

Organised by:

BCA ACADEMY

Held in conjunction with:



International Built Environment Week (IBEW) 2022

Built Environment Technical Seminar Series #4

HARNESSING DATA FOR ENHANCED INTEGRATED DIGITAL DELIVERY

18 Aug 2022 • 2pm – 5.30pm • BCA Braddell Campus, Auditorium (T1-1)

With the increased in digitalisation throughout the building lifecycle, large amount of data are generated. The data offer valuable insights for the built environment (BE) stakeholders to build upon to progressively improve their workflows and build competitive edge. The seminar shares insights on trends, innovations and practical strategies on how the stakeholders could better manage and harness data gathered to maximise potential of IDD. You will also hear from the speakers on technical specifics and methodologies adopted, illustrated through case studies.

HIGHLIGHTS

TIME	TOPICS & SPEAKERS
2.00pm	Making Data Meaningful for BE Projects Ms Yve Xu, Senior Manager, Digital Built Environment, JTC Corporation
2.30pm	Achieving More Efficient Contract & Cost Management with Data Mr Jason Wong, Country Product Manager, Glodon SEA
3.00pm	Construction Alliance Platform: Digital Transformation Mr John Tan, Smart Cities Business Development Director, SoftwareONE
3.30pm	Tea Break
4.00pm	Fostering Culture of Data Driven Decision Mr Muhammad Khalil, Deputy Director, Group Technology Office, Boustead Projects
4.30pm	The Smart Digital Reality: Beyond Digital Twin & Smart Workflows for IDD Ms. Delphine Ang, ASEAN Sales Leader – Smart Build, Hexagon
5.00pm	Using AI & Data Optimisation through 360 Photography for Construction Mr Ho Kah Chun, Technical Head, OpenSpace APAC
5.30pm	End of Seminar



TOPIC 1: Making Data Meaningful for BE Projects

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? Does everyone understand why data plays such an important role in digitalising the built environment, and the respective role they themselves play in this transformation. It takes more than just technology to transform the industry and we should prepare for this change together. In this session, Yve will share how JTC harness the potential of data available, drive better adoption as well as improve project delivery, demonstrated through case studies.



Ms Yve Xu
Senior Manager,
Digital Built
Environment,
JTC Corporation

Ms Yve Xu specialises in Integrated Digital Delivery (IDD) and has been actively involved in project implementations of technology tools such as Building Information Modelling (BIM) and Common Data Environment (CDE). She also drives the digital transformation and change management of Building and Infrastructure Construction (BIC) sector for a more productive way of delivering projects. She is currently a Senior Manager in JTC's Building Information Management Department, championing BIM implementation in JTC and engagement with industry stakeholders.

TOPIC 2: Achieving More Efficient Contract & Cost Management with Data

Digital Transformation (DT) is one of the hot topics everyone is talking about in the Built Environment Industry recently. Globally, digitalization is recognized as one of the key enablers in BE sector to improve productivity, transparency, and connectivity throughout the value chain from design, manufacturing, construction, and facility management. This presentation is proposing a concept ideology on how to improve the overall project operation efficiency and better cost management by adapting the digital lifecycle contract management process.

In order to achieve effective digital construction cost management, we will discuss on what are the current barriers many organizations are facing while adapting Digital Transformation (DT) in their work processes. With the DT integration, data is collected, and various analyses could be performed to achieve lean management. Operation standards and unified management of result data can be incorporated into the platform to accumulate the enterprise cost data and tendering data.



Mr Jason Wong
Country Product
Manager,
Glodon SEA

A Country Product Manager & Service Consultant with Glodon International, graduated from NTU with an Honors in Mechanical Engineering. He has accumulated more than 6 years' experience and knowledge in the construction domain. A former QS & Engineer in the construction industry, Jason is currently supporting the development of BIM Integrated Digital Platform for QS Digital Costing (Cubicost) & MEP Design Software (MagiCAD) for Glodon Company. His Enthusiasm and eagerness to share forth the values of Digital Construction with Cubicost through trainings sessions, project guidance to numerous QS in various firms and public speaking is clear. He was duly awarded and emerged as Excellent Service Consultant & Lecturer in 2017.

TOPIC 3:**Construction Alliance Platform: Digital Transformation**

While other sectors show strong leaps towards digital transformation and cross-collaboration in the past decades, the construction industry is still lagging in this regard with most stakeholders working in silos. Recent studies have revealed that 95.5% of all captured data go unused because 90% of that data is largely unstructured.

Having a common platform that enables stakeholders from all disciplines to come on and collaborate throughout the end-to-end project lifecycle solves this long-standing issue and requires not only a software tool, but strong change in mindset. The SoftwareONE | MTWO Construction Cloud provides the most advanced construction technology and guides organizations within the AEC industry throughout their digitization journey, helping them to gain better control and to increase their productivity.



Mr John Tan
Smart Cities Business
Development Director,
SoftwareONE

John works with key stakeholders in the AEC (Architecture, Engineering, Contractor) industry in Singapore to digitally transform their business through the adoption of a world leading vertical cloud solution - MTWO. With more than 8 years' experience working in the AEC sector, he is familiar with the needs and challenges of the industry. He has worked on many Smart Building projects and is a key advocate for the adoption of Smart technology to meet the growing demand for building smarter and more sustainable buildings in Singapore.

TOPIC 4:**Fostering Culture of Data Driven Decision**

As part of Boustead Projects' Digitalization journey, the firm envisages the significance of leveraging Big Data in decision making and reporting. In this presentation, Khalil will share the challenges faced and strategies adopted in data collection, analysis and visualization for important business decisions, in order maintain the firm's competitive edge.



Mr Muhammad Khalil
Deputy Director,
Group Technology
Office, Boustead
Projects

Khalil has been in the Building & Construction industry in Singapore since 2005. A firm believer in technological solutions and innovative workflow, he constantly keeps himself abreast of upcoming technologies in the effort to increase productivity in the construction industry. He is an avid promoter and implementer for game changing solutions including BIM, Virtual Design Construction (VDC) and Digital Platform. Currently, Khalil oversees the digital transformation of Boustead Projects, set up roadmap, and integrate digital work processes at operational and management level.

TOPIC5:**The Smart Digital Reality: Beyond Digital Twin & Smart Workflows for IDD**

Are reports from silos of data giving you an accurate picture of your project? Can you manage a project efficiently without linking Scope, Time & Cost? How can we harness the data from Sensors & Scanners for an enhanced Integrated Digital Delivery?

The topic will discuss on how silos can be broken down & streamlined with 4D and 5D BIM processes in the field or in the office. We will also explore how the usage of sensors and scanners can enhance the data that is captured from site to optimise site productivity. By bridging the data leverage gap, a smart digital reality can enhance the Integrated Digital Delivery. A smart digital reality is increasingly autonomous, with the ability to make unaided decisions and become smarter over time.



Ms Delphine Ang
ASEAN Sales Leader
– Smart Build,
Hexagon

Delphine Ang has been in the software industry for more than 7 years. Coming from Autodesk to Hexagon, she has gained great experience in the construction industry. Transforming from the CAD designing world to leading digital transformation, removal of silos in the AEC & Manufacturing industry, she has shown great interest in the way buildings and infrastructure are designed, built and operated using an end to end solution.

With these years of experience, Delphine understands the challenges faced by the operations and project teams. As the ASEAN Sales Leader – Smart Build for Hexagon, Delphine gets to share her vision and best practices from global organisations on how to connect the silos to streamline the business processes.

TOPIC 6:**Using AI & Data Optimisation through 360 Photography for Construction**

“Reports and Data” forecast for the global market on Artificial Intelligence in construction will reach \$4.51 billion by 2026. AI has already proven its worth in the construction business in many ways, from optimizing work schedules to increasing workplace safety to keeping a secure watch on construction sites.

In this session, KC Ho will share how computer vision, AI and data visualization leverage the 360 images to provide unprecedented insight into project status and progression.



Mr Ho Kah Chun
Technical Head,
OpenSpace
APAC

With his 16 years’ of industry experience in Architectural, Engineering and Construction (AEC) ecosystem, KC Ho currently supports the strategic and Openspace business activities, primarily as the technical expert educating and creating awareness for the AEC industry. He led in various technical collaborations with government agencies and commercial organizations across ASEAN, adopting the new technologies expanding the use of BIM; IoT, computational and generative design, digital transformation.

His experience spans with various organizations including consultants, contractors, developers, owners and government agency; responsible to develop, manage, execute strategies and tactics for effective BIM implementation.