

**Keynote Speech by**

**Yang Berbahagia**

**Dato' Dr. Syed Omar Sharifuddin bin Syed Ikhsan**

**Secretary-General of the Ministry of Works**

**STATISTICS, INDICES IN CONSTRUCTION AND AUTOMATION (SICA)  
CONFERENCE 2019**

**Theme:**

***National Construction Industry Information Centre (NCIIC):  
Leading the Way in Digital Construction***

**20 AUGUST 2019**

**W HOTEL, KUALA LUMPUR**

---

Distinguished Speakers,  
Tan Sri, Dato' Sri, Datuk-Datuk, Datin-Datin,  
Ladies and Gentlemen,

Assalamualaikum Warahmatullahi Wabarakatuh, Salam Sejahtera and a very good morning to all of you here today.

1. It is a great honour for me to be here with all of you today at the **STATISTICS, INDICES IN CONSTRUCTION AND AUTOMATION (SICA) 2019**, organised by the Construction Industry Development Board (CIDB) Malaysia.
2. First and foremost, I would like to thank all of you for making time to be present here today. I am especially grateful to our speakers, who are all experts in their respective fields, who have generously contributed their time and knowledge to share their insights with us today. It is indeed an honour to share the stage with such distinguished experts, and be given the opportunity to be the keynote speaker on the topic of "National Construction Industry Information Centre (NCIIC): Leading

the Way in Digital Construction” for this conference. In this keynote, I wish to “paint the backdrop” or in other words, I will be highlighting the need and rationale for establishing the NCIC, a key initiative of the Ministry of Works through CIDB.

Ladies and gentlemen,

3. The running theme for the previous 2 years’ SICA conference was the importance of Big Data for the construction sector to enhance its business effectiveness. As we all know, Big Data Analytics has revolutionised many industries. For example, Big Data is changing the retail industry significantly, and by extension, it is also changing how society shops. Both online and offline retailers are using data-driven strategies to understand their customers, and match them to products they are likely to buy. Those who do this well are reaping huge rewards as a result.
4. Even in traditionally ‘boring’ industries such as warehousing, supply chain management and logistics is finding that big data applications are hugely beneficial for accurately maintaining and even forecasting optimum stock levels. It is foreseeable that in the near future, warehouses and distribution centres will be able to run themselves efficiently, with very little need for human intervention.
5. In light of such technological advances, the construction industry cannot afford to be left behind while other industries continue to evolve and become more efficient and more profitable through smart application of technologies and innovations.
6. Some may wonder, how is Big Data relevant to a ‘hands-on’ industry such as construction? Allow me to highlight some ways big data is changing the face of construction around the world today.

Ladies and gentlemen,

### Big Data in Construction

7. In the construction industry, Big Data refers to the huge quantities of information that have been generated and stored in the past up until today. This data is

generated from people, computers, machines, sensors, and any other data-generating function, and includes all the plans and records of anything that was ever built.

8. Traditional information systems record useful information, such as project schedules, CAD designs, costs, invoices, and employee details. However, they are limited in their ability to work with unstructured data like free text, printed information or sensor readings. Furthermore, big data by itself is not useful. To gain more insights and make better decisions in construction management, significantly more data is needed, as well as the capability to analyse it. For that you need powerful big data analytics programmes.
9. Construction firms are now using data to make better decisions, increase productivity, improve jobsite safety and reduce risks. With artificial intelligence and machine learning systems, firms can turn mountains of data to arrive at better forecasts and gain a competitive advantage when costing for construction projects.

#### Importance of Adapting to Technological Advancements

10. Given the rapid pace of change in technology, Malaysian construction industry players need to **identify the current and future challenges** and prepare for it so as to keep up with the progression of the construction industry in the world. Not only that, it is crucial to **invest in technologies that would enhance work practices in order to remain agile** and survive in the fierce competitive environment in a globalised construction industry.
11. As technological disruption is already taking over many well-established industries, it is no longer an option but a necessity to adopt the latest technological advances to ensure our nation remains on track to be a developed nation. I believe we all want to see the Malaysian construction industry be on par with other developed economies.
12. As the Fourth Industrial Revolution picks up pace, the construction industry increasingly needs to embrace technological advancement so that we remain competitive and thrive in the international arena. **It is imperative to embrace**

**digitisation and technological disruptions to transition from being a labour-driven industry to one that is more efficient and data-driven.**

13. Only by adopting these skills, methods and technologies can individual professionals, and the industry collectively, increase construction productivity at scale. I am confident that the industry will be ready to take the lead in this emerging and challenging landscape with willingness to change and embrace digitisation.

Ladies and Gentlemen,

Construction Industry Transformation Programme 2016-2020 (CITP)

14. The transformation of the construction sector is crucial as it is a key engine in driving the country's economic growth. It creates new jobs and provides solutions to address social, climate and energy challenges. Construction's impact on GDP and economic development goes well beyond the direct contribution of construction activities. Construction significantly impacts GDP and overall economic development as it is closely linked to other sectors, which ensures its multiplier effect. As a key component of the economic well-being of the nation, **the industry needs to be resilient to challenges for both today and tomorrow, especially when faced with technological disruptions.**

15. As such, 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. As you all know, the transformation of the industry is still ongoing according to the CITP's four strategic thrusts:

- Quality, Safety and Professionalism;
- Environmental Sustainability;
- Productivity; and,
- Internationalisation and Competitiveness.

16. The ultimate goal of CITP is to transform the construction industry to create highly competent and competitive players for both the local and international construction industry. Our construction players must have complete confidence and the

necessary professional acumen to handle increasingly complex and challenging global construction projects. In order for Malaysia to become a high-income nation, it is crucial that our construction players be on par with the technological advancements and new talents in the global construction arena.

17. In line with this vision, the Ministry of Works is committed to **promoting the use of Big Data analytics** as we recognise that it will certainly benefit the industry and its entire value chain. With data-backed strategies and decisions, the industry will be able to lift itself to be one that is known for its high quality, safety, environmental sustainability and high productivity.

18. In fact, I am made to understand that CIDB is championing the development of the Fourth Industrial Revolution (IR 4.0) Roadmap for the construction industry which is due to be launched next year. The IR 4.0 Roadmap, jointly developed by a special committee involving key stakeholders from relevant fields, will outline ways in which the industry can move forward in increasing BIM usage for higher productivity and efficiency.

Ladies and gentlemen,

### **National Construction Industry Information Centre: CONVINCCE & MyN3C Portal**

19. IR 4.0 is already upon us. As the Malaysian construction industry enters this global era, we must embrace Big Data technologies as the way forward. With Big Data, mountains of data accumulated over the years can help in developing better cost estimates and even predict project outcomes. This allows industry players to make strategic decisions through data-driven processes, thereby producing various benefits, among others but again not limited to increasing productivity, improving jobsite safety and reducing business risks.

20. Previously, the industry faced the issue of a lack of access to accurate data as there was no centralised database in existence. I am made to understand that CIDB Malaysia has created an industry-wide Big Data ecosystem known as **CONVINCE** – the “**Construction Information for Your Convenience**”. CONVINCCE will be a one-stop information centre for all construction-related data,

which will be available to all stakeholders. This will support all industry players as they can now kickstart their Big Data Analytics applications without having to come up with the large capital outlay.

21. Another parallel development to CONVINCE is the **MyN3C portal**. The Ministry of Works through CIDB has also set up MyN3C Portal or the National Construction Cost Centre, currently a free to use online platform that provides comprehensive information on construction costs to all industry stakeholders. CIDB collects, analyses, updates, maintains and publish updated statistical data on construction material prices that will help industry players make better decisions pertaining cost data.

22. The MyN3C Portal contains:

- **Cost Data** such as Building Material Prices, Labour Wage Rates, Machinery Hire Rates and Equipment Purchase Prices, and
- **Construction Cost Indices**, which include the Building Material Cost Index, Building Labour Cost Index, Building Machinery & Equipment Cost Index (BMECI), and Building Cost Index.

23. I am proud to note that CIDB is constantly innovating and exploring ways to improve our offerings and contributions to the industry. Currently, MyN3C provides:

- Construction Cost Information
- Life Cycle Costing
- Tender Price Indices
- Labour & Plant Constant

We are in the process of introducing new features and upcoming developments to MYN3C in the future, which includes:

- Road Construction Tender Price Indices
- Forecasting Indices

24. By providing timely industry data through the MyN3C Portal, we aim to:

- Ease the availability of comprehensive construction related data for industry reference;
- Ensure regular data releases for informed policy formulation and decision making;
- Enable better resource planning and longer-term operational sustainability

Ladies and gentlemen,

### The Way Forward

27. The topics we are discussing today is indeed of great importance as it has significant ramifications for the future direction of the Malaysian construction sector. I am confident that, from these discussions, all participants here will be able to take away many insights on how Big Data can benefit your business.

28. As such, I urge all of you here today - the industry stakeholders - to continue adopting modern technologies and processes, such as big data analytics, to ensure continuous growth trajectory and sustainability of the construction sector.

25. With the existence of CONVINCENCE, stakeholders of the industry can now have access to a ready Big Data Analytics infrastructure. In the spirit of the CITP, ***“Driving Construction Excellence Together”***, I call on all stakeholders to work together to embrace these solutions to make the construction industry in Malaysia highly efficient, productive and progressive.

26. Before I conclude, let me once again express my appreciation to all of you for your support and presence here today. I congratulate the organisers of **SICA CONFERENCE 2019** for the fifth successful instalment of this platform where we can openly discuss issues with the aim of improving the construction industry in Malaysia and ensuring its continued prosperity in the future.

27. I wish all of you a fruitful day ahead.

Wabbilhitaufiq Walhidayah Wasalamualikum Warahmatullahi Wabarakatuh.

Thank you.

**#####**