

# IFMC 2021

THE 7<sup>TH</sup> INTERNATIONAL FACILITY MANAGEMENT CONFERENCE

## Remodeling FM for The Future

Cassia Meeting Room, Level 3,  
Marina Bay Sands Singapore

24 November 2021  
9.30am - 6pm

**This Conference will focus on technologies that are going to drive digital transformation in the Real Estate and FM Sectors.**

These include 5G, Cloud and Edge Computing, IoT, Big Data, Immersive Extended Reality Technology, Blockchain Technology and Digital Twins that are disrupting the digital world. Covid-19 has already accelerated the digital transformation in just about every business. This will continue Post Covid. The Built Environment (BE) comprising of Real Estate, Architecture Engineering and Construction (AEC) and FM sectors will not and cannot afford to be left out. Various presenters will explain how the convergence of these enabling technologies is going to power the deployment and application of a wide range of digital technologies and solutions in the BE sectors.

## Pricing

Conference Packages	Regular Fee	Subsidised Fee
For Industry Professionals Only		
Singapore (Local and PR) – In-Person Fee <sup>2</sup>	SGD\$214	SGD\$107 <sup>1,3</sup>
Singapore (Local and PR) – Virtual Fee	SGD\$107	SGD\$53.50 <sup>1,3</sup>
Singapore (Foreigners) – In-Person Fee <sup>2</sup>	SGD\$214 <sup>3</sup>	-
Singapore (Foreigners) – Virtual Fee	SGD\$107 <sup>3</sup>	-
International – Virtual Fee	SGD\$100	-

Note:

1. Singapore delegates (Local and PR) attending IFMC 2021 qualify for subsidy under the E2i Training Fund of \$15/hr or 50% of applicable fee, whichever is lower. The expected subsidy is estimated as 50% respectively for In-person and Virtual Fee. (Subject to confirmation by E2i.)
2. The fee will entitle the In-Person delegate to 1 conference seat, bento lunch and one coffee break
3. The above fee is inclusive of a 7% GST.

## ENQUIRES

For conference enquiries, please get in touch with our team at [abs.conference@cems.com.sg](mailto:abs.conference@cems.com.sg)

## REGISTRATION



Scan the QR code to register now!

# Speakers

## **Practical Challenges of deploying IoT Systems for Smart Buildings**

*by Dr Tan Guan Hong*

Today there are many IoT systems, enterprise users need to consider these operational needs. When selecting IoT systems, there is a need to address daily operational needs to avoid these systems becoming white elephants. Considerations are Data Quality for decision making, False alerts and Sensor Deployment. The presenter will highlight these challenges that are likely to be faced new adopters for Sensors and Using Cameras as Sensors in IoT systems.

## **AI-powered Green Assessment as a service for Optimization of Building Performance**

*by Nilesh Y. Jadhav*

Imagine a platform that creates Digital Twins of entire districts and cities. Then invite the building owners, managers, consultants, tech and finance providers to evaluate and improve building performances using an Enhanced Digital Green Assessment tool. This tool applies building physics and AI to suggest the best solutions and technologies for buildings at the right costs and Returns on Investment (ROI). At the same time it helps technology providers to find the best fit with buildings and green projects with the best financing options available in the market. All this is delivered through an open access but yet secured cloud platform that is convenient and super-easy to use!

## **Innovating Robotics and Automation for FM**

*by Zen Tan*

The Pandemic was a wake-up call for organizations that have thrived on low-cost, low skilled labor in their operations. The need for driving up manpower efficiency through robotics and automation will be even greater and especially urgent in those segments of work that rely heavily on foreign workers such as environmental services (such as cleaning of floors and window), security, inspection in risky environment in buildings and infrastructural facilities. The push for robotics and automation had already started a couple of years ago. The pandemic has accelerated the pace of deployment.

This session will discuss the upcoming trends in the innovative use of robots for FM, especially for moving things around. For example, there is a growing trend of Robots as a Service (RoS) where vendors either lease the robot, charge per hour usage or per intelligent action. How does this benefit the industry and what is its impact on the user's ROI and concerns with maintenance. Interesting examples will be highlighted to tinker the audience's imagination.

# Speakers

## Digital Twins – The Future of Smart FM

by Sam Tay

The use of a shared Digital Twin platform that harnesses the combined technologies of BIM modeling, Open Common Data Environment, central visualization system, AIoT and Data Analytics will be a step to the next wave of innovation in Smart Integrated FM for Buildings and Estates/Districts. The Digital Twin will provide all relevant stakeholders – building owners, designers, managers, service providers and occupants – access to a single source of truthful information. This will enable the Integrated FM team to collaborate through info-sharing, visualization, simulation modeling and performance analytics. They will have new insights to make bold and pragmatic decisions across complex sets of possible actions and investments. This will enable FMers, building owners and occupants achieve low-carbon transition targets, great user experience and a healthy and resilient environment. The platform can also be further enhanced by Blockchain to ensure the operations are efficient, transparent, traceable and reliable with tamper-proofed managed data and performance parameters.

## Integrated Solutions for Smart FM

by Alvin Ng

There is an increasing demand for integrated and intuitive Smart FM solutions. These are advanced and AI-supported solutions such as predictive maintenance, remote diagnostics, energy optimization, risk management, compliance monitoring, continuous commissioning and more. There is also a move towards greater collaboration and co-creation of smart solutions enabled by Open Common Data Environment and use of API, greatly widening the choice of solutions. As a result, buildings will be better able to meet rising performance expectations around sustainability, energy efficiency, productivity as well as user experience.

## FM Powered by AI

by Dr Clayton Miller

Many sectors such as Finance, Retail, Health and Medicare have adopted extensively smart solutions powered by data science. The Built Environment, however, has been slow in comparison. Dr Clayton will share how AI driven solutions are being designed and deployed in the various operations and activities of the construction and FM sectors. Examples of applications of AI are areas such as predictive maintenance, self-optimization of operations, automated assets management and energy management. He will also let us peek into some of on-going data science R&D projects that could contribute to the smart FM capability of the sector in the near future.

# Speakers

## **Blockchain Technology to Enhance Digital Solutions in the Built Environment**

*by Chak Lee Meng*

According to the IMDA's Future of Services report, the blockchain market in Singapore could achieve a market spending of up to US\$26 billion by 2030 with a cagr of 32.5%. Globally, Gartner predicts that blockchain 's business value-added will grow to over US\$360 billion by 2026. Overall, the potential value creation from blockchain technology will be immense. In Singapore, sectors such as financial services, banking, logistics and supply chain, lifestyle/media/entertainment are already adopting the technology. However, the Built Environment sector has been slow in awakening to the potential of this technology. It is critical for the sector to start exploiting the potential of this technology as a value creation mechanism in the world of big data. More importantly, the industry should be aware of its possible applications to many services in the various value chains to further improve cost effectiveness, efficiency, transparency, governance and security.

## **Smart Cooling As A Service - the hottest idea for FM innovation in recent years**

*by Benjamin Lai*

The traditional business model of delivering cooling involves the manufacture, sale, use and disposal of the equipment. Higher volumes of usage mean more sales and profits. There is thus no incentives to voluntarily minimize the use of energy and the equipment. This session discusses the new approach to cooling -Cooling as a Service (CaaS) which involves customers paying for the cooling they receive, rather than the hardware or infrastructure that delivers the cooling. CaaS benefits the customers through lower energy and maintenance cost, zero Capex and a transparent and predictable pricing structure. The model also reduces the customer's technology investment risks as he is not exposed to the risk of equipment failure. On the other hand, the service provider is incentivized to produce the cooling service in the most efficient manner including using AI or ML to optimize the operation of the cooling system and even consider engaging the customers to influence their consumption behaviors.



# Speakers

## **Singapore Green Building Masterplan (SGBMP) and Super Low Energy Buildings (SLEB) –Challenges and Opportunities for FM practitioners**

by Dr Gao Chun Ping

Singapore Green Building Masterplan (SGBMP) seeks to foster a leading green Built Environment sector that can lower its carbon footprint and provide a healthy, liveable and sustainable built environment. Under SGBMP, two trends will require the special attention of Singapore's FMers. The first is BCA's Super Low Energy Building (SLEB) programme which will produce highly energy efficient buildings whose high performances are enabled by smart building systems, optimised cooling and ventilation, and renewable sources of energy. Secondly, the new Green Mark 2021 sets more challenging performance benchmarks for sustainability and occupants' health and wellness. This session will give an overview and update of the SGBMP and discuss challenges and opportunities for facility managers to keep up with these trends.

