins)	Daniels Chandra	ONG&ONG	Embracing the Digital Workplace
1235 (30 mins)	Kho Teok Siong	Kimly	Midwood BIM tender documentation and model release to contractor
1305 (30 mins)	Rita Soh Kee Zhi Wei	RDC	Driving Productivity and Quality Improvements in Healthcare Projects with Integrated Digital Delivery
1335 (30 mins)	Angel Neo Kae Yan	CPG	BIM-based Virtual Mock-up Implementation in Construction
1405	End of Seminar		

THE SPEAKERS AND THEIR SYNOPSES

1. Embracing the Digital Workplace

Synopsis

The current pandemic situation has accelerated the Integrated Digital Delivery (IDD) implementation to fully embrace virtual collaboration. As one of the IDD use cases, Integrated Concurrent Engineering (ICE) coordination is usually conducted in the meeting room, site office or with co-location setup via the 'Big room' concept. Since the beginning of the pandemic, this arrangement may no longer be practical due to safe distancing measures and travel restrictions. Now many projects adopted a virtual environment setup for IDD collaboration by leveraging cloud technology with software as a service (SaaS) model. The presenter will share examples of successful IDD projects including the implementation of cloud-based Common Data Environment (CDE) to optimise multi-disciplinary BIM authoring, virtual ICE sessions and remote working arrangements during the Covid-19 pandemic.

Speaker: Daniels Chandra (ONG&ONG)

Daniels has more than 22 years of experience in architecture design and technology. He leads ONG&ONG Group's multi-disciplinary digital transformation by way of managing enterprise-wide strategic digital framework, implementation of BIM, Virtual Design & Construction (VDC) and Integrated Digital Delivery (IDD) technologies. Daniels has been implementing BIM since 2003 for a variety of projects including health facilities, infrastructure, mixed-use, commercial, master planning as well as residential developments. The scope of BIM implementation ranges from conceptual design and construction through to facility management.

Under his digital technology leadership, ONG&ONG Group has won BIM competitions and awards including a Platinum Award for BCA BIM Awards 2016 (Organisation Category). Prior to joining ONG&ONG, Daniels worked with a few leading architecture firms in Sydney, Australia where he spent over a decade of his career. During his time there he contributed his design and technology expertise to a number of high-profile Australian commercial, infrastructure and government projects in which he successfully implemented BIM technology.



2. Midwood: BIM tender documentation and model release to contractor

Synopsis

IDD is one of the key aspects in the Construction Industry Transformation Map (ITM) which aims to improve productivity and upskilling of the workers. IDD covers the following 4 areas: Digital Design, Digital Fabrication, Digital Asset Delivery & Management and Digital Construction. In this lecture, the presenter will share with the audience on IDD implementation in one of their residential projects, Midwood Condominium, from Design to Construction Stage. He will also share with the audience on digital technologies that Kimly implemented for other projects

Speaker: Kho Teok Siong (Kimly)

Mr. Kho Teok Siong is the Senior VDC Manager at Kimly Construction, one of Singapore's leading homegrown A1 construction company. Currently, he oversees the development and implementation of BIM/VDC/IDD within the organization. He has over 15 years of experiences, both locally and overseas. Some of his IDD projects include SIT Campus Plot 2, JTC Logistics Hub and Midwood.

He is a firm believer that digitalization is the way moving forward in the construction industry. He has a profound interest in the latest technologies for construction and believe that technologies with together process reengineering, can lead better project execution and higher productivity. Prior to his current portfolio, he was a BIM Manager/Implementer in one of Singapore largest consultancy firm where he came up with BIM standards and provided training for the staff.

Mr. Kho is involved in several BCA BIM/VDC workgroups, one of the contributors to HDB BIM guide and a member of the Accreditation Board for the DDM Accreditation Scheme.



3. Driving Productivity and Quality Improvements in Healthcare Projects with Integrated Digital

Synopsis

“Progressive regeneration and constant betterment in the way we design has always been quintessential to us especially in our approach to delivering healthcare infrastructure projects.

In the context of Singapore’s healthcare demands, the level of programme complexity coupled with the design detail development often require strategic appropriation of our limited time and resources. Therefore, it is crucial for us in the construction industry to stay abreast with the latest in technology and embrace the vast opportunities presented by digitalisation to pivot towards Digital Transformation. “

Speaker Ar. Rita Soh and Zhi Wei will briefly share on their journey towards integrated digital delivery in a recently completed project, the Kallang Polyclinic & Long Term Care, a co-located healthcare Facility.

They will share their vision, the challenges and lessons learnt from design to the key project phases including the Authorities and Construction Management stages; in their continual pursuit to push boundaries.

Key highlights will include:

- i. The collaborative spirit and role of all parties involved; from the developer, the consultants and the builders
- ii. The considerations in redesigning the conventional workflows, and
- iii. The collection, dissemination and use of information brought about by digitalization.

Speaker: Ar. Rita Soh (RDC)

Project Director/Managing Director RDC Architects Pte Ltd

Ar. Rita Soh graduated with honours from the National University of Singapore in 1987 and obtained her professional practice licence in 1989.

In 2011, she obtained her Master of Science (Sustainable Building Design) from University of Nottingham (UK). This is to reinforce her strong belief to have all buildings designed sustainably, with good environmental comforts and to use natural resources responsibly.

Beyond breaking the gender leadership stereotype, she has advanced the causes of professional ethics and collaborative partnership in Singapore as well as on the Asian fronts.

The first woman President of the Singapore Institute of Architects (2004-2007), Rita standardized Singapore’s architectural nomenclature by creating Singapore’s own Code of Practice and pushed the architectural body towards digitalization of its professional services. Subsequently, as President of Singapore’s Board of Architects (2010-2015), she championed ethical architectural practice both regionally and globally. In her current position as President, Architects Regional Council, Asia’s (ARCASIA) (2019-2021), Rita strives to foster closer collaborations amongst architects across Asia and leading the drive to collectively define global benchmarks from an Asian perspective.

While a Nominated Member (2014-2015), Rita advocated reducing Singapore’s carbon footprint by embracing environmentally-friendly buildings and urged for an expansion of healthcare infrastructure to cater for an aging population.

She was involved in the remodeling of two state-owned hospitals (2009 & 2014). The Integrated Building & Medical Centre @Changi General Hospital and Yishun Polyclinic & Kallang Collocated Care-Facility are her recent projects. She won the ARCASIA Gold Medal (2018), Urban Redevelopment Authority Architectural Heritage Award (2016) and Singapore Institute of Architects Architectural Design Award (2016) for restorations to a national monument, Church of Saints Peter & Paul.



Co-Speaker: Mr. Kee Zhi Wei,
Architectural Associate, RDC Architects Pte Ltd

Kee Zhi Wei is a Master graduate from Delft University of Technology. As a young professional, Zhi Wei aspires to find unique and meaningful responses through design and architecture, by engendering deliberate practices while resisting conforming-with, or settling-for the convenient or the status quo; and driving projects from conceptualisation through execution with deep passion.

His project experience ranges from high-rise residential to institutional buildings, including an animal welfare shelter as well as public healthcare facilities.

4. BIM-based Virtual Mock-up Implementation in Construction

Synopsis

Current progress and prevalence of BIM, Virtual Design & Construction (VDC) and IDD implementation on projects in construction has allowed for easy generation of design visualisation in virtual reality for multi-disciplinary, multi-trades coordinated aesthetical, spatial and optimisation reviews. The BIM platform has allowed for unlimited possibilities and alternatives on an extensive scale without physical mock-ups. The presenter will share on the changes to team dynamics, project delivery, client/user approvals and decision making with growing use of virtual mock-ups in construction.

Speaker: Angel NEO KAE YAN (CPG)

Angel is currently the Vice President for CPG Consultants, Healthcare Division. She has 14 years of experience, focusing on feasibility studies, masterplanning, design and project management of various healthcare facilities as well as health oriented developments. She also oversees and work direct with project teams to formulate project brief, develop design concepts, medical planning, right up to design documentation, tender and construction management.

Her experience in Healthcare Design spans across United Arab Emirates (UAE), Singapore, Southeast Asia and Greater China. She was also involved in medium sized aged care facilities and medical centres to large scale health oriented developments projects around China and Vietnam. Completing the full spectrum of Academic Medical Campus and Health Oriented Developments from Fast to Slow medicine and from education to research.

In Singapore, she leads CPG's multi-disciplinary teams implementing BIM, Virtual Design & Construction (VDC) and Integrated Digital Delivery (IDD) technologies in projects as part of CPG's Digital Transformation Roadmap.

