Photo1 – Summit background

圖 1 –峰會背景圖

Digital Construction Summit was successfully held in Hong Kong Cordis Hotel on 27 June 2019. It was jointly organized by Global BIM Centre of Excellence (CoE), The Hong Kong University of Science and Technology (HKUST) and Construction Industry Council (CIC). The summit acquired lots of support from institutes, academics and corporates.

數碼建築峰會於 2019 年 6 月 27 日再在香港康得思酒店完滿落幕。研討會由國際 BIM 研究院 (CoE)，香港科技大學和香港建築協會協辦。峰會得到來自學會，學術機構和商業機構的大力支持。

Photo 2 – Reception of the Summit

圖 2 – 峰會的接待處

Recently, construction industry is calling for transformation globally. In UK, the Transforming Construction Challenge (TCC) has been launched with an input ￡ 170 millions from Innovate UK and ￡ 250 millions committed match from industry. In Mainland China, there are many municipal, provincial and national levels development plan for construction industrialization and digitization. In Hong Kong, government has launched a HK$ 1 billion Construction Innovation Technology Fund (CITF) to boost the industry transformation. Echoing to the Construction 2.0 report published by Development Bureau and the Hong Kong Construction Industry Council BIM Year 2019 theme, this Digital Construction Summit aims to deliver the latest global development in BIM with a focus on digitization and construction. Expert speakers were invited from academia and industry from United Kingdom, United States, Australia and Mainland China to share their valuable experiences and insightful vision to the local industry.

　　現時建造業正在全球各地轉型中：在英國，Innovative UK 及業界分別投入 1.7 億及 2.5 億英鎊以開展名為"Transforming Construction Challenge (TCC)"的計劃；在中國，許多市政、省份及國家級的發展計劃皆專注於建造業工業化及數碼化；在香港，政府亦投入 10 億港元於建造業創新及科技基金，以推進業界轉型。為了響應發展局推行的建造業 2.0 及香港建造業議會提倡 2019 建築信息模擬年，本次峰會旨在發表建築信息模擬最新的發展，聚焦於數碼化及建造，並邀請了來自英國、美國、澳洲及中國內地傑出講者，讓他們以學界及業界的角度去分享對建造業的保貴經驗及看法。

The forum shared the digital construction from the following perspectives:-

Morning Session:

● Technology
  Focus on software, hardware and IT infrastructure
● Process
  Focus on leadership, infrastructure, products and services

Afternoon Session:

● Policy
  Focus on contracts, regulations, specifications and research
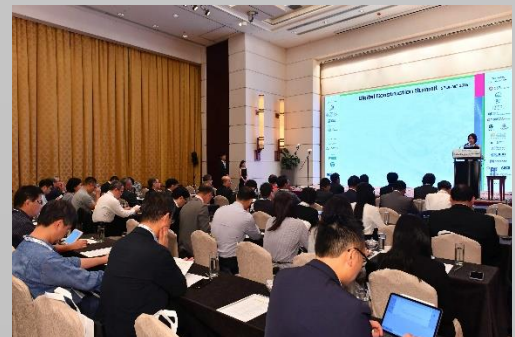● People
  Focus on human resources, education and training

本次論壇從以下各角度分析數碼建築：

上午時段：

● 科技方面
  聚焦於軟硬件及資訊科技基礎建設
● 進程方面
  聚焦於領導素質、基礎建設、產品及服務

下午時段：

● 政策方面
  聚焦於合約、條例、規範及研究
● 人才方面
  聚焦於人力資源、教育及培訓

Photo 3 – 5 Participants from different sectors

圖 3 – 5 來自不同界別的聽眾

The summit kicked off on time on 9:00am. On behalf of organisers, Sr Miranda Lui - the Chairlady of Global BIM Centre of Excellence (CoE), delivered opening remark to all participants. She introduced CoE's background, aims and development status.

峰會準時在上午九時開幕。呂靜儀測量師——國際 BIM 研究院理事長代表主辦單位發表了開幕致辭，她介紹了 CoE 的成立背景、宗旨和發展現狀。

Photo 6 Sr Miranda Lui

圖 6 - 呂靜儀測量師

Photo 7 Guests group photo

圖 7 – 嘉賓合照

Prof. Hong Kam Lo – Chair Professor (Head) of Civil & Environmental Engineering, the Hong Kong Universoty of Science and Technology (HKUST) represented the co-organisers and gave the welcome speech.

Photo 8 Prof. Hong Kam Lo

圖 8 羅康錦教授

羅康錦教授——香港科技大學土木及環境工程學系主任及講座教授代表協辦單位發表開幕致辭。

Our Guest of Honour, Ir Sai-hung Lam – Permanent Secretary for Development (Works) of Development Bureau delivered an opening remarks.

這次峰會的特邀嘉賓林世雄工程師——發展局常任秘書長(工務)發表歡迎詞。

Photo 9 Ir Sai-hung Lam, JP

圖 9 林世雄工程師, JP

Photo 10 Ms. Ada Yin-suen Fung, BBS, JP

圖 10 馮宜萱女士,BBS, JP

Followed by the Keynote speaker – Ar. Fung Yin-suen, Ada, BBS, she is the Chairperson of Committee on BIM, Construction Industry Council. Ms Fung presented keynote speech with the topic "Disruptive Technology: Local and Global", that she explained the meaning of Disruptive Technology and current situation of using Disruptive Technology in Global and Local.

接著是主講嘉賓馮宜萱女士, BBS，JP。她是 BIM 建築業委員會主席。 馮女士就"本地和全球之顛覆性技術"這一主題發表了主題演講，她解釋了顛覆性技術的含義以及在全球和本地使用顛覆性技術的現況。

Photo 11 Mr. En Rofizian AHMAD

圖 11 En Rofizian AHMAD 先生

The summit kept going on, En Rofizian AHMAD, CEO of Construction Industry Development Board (CIDB) e-Construct Service Sdn Bhd. He introduced the situation of Digital Construction Industry in Malaysia.

峰會繼續進行，Rofizian AHMAD 先生，他是建築業發展委員會（CIDB）e-Construct Service Sdn Bhd 的首席執行官。他是峰會的特邀嘉賓。 他介紹了數碼建築業在馬來西亞的現況。

Photo 12 Dr. Calvin KAM

圖 12- 甘嘉恆博士

Then another guest speaker – Dr. Calvin KAM, Adjunct Professor at Standford University's Center for Integrated Facility Engineering (CIFE) & Founder & CEO of Strategic Building Innovation. He explained the Trends and Insights from the Silicon Valley.

然後，是另一位嘉賓演講嘉賓——甘嘉恆博士，他是斯坦福大學綜合設施工程中心（CIFE）的兼職教授，戰略建築創新的創始人兼首席執行官。 他解釋了矽谷的趨勢和見解。

After the coffee break, Mr. Prof. Guangbin WANG – Head & Professor of Construction Management and Real Estate Department & Director of Center of Innovation & Development in Construction of Tongji University. He introduced The BIM Education and Professional Certificate Program in China.

小休後，王廣斌教授——同濟大學建築管理與房地產系主任兼創新與發展中心主任，他介紹了中國的 BIM 教育與專業證書課程。他是是次峰會的特邀嘉賓之一。

Photo 13 Mr. Prof. Guangbin WANG

圖 13 　王廣斌 教授

Photo 14 Mr. Kelvin Kuo

圖 14 - 郭峰先生

Follow by another guest speaker – Mr. Kelvin Kuo. He is Project Director of MES Group Asia. He introduced the 5D BIM Cost Management Approach. He also explained the reason why BIM is the key to future of Quality Surveyor (QS)

另一位演講嘉賓——郭峰先生。 他是 MES Group Asia 的項目總監。 他介紹了 5D BIM 成本管理方法， 還解釋了 BIM 是質量測量師（QS）未來的關鍵的原因。

Photo 15 Prof. In-han KIM

圖 15 - In-han KIM 博士

Then, another guest speaker – Mr. Prof. In-han KIM, Vice-chairman of BuildingSMART Korea & Professor of Kyung Hee University. He introduced The BIM Based Automated Compliance Checking System Development. i.e BIM Compliance Checking with AI Technology.

然後，另一位演講嘉賓——In-han KIM 教授，韓國 BuildingSMART 副主席兼慶熙大學教授。 他介紹了 BIM 基礎自動化的合規性檢查系統之開發，例如使用 AI 技術進行 BIM 合規性檢查等。

Photo 16   Mr. Chuang QIU

圖 16 -邱闖先生

After the Networking lunch, Mr. Chuang QIU is the Chair of North China, CIOB & Director, JCM International Engineering, he is one of the guest speaker. He conducted a case study which the question is called " How BIM Helps Complex International Project Delivery in Mainland China" He has mentioned The BIM implementation results, review on the Management of International Theme Park Project etc.

在共聚午餐後，是次峰會的其中一位特邀嘉賓——邱闖先生，他是擔任華北地區主席，CIOB 和 JCM 國際工程總監。他進行了一個案例研究，題目是"BIM 如何幫助中國大陸的複雜國際項目交付"，裏面提到 BIM 實施結果，國際主題公園項目管理審查等。

Photo 17 Mr. Zhong WU

圖 17 – 吳忠 先生

Follow by Mr. Zhong WU, Senior Developer Advocate, Autodesk, he is another guest speaker. He introduced the Accelerate the Digitization of AEC Industry with Autodesk Forge Technology. He explained that the Industry Trends & Challenges, Autodesk Forge & BIM360 and Innovation Empowered by Forge.

接著，吳忠先生，他是 Autodesk 高級開發人員倡導者，他亦是本次峰會的另一位演講嘉賓。 他介紹了使用 Autodesk Forge 技術加速了 AEC 行業的數碼化。 他亦解釋了行業的趨勢與挑戰，Autodesk Forge 和 BIM360 以及 Forge 賦予的創新能力。

Photo 18 Prof. Jack C.P CHENG

圖 18 – 鄭展鵬教授

After the second coffee break, Prof. Jack C.P CHENG, Associate Professor of Department of Civil & Environmental Engineering, The Hong Kong University of Science and Technology, he shared the AR and AI for Construction and Facility Management. He explained how the Augmented Reality (AR) supported by BIM.

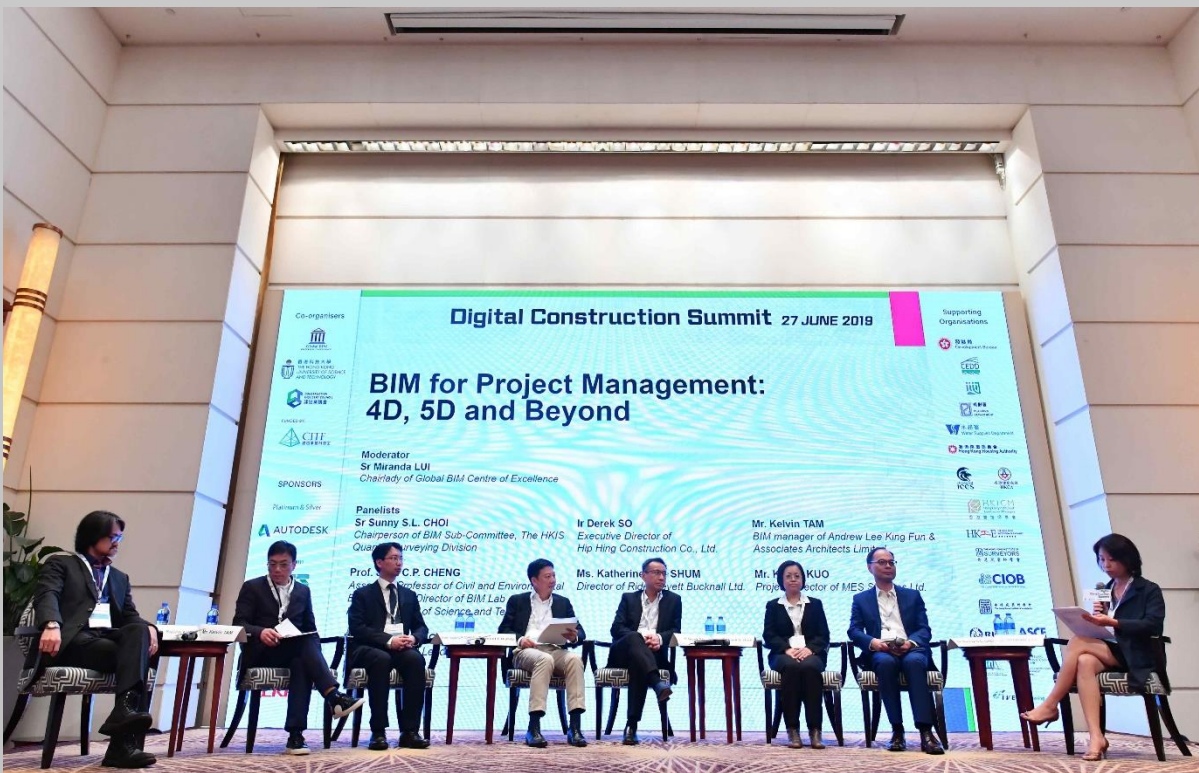第二次小休後，香港科技大學土木與環境工程系副教授鄭展鵬先生分享了建築與設施管理的 AR 和 AI， 他也解釋了 BIM 如何支持增強現實（AR）。

Photo 19 Mr. Jacky CHEUNG

圖 **19 -** 張先生

Then, the last guest speaker – Mr. Jacky CHEUNG, Market Development Manager, Personal System Business, HP Inc. H.K., He introduced Accelerating your BIM Workflow with the Latest HP Technologies and Tools.

然後，最後一位特邀嘉賓——張先生，他是個人系統業務市場開發經理 in HP Inc. H.K.，他向大家介紹了使用最新的 HP 技術和工具加速您的 BIM 工作流程。

Photo 20 Panel Discussion

圖 **20 -** 小組討論

Panel Discussion Topic: BIM for Project Management: 4D, 5D and Beyond
Media: English

Moderator: Sr Miranda LUI,
Chairlady of Global BIM Centre of Excellence

Panelists:
Sr Sunny S.L. CHOI,
Chairperson of BIM Sub-Committee,
The Hong Kong Institute of Surveyors - Quantity Surveying Division
Prof Jack C.P. CHENG,
Associate Professor of Department of Civil & Environmental Engineering,
The Hong Kong University of Science and Technology
Ir Clement CHUNG,
East Asia Digital Leader of Arup
Ms. Katherine K.S. SHUM,
Director of Rider Levett Bucknall Ltd.
Mr. Kelvin TAM,
BIM manager of Andrew Lee King Fun & Associates Architects Limited
Mr. Kelvin KUO,
Project Director of MES Group Asia

Common Questions:

1. Do you think the industry is ready for this new SMM?

2. How ready do you think the industry and the BIM education for 5D, or even beyond like FM (6D) and sustainability (7D)? Are there enough standards and tools?

3. Using BIM in a project, do you think it is adding value or adding cost for project delivery?

4. What are the challenges / potential problems of BIM to project management (e.g. project handover, inspection)? How can we resolve them?

小組討論題目：BIM 項目管理：4D，5D 及以後的發展
語言：英語
主持人：
呂靜儀女士
國際 BIM 研究院主席

組員：

蔡盛霖先生
BIM 分會主席
香港測量師學會- 工料測量組
鄭展鵬教授
香港科技大學土木及環境工程副教授

鍾鴻威先生
Arup 的東南亞數碼領袖
沈啟森女士
利比公司董事
譚仲泉先生
李景勳、雷煥庭建築師事務所的 BIM 經理
郭峰先生
MES Asia Group 的項目總監

一般問題:

1. 您認為行業已做好準備迎接這個新的 SMM 嗎?

2. 您認為行業與 BIM 教育 – 5D 或者以後例如 FM(6D)和 可持續性(7D)之間準備得如何?
   是否有足夠的水準和工具?

3. 使用 BIM 在項目內,您認為會增加價值抑或是增加了項目的運輸成本?

4. 在項目管理上,BIM 有什麼挑戰 / 潛在的問題(項目的交接,檢驗)? 我們該如何解決?

Ar. Ada Fung and the Chairlady of CoE, Sr Miranda Lui presented certificates to all honorable speakers for their brilliant speech.

馮宜萱女士和呂靜儀女士頒發感謝狀給所有尊貴的演講嘉賓，感謝他們的精彩演講。

We believe that all participants will be better equipped in comprehending and identifying the possible international and local cultural and technical barriers in BIM adoption. Also, they can more understand the latest global development in BIM with a focus on digitization and construction.

我們相信經過這次數碼建築峰會之後，參會者更加能夠全面了解 BIM 應用的策略及技術層面上的流程，以達到業務的目標，而且還可以更好地了解和識別 BIM 採用過程中可能可能存在的國際和地方文化差異及技術障礙。此外，他們可以更加了解 BIM 的最新全球發展，包括著重於數碼化和建設這兩個範疇。

Photos from the summit

峰會照片