REDAS

REDAS IDD SYMPOSIUM 2022

17 NOVEMBER 2022
THURSDAY

MARINA BAY SANDS
EXPO & CONVENTION CENTRE

Enhancing Data-Driven Productivity across Developer Value Chain

For enquiries on sponsorship and registrations, please email to elaine@redas.com

Symposium Programme

8.30am - 9.00am	**Registration**
9.00am - 9.05am	**Opening by Emcee**
9.05am - 9.15am	**Welcome Address by** *Mr Chia Ngiang Hong, President of REDAS*
9.15am - 9.25am	**Opening Address by GOH** *Mr Heng Teck Thai,* *Deputy CEO (Communications and Engagement)*, ***Building and Construction Authority***
9.25am - 9.55am	**The IDD Story on Campus – Update from 2019** *Mr Eugene Seah,* *Senior Director (Special Projects), GCEO's Office Director,* ***Surbana Jurong Private Limited /*** *Managing Director,* ***Surbana Technologies Pte Ltd***
9.55am - 10.25am	**Digital Delivery For Government and Commercial Projects – Transforming Construction Processes With CDE** *Mr Ng Siew Loong,* *Head of Virtual Design & Construction,* ***Obayashi Singapore***
10.25am - 10.40am	Morning Break
10.40am - 11.10am	**Can IDD Deliver Its Role In Development?** *Mr Edmund Leong,* *Senior Manager (ICT, BIM-VDC)*, ***Straits Construction Singapore Pte Ltd***
11.10am - 11.40am	**Working Towards Data-Driven Facilities Management** *Mr Daniel T'ng,* *Associate Adult Educator*, ***Founder of Starklit Consultancy***
11.40am - 12.25pm	**Morning Panel Discussion** **Moderator:** *Mr Eugene Seah,* *Senior Director (Special Projects),* *GCEO's Office Director,* ***Surbana Jurong Private Limited /*** *Managing Director,* ***Surbana Technologies Pte Ltd***

*Above programme is published as of 1 November 2022 and is subject to changes due to unforeseen circumstances.

Symposium Programme

12.25pm - 1.30pm   **Lunch**

1.30pm - 2.00pm   **A Single Bird's Eye View to Manage an IDD Project**
Mr Gwee Seng Kwong, LEAD Project Director, REDAS

2.00pm - 2.30pm   **Using the IDD Implementation Guide to Establish a Best Practice IDD Framework**
Mr Chandra Hampiholi, Principal BIM Manager, Surbana Jurong Private Limited

2.30pm - 2.45pm   **Afternoon Break**

2.45pm - 3.15pm   **How Developers Can Take Advantage of a Well-Defined and Executed Project From a Project Management Perspective**
Mr Alex Nesbitt, Director;
Siti Sabariah Binte Norman, Associate Director
Turner & Townsend, Singapore

3.15pm - 3.45pm   **Data-Driven Approach to the Digitalisation of Built Environment Projects**
Mr Wong Wei Loong, Director, Building Projects, JTC Corporation

3.45pm - 4.30pm   **Afternoon Panel Discussion**
Moderator: *Mr William Lau, President, buildingSMART Singapore Chapter*

4.30pm - 6.00pm   **Exhibition Viewing**

CPD Accreditation:
BOA-SIA: Pending
PEB: **6 PDUs**
SPM: **5 CPD Points**
SISV QS Division: **4.5 CPD Points**

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SPEAKERS' PROFILES & SYNOPSES

1) **Speaker and Morning Panel Chair:**
   Mr Eugene Seah
   Senior Director (Special Projects), GCEO's Office Director, Surbana Jurong Private Limited /
   Managing Director, Surbana Technologies Pte Ltd

Presentation Title
The IDD Story on Campus – Update from 2019

Topic Synopsis
The IDD approach to Campus starting in 2017 with a framework. With the campus completing in phases, the SJ team is pleased to give an update on where we are now with the IDD implementation and what is next. This paper will discuss on what is next on the horizon, especially the last pillar on Digital FM and Digital Asset Management, especially with the use of dashboard and data analytics.

Brief Profile
Eugene joined the Surbana Jurong Group on 1 January 2017 as Senior Director, Group CEO's office, to spearhead and oversee the Group's special projects and strategic initiatives, in particular, Digital Management Office, and Sustainability and Resilience Office. He is also a Director on the Boards of Threesixty Cost Management Contract Advisory and an Adjudicator in the Singapore Mediation Centre. In 2020, he took office as the Managing Director of Surbana Technologies, the Smart Cities arm of the SJ Group, pushing the boundaries of smart and digital technologies, digital twins and sustainability in Facilities Management and Securities. His unique approach to cost, digital, technology and sustainability management provides value add to his clients, especially in this world of climate response.

2) Speaker:
Mr Ng Siew Loong
Head of Virtual Design & Construction
Obayashi Singapore

<u>Presentation Title</u>
Digital Delivery For Government and Commercial Projects – Transforming Construction Processes With CDE

<u>Topic Synopsis</u>
This presentation discusses about the digital delivery for government and commercial projects, and how to transform construction processes with Common Data Environment (CDE).

<u>Brief Profile</u>
Siew Loong began his career in Japan as a structure engineer after graduating from university in Japan in 1994. He obtained his Japan First Class Architect License in 1997. He joined Obayashi Malaysia in 2000 as design coordinator.

In 2009, he was transferred to Dubai Obayashi as design manager in Dubai Metro Project.

In 2011, he was transferred to Singapore to set up a core BIM team in Obayashi Singapore Town Office.

During the past years, he was involved in BIM, VDC & IDD implementation and gained good experiences in Jewel Changi Airport, Funan Digital Mall, some data centers and commercial projects in Singapore.

Siew Loong is a team leader for BIM, VDC & IDD team in Obayashi Singapore. He is in-charge of BIM, VDC & IDD implementation during tender and construction stages. Currently he is involving in IDD setup for Keppel Tower & HDB Tengah C3C7.

3) Speaker:
Mr Edmund Leong
Senior Manager (ICT, BIM-VDC)
Straits Construction Singapore Pte Ltd

Presentation Title
Can IDD Deliver Its Role in Development?

Topic Synopsis
More often than not, IDD has always been considered "too technical" and thus gets relegated to the professionals and technical guys downstream. As such, the outcome generally becomes too technical for upstream appreciation. Would there then be use-cases that clients and owners can find meaningful roles with IDD to warrant main-stream adoption in their projects. This presentation aims to provide some insight here and demonstrate IDD can provide effective representation in projects.

Brief Profile
Edmund leads a team that oversees and manages innovation and technology operations in Straits. With an established track record of over 20 years in the industry with IT Turnkey Solutioning, GIS, and BIM/VDC, he combines these skills toward transforming and contributing to the Build Environment with his experience. Edmund remains an active member in several Industry BIM workgroups and has contributed to the development of Singapore's BIM Guides and Training Curriculums.

4) Speaker:
Mr Daniel T'ng
Associate Adult Educator
Founder of Starklit Consultancy

Presentation Title
Working Towards Data-Driven Facilities Management

Topic Synopsis
Facilities Management Companies are jostling to transform towards future facilities management practices alongside the rapid advancement of technologies such as IoT, Drone, Building Information Modelling, Digital Twin, Augmented Intelligence, Artificial Intelligence, etc. The pandemic has certainly hastened this digital transformation journey. Huge myriad of data from the integrated facilities services poses both a challenge as well as opportunities for better decision-making and enhancement of productivity. Employers will have to re-navigate the skillsets of their facilities management employees, balancing business sustainability while adapting to a myriad of changes arising from the advancement of technologies and customers' expectations.

Data-driven facilities management will be a cornerstone for adapting to change. By embracing this digital transformation, businesses can not only remain sustainable but thrive in challenging times.

Brief Profile
Mr Daniel T'ng has more than 38 years of experience in the property and facilities management industry in Singapore and the Region. He has extensive experience in managing strata-titled developments, lease management, facilities management, project consultancy and general management as well as business development in the facilities management industry. Mr T'ng is an experienced and qualified Associate Adult Educator specialised in coaching and training real estate practitioners in the areas of Facilities Management and Strata Development Management. Prior to being an Adult Educator, Mr T'ng had held several senior management positions, some of which include:

1. Executive Vice President (Property & Facility Management Division), City Developments Limited
2. Chief Executive Officer & Executive Director, One Marina Property Services Pte Ltd
3. Senior Vice President (Property Management), Marina Properties Pte Ltd
4. General Manager (Business Development), Keppel FMO Pte Ltd
5. Director (Corporate Services), BrightBeam Pte Ltd
6. Director (Property Management), Singtel Pte Ltd

Besides his years of real estate corporate experiences, Mr T'ng had held positions as council chairman and council member of some high-end residential MCSTs. He has also contributed to the drafting and finalisation of the Singapore Standard for Pneumatic Waste Conveyance System as member of the Workgroup led by the National Environment Agency and Enterprise Singapore. In spite of his retirement, he remains active in the workplace safety & health industry. He co-chairs the Workplace Safety & Health (FM) Committee and is an active member of WSH Council as well as a member of WSH Finance Committee. Mr T'ng is re-appointed by Building Construction Authority as a Resource Person (Advisor) to the Integrated Planning & Design – Design for Maintainability Taskforce.

5) Speaker:
Mr Gwee Seng Kwong
REDAS LEAD Project Director

Presentation Title
A Single Bird's Eye View to Manage an IDD Project

Topic Synopsis
In alignment with BCA's initiative in transforming the industry to shape a safe, liveable and smart Built Environment for Singapore, REDAS is working on a Developer-Centric IDD Dashboard (DCID) for developers to manage the lifecycle of their project in a single pane of glass. In this sharing, the presenter will be sharing on the following agenda:
1. Objectives and Takeaways
2. Current Scenarios and What Success Looks Like
3. System Architecture
4. 50 Reports and Studies
5. Dashboard Demonstration
6. Connectivity with Partner Platforms
7. Value Proposition

Brief Profile
Currently, Mr Gwee Seng Kwong is the Project Director in charge of the Developer-centric IDD Dashboard project in REDAS. He was formerly the Secretary General of Singapore Manufacturing Federation. Prior to SMF, he was at SPRING Singapore doing enterprise development. He was involved in implementing several national projects like Singapore Connect, first online directory and service in Singapore to link our SMEs to the world, EnterpriseOne, the first One-Stop SME platform which include a portal, a call centre and a network of Enterprise Development Centres to better service the SME community.

6) Speaker:
Mr Chandra Hampiholi
Principal BIM Manager, Surbana Jurong Private Limited

Presentation Title
Using the IDD Implementation Guide to establish a best practice IDD framework

Topic Synopsis
IDD Implementation Guide from REDAS is aimed at developers who would like to implement many of the IDD processes prescribed by BCA for their upcoming projects. To better support developers who may be new to IDD and to adopt IDD confidently in their projects, this "guide" has been published to guide participants through a process of adopting a proper IDD structure in their projects or for their organizations.

IDD is one of the focus areas of the ITM (Industry Transformation Map). The recently refreshed Built-Environment ITM by BCA, amalgamates the previous Construction and Real Estate (Facilities Management) ITMs into a single ITM focusing on a value-chain approach to seize opportunities for the built environment sector. It will help stakeholders within the sector collaborate more effectively across the value chain.

The guide will assist the developers to deliver smart buildings, and in doing so it is imperative to say that collaboration and integration of digital technologies across this wide spectrum becomes the key driving force. IDD processes bridge this collaborative approach by a series of integrated digital technologies across the entire value chain of the project including design, fabrication, construction and asset management. This guide will not only introduce about the basic concepts of IDD & its processes but also highlight on the advantage of using them in your projects. It will also highlight IDD best practices and how to implement them in your projects within the IDD framework.

Brief Profile
Chandra has international industry experience in Architecture, Planning & Project Management. His expertise extends beyond the realms of Digital Design & Delivery including CAD, BIM, GIS, IDD & Computational Design. He is able to lead Project teams in BIM documentation, Virtual Design and Construction, BIM Governance, Quality Control, & project delivery standards. He has successfully delivered large scale projects in the capacity of an Architect and BIM Lead at various international organisations in his entire career spanning more than 35 years.

Presently, Chandra is working at the Digital Management office (DMO) of Surbana Jurong Consultants Pte Ltd, and is responsible for deploying, maintaining and training in various digital tools, processes & technologies for the built environment domain. He is spearheading the implementation of BIM, IDD, ISO-19650, and other related digitalization standards and technologies in projects delivered by Surbana Jurong.

Chandra graduated with a Bachelor's degree in Architecture & a Master's degree in Infrastructure Planning. He is also passionate in teaching & training and has been training AEC professionals in BIM, IDD & other technological tools for the built environment professionals. Recently he has obtained his Advance Certificate in Learning and Performance from the Institute of Adult Learning, Singapore.

7) Speaker:
Mr Alex Nesbitt
Director, Turner & Townsend, Singapore

Joint Presentation Title

How Developers Can Take Advantage of a Well-Defined and Executed Project From a Project Management Perspective

Topic Synopsis

There is an enormous opportunity for Clients/developers to reap the rewards of adopting digital ways of working on their projects, from reduced professional fees to improved project timelines. But, like with most things, you will only get out what you put in! Clients need to be clear on the outcomes they seek to achieve; they need to be willing to drive a different approach, move away from and not accept the "usual way of doing things".

We will take you on the journey of one of our Banking Clients that have done just that. Across their global retail property portfolio, they have; reduced their retail design timelines by 80% and design workhours by 75%, all whilst getting some excellent reviews from their customers with early 3D design visualisations.

Brief Profile

Alex is the Head of Digital for Asia at Turner & Townsend; passionate about transforming performance throughout the industries we work within for a green, inclusive, and productive world.

He has over 10 years' experience in leading digital on some of the most iconic major projects and programmes globally and has been the BIM leader on the Changi East Development programme (Terminal 5) since 2017.

Leveraging on his technical experiences, Alex works with clients in developing realistic and achievable strategies that drive effective digital transformation, unlocking value from the digital ways of working.

Alex believes the key to delivering successful projects effectively and achieving operational excellence is to get the fundamentals in place first, that is the right people, working efficiently and supported with the best suited technology.

8) Speaker:
Siti Sabariah Binte Norman
Associate Director, Turner & Townsend, Singapore

Joint Presentation Title
How Developers Can Take Advantage of a Well-Defined and Executed Project From a Project Management Perspective

Topic Synopsis
There is an enormous opportunity for Clients/developers to reap the rewards of adopting digital ways of working on their projects, from reduced professional fees to improved project timelines. But, like with most things, you will only get out what you put in! Clients need to be clear on the outcomes they seek to achieve; they need to be willing to drive a different approach, move away from and not accept the "usual way of doing things".

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Brief Profile
Siti is an Associate Director at Turner & Townsend. With 15 years industry experience and a background in design, Siti is an early adopter of BIM since 2007. She is passionate about improving industry standards through streamlining existing processes and adoption of new technology, that enables efficiency and high-quality output from lean teams. Siti leverages her expertise in digital transformation and integrated project delivery to lead on global project teams in multi-disciplinary coordination throughout a project's lifecycle with the end users at the heart of decision making.

As the industry evolves and more organisations transition into the digital and new ways of working, she ensures a smooth transition for teams by implementing systems that enable global collaboration with clients, project team members and supply chain, in planning, upskilling, communicating, and delivering the best strategy forward for success.

Siti also contributes to transforming the industry's performance, lectures at the Singapore Polytechnic and volunteering as chief panel expert for the National World Skills competition.

9) Speaker:
Mr Wong Wei Loong
Director, Building Projects, JTC Corporation

Presentation Title
Data-Driven Approach to the Digitalisation of Built Environment Projects

Topic Synopsis
Data is all around us and being created constantly as part of our projects, but do we know what do we need; how to harness and make use of them effectively? Data plays an important role in digitalising the built environment. It takes more than just technology to transform the industry and we should prepare for this change together.

Brief Profile
Wei Loong joined JTC Corporation in 2011 and is currently heading the Building Projects Division and the Department for Digital Built Environment. Other than delivery JTC projects, Wei Loong is responsible for the drive to fully digitalise the whole development process, from design, construction to asset management through the adoption of Integrated Digital Delivery approach. He has been instrumental in establishing JTC information requirements, re-defining how information is delivered and used, digitalising processes, and weaving in the use of various technologies to bridge design, construction and asset management. His other portfolios include championing construction sustainability and design thinking.

10) Afternoon Panel Chair:
Mr William Lau
President of buildingSMART Singapore Chapter

Brief Profile

William Lau who has been in architectural practise since 1980 established William Lau Architects in 1997. The wealth of project and development experience acquired covers Residential (including Condominium), Commercial, Conservation, Industrial and Institutional projects.

The firm believes in optimising limited resources to design buildings that are functional as well as achieving aesthetic prominence in the context of the built environment. In addition to the architectural practice, the firm also provides other related services including project management, interior design and space planning as well as project development consultant.

The practice recognises the usefulness of information technology by amalgamating the latest digital technologies available including CAD and other relevant software and hardware tools in order to meet the challenges and demands of the building industry in the current built environment.