Opening Speech by

Yang Berbahagia
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BIM Day 2019

Theme:
Digitalising Construction Together

20 March 2019
Malaysia International Trade and Exhibition Centre (MITEC),
Kuala Lumpur

Fellow construction industry professionals
Our distinguished guests from abroad
Ladies and gentlemen

Assalammualaikumwarahmatullalhiwabarakatuh,Salam Sejahteraand a very good morningto all of you here today.

1. It is a great honour for me to be here with all of you today at the Building Information Modelling, or BIM Day 2019, which is held in conjunction with the prestigious International Construction Week 2019.

2. Before I proceed, I wish to take this opportunity to thank our distinguished speakers from Malaysia and abroad who have generously agreed to share their knowledge and expertise. I am confident that we will be able to gain fresh perspectives through their presentations on how we can continue to harness the potential of Building Information Modelling, or BIM, in the way we work and build.

I also hope that through BIM Day 2019, you will be able to create new opportunities for yourselves.

3. I wish to also thank the supporting partners of BIM Day 2019 from the Public Works Department (PWD), the Construction Research Institute of Malaysia (CREAM), the Industry Centre of Excellence for Construction (ICOE) under the Ministry of Higher Education, Universiti Malaysia Pahang, 3DTech Parametric SdnBhd, Bina Initiatives Sdn Bhd and Bandwork GPS Solutions Sdn Bhd. Thank you for your support and commitment!

Ladies and gentlemen,

4. The theme for BIM Day 2019 is, “Digitalising Construction Together,” which brings home the message that the construction industry as a whole needs to embrace the future and make the leap into Industry 4.0.

5. In today’s challenging business environment, embracing disruptive technology is necessary to survive. The construction sector is no exception. In this digital age, technology plays a big part of how we live and work. The adoption of technology in whatever we do is no longer an option but a necessity in our quest to transform the productivity of the construction industry to be onpar with other developed economies.

6. We are living in an age of unprecedented challenges and also opportunity for the construction industry, whether in times of economic prosperity or economic difficulty. Times of prosperity normally come with problems of construction quality whereas difficult economic situations usually bring about problems of excess capacity. To overcome such challenges, we need to adopt new ways of thinking and working. Technologies and innovations already exist to address these issues.

7. However, it is widely observed that the construction sector has been slow to adopt new technologies and methodologies. According to a McKinsey report –

Imagining Construction's Digital Future – cost and schedule over-runs are the norm, while labour productivity has not kept pace with economic productivity.

8. The report does acknowledge that many technical challenges must be overcome in order to successfully rollout new technologies at scale across the industry's complex supply chain. However, the report notes that it is unlikely that adoption will become easier in the future, especially as projects become more complex which in turn gives rise to higher risks of unforeseen issues. Despite the increasing sophistication of structures, construction remains one of the least digitized industries.

9. At any typical construction site, chances are you will see construction operations working in much the same way it did 40 or 50 years ago. But with increasing pressures to achieve ever higher cost and time efficiencies, what worked then is no longer feasible today.

Ladies and gentlemen,

10. I am sure that many of you are aware of how BIM has effectively disrupted the way construction companies operate. BIM has allowed the construction industry to create greater efficiency, which in turn leads to enhanced productivity, quality, and safety.

11. In recent years, BIM has emerged as a better alternative to 3D Computer Aided Design (CAD) modelling. Perhaps BIM's greatest value is its potential to cut down on rework and duplication of drawings for the different requirements of building disciplines. This is because the BIM model contains more information than a drawing set, which allows each discipline to annotate and connect their intelligence to the project.

12. Essentially, all stakeholders such as architects, engineers, structural designers, and others, are to collaborate on the same process to build a complete digital model of the building - in a single, integrated tool. BIM digital models go beyond 3D modelling of width, height, and depth, to describe every aspect of the

projectsuch as 4D (time), 5D (cost), and even 6D (as-built operation).[1]As all interested parties can work together concurrently in building a comprehensive, digital outline of a building, they are able to collectively scrutinise every step involved in a project's lifecycle covering time, cost and sustainability.

13. This allows for accurate projections of constructability and cost, which helps construction managers and stakeholders to better understand what exactly will be involved in building the final project. This supports decision-making throughout a project cycle, even before the first brick is laid. The resulting building information model will then function as the standardised blueprint for all parties involved in taking the project from concept, to construction and to completion.

14. The efficiencies created by BIM is revolutionising the entire life-cycle of a project, from the way buildings are designed, up to its construction, maintenance and even demolition. This will only continue to improve with advanced sensors, machine-to-machine communication links, 3-D printing, robotics, artificial intelligence, big data analytics and cloud computing technology making in-roads into the construction industry.

Ladies and gentlemen,

15. As projects are becoming increasingly competitive, the use of BIM offers a more cost and time-sensitive solution as compared to the traditional process of construction. In fact, the potential of BIM to reduce construction costs and avoid design problems in the planning phase was the main impetus behind the Government's push to increase adoption of BIM in the industry.

16. In Malaysia, some of the notable projects that have benefited from BIM include the Pan-Borneo Highway; National Cancer Institute in Putrajaya; the Malaysian Anti-Corruption Commission Building in Shah Alam; the Educity Sports Complex in Nusajaya and the Ancasa Hotel in Pekan, Pahang. Notably, the use of BIM in the KVMRT Line 2 Sungai Buloh-Serdang-Putrajaya (SSP) project has won the BIM Advancements in Rail and Transit award category at Bentley's 2017 'Be

[1]http://www.theborneopost.com/2018/03/28/malaysia-lags-behind-in-ibs-construction-adoption-cidb/

Inspired' Awards[2]. This clearly highlights to us that the Malaysian construction industry already has the capabilities in utilising modern construction technologies such as BIM.

17. Currently, the level of adoption of BIM in Malaysia stands at 17 per cent[3], which is very low compared to the United States at 71 per cent, the United Kingdom at 39 per cent and Singapore, at 65 per cent. The low adoption of BIM in Malaysia is largely due to the lack of awareness, the high cost of adoption, the lack of skilled talents and the unwillingness to adapt working processes to BIM. Certainly, there is room for greater growth and adoption of BIM in the industry.

Ladies and gentlemen,

18. The Construction Industry Transformation Programme, or CITP, was introduced to transform the Malaysian construction industry into one that is highly productive, sustainable and world-class by 2020. The transformation of the industry is currently ongoing and is guided through the CITP's four strategic thrusts: Quality, Safety and Professionalism; Environmental Sustainability; Productivity; and Internationalisation, with 21 initiatives identified to address specific challenges within the construction industry.

19. Under the Productivity strategic thrust, a key initiative is to roll out technology advantage across project life-cycle by using advanced technologies such as BIM. To achieve this, three key drivers were identified, which are to:

- Facilitate BIM adoption in the construction industry through regulations;
- Establish a reference centre to support the development and adoption of BIM as well as other modern methods; and

20. To support the adoption of BIM amongst industry players, CIDB established the myBIM Centre, which serves as a one-stop resource centre for industry players. myBIM Centre was introduced as a means of providing the industry with a more

[2]https://www.aecom.com/my/bim-award-kvmrt/
[3]http://www.cidb.gov.my/images/content/penerbitan-IBS/BIM-REPORT.pdf

cost-effective avenue to implement BIM throughout the construction sector value chain.

21. The Centre, which was developed through an initial investment of RM3 million by CIDB, features state-of-the-art facilities that enable users to model and visualise building projects in a simulated environment. The National BIM library is also housed at MyBIM Centre where users can download and use any of the BIM objects and materials listed in the library.

22. To further ease the adoption of BIM, subsidised trainings are offered at MyBIM Centre, providing various levels of BIM proficiency trainings. These subsidies are provided by CIDB and the Economic Planning Unit (EPU) to reduce the highcosts of BIM adoption, particularly for SMEs looking to adopt BIM in their processes. I am pleased to note that, to date, more than **2,000 BIM personnel**have been trained and accredited by CIDB.

23. A key strategy to make BIM a norm in the construction sector is to ensure the new construction workforce are highly-skilled in BIM. Towards this end, six MyBIM satellite centres have been set up at Universiti Malaysia Pahang, Universiti Malaysia Perlis, Universiti Sains Malaysia, Universiti Malaysia Sabah, Universiti Teknologi Malaysia and Swinburne University to provide training and development programmesfor students in construction-related fields. CIDB through its subsidiary Akademi Binaan Malaysia is ready toinclude BIM Modeller training programmes at the six ABM centres across the country.

Ladies and gentlemen,

24. To assist the implementation of BIM at Government projects, CIDB established the RM1 million BIM Transformation Scheme Fund for the year 2017, which was used to obtain the BIM software and to fund training programmes that are offered for free. As of today, over 30 companies have benefited from this scheme. In 2018, over RM350,000 was budgeted for the BIM Transformation Scheme. This year, CIDB will be allocating RM 3 million to facilitate 72 companies in BIM

adoption. Through such financial support, we hope to develop a thriving construction environment that is anchored on BIM.

25. Additionally, the government is setting the pace for BIM implementation. CIDB is working closely with local authorities to implement BIM during the initial project submission stage. CIDB is collaborating with Putrajaya Corporation, Majlis Bandaraya Petaling Jaya, Majlis Bandaraya Melaka Bersejarah and Majlis Perbandaran Kangar on BIM eSubmission – which is a Uniform Building By-Laws auto-checker for building plans. Through these efforts, we are targeting to run four pilot projects this year. By 2021, all local authorities (Pihak Berkuasa Tempatan) with city status will be using this system for all project submissions.

Ladies and gentlemen,

26. The time to talk about "changing" is already past. Change is already upon us, whether we like it or not. In the face of fierce competition brought about by market liberation, as well as disruptive building technologies already being deployed in the market, the Malaysian construction industry cannot afford to sit back and allow the tides of time to pass us by.

27. The time is now for the industry to pay greater attention to advanced technologies such as BIM. This is because the adoption of BIM is a key game changer to ensure that the construction industry maintains its competitiveness at the local and international fronts. Furthermore, BIM will be an important component as we enter the Fourth Industrial Revolution. As Yang Berbahagia Dato' Ahmad 'Asri had mentioned earlier, CIDB is working towards launching the Industry 4.0 Roadmap for Malaysia next year.

28. Before I conclude, I wish to once again reiterate that embracing these technologies, will be key to success and widespread adoption and ensure that the construction industry stays in step with advancements in productivity and efficiencies of other sectors.

29. With greater promotion and awareness efforts, we are optimistic about the future uptake and implementation of BIM in the industry. We are certain that the industry's adoption of BIM can only result in the increase of overall productivity, according to the goals set forth in the CITP.

30. With that, I am pleased to announce the BIM Day 2019 officially opened!

WabbilhitaufiqWalhidayahWasalamualikumWarahmatullahiWabarakatuh.

Thank you.

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