



**IIT MADRAS**  
Indian Institute of Technology Madras



### **ADBI-IIT Madras Workshop**

*Strategies for adoption of Digital Technologies for skill development and project management in Construction*  
**(In-Person)**

**Date: 6th May 2024**

**Time: 09:00 – 17:30 IST**

**Venue: Hall 2, ICSR, IIT Madras**

**Centre for Industrial Consultancy and Sponsored Research**

**Indian Institute of Technology, Chennai**

**Tamil Nadu 600036, India**

#### **Organizing Partners**

Asian Development Bank Institute (ADBI)

Indian Institute of Technology, Madras (IITM)

#### **Supporting partners**

Centre of Excellence on Technologies for Low Carbon and Lean Construction (TLC2)

#### **Background**

India is forecasted to be the largest growing construction market globally. However, India's construction sector continues to grapple with challenges such as time and cost overruns. Such issues are underpinned by systemic issues such as the lack of skilled workforce and adoption of digital technologies, despite the proven positive effect of digital technologies in aiding pressing construction industry issues. To promote rapid growth of digital technologies in the construction sector, this workshop draws lessons from practical cases of applying information technology to design, construct, and maintain civil infrastructure in the Indian context.

<b>Time (IST)</b>	<b>Agenda</b>
09:00	Registrations
09:30 – 09:45	<b>Opening Remarks</b> by <i>Dr. K E Seetharam, Senior Consulting Specialist, ADBI &amp; Professor Nikhil Bugalia, IIT Madras</i>
09:45 – 10:45	<b>Panel Discussion: Solutions and Challenges in Digital Technology Adoption for Construction Sector</b> <i>Moderator – Professor SenthilKumar, IIT Palakkad</i> <i>Panelists</i> <i>Bangalore Sreevatsan Mukund , Head BIM- L&amp;T Construction</i> <i>Kubaloy Kundu, DGM/Planning, National Capital Region Transport Corporation</i> <i>Siddharth S Kumar, Founder and CEO, Eartheon</i> <i>Kalyan Vaidyanathan, Director Business Development, Bentley Systems India</i> <i>Q&amp;A from the Audience</i>

10:45 – 11:30	<b>Keynote Address: Transformational Digital Initiative at NCRTC</b> <i>M. Rajat Gosai Group General Manager (Planning) NCRTC</i> <i>Interactive Discussion</i>
11:30 - 12:00	Break
12:00 - 13:00	<b>Workshop on BIM Adoption: Lessons from NCRTC</b> <i>Professor Ashwin Mahalingam, IIT Madras</i>  IIT Madras, supported by ADBI, has developed a case study on the journey of Digital Technology Adoption by NCRTC. The workshop will disseminate the knowledge from this case, illustrating best practices that can be readily adopted in construction projects across India.
13:00 - 14:00	Lunch
14:00 - 16:00	<b>Fish-banks Game – Renewable Resource Management Simulation</b> <i>Professor Nikhil Bugalia, Assistant Professor, Department of Civil Engineering, IIT Madras</i>  Participants will explore an online simulation game developed at MIT in this workshop. Working closely in a team of 3 people, participants will roleplay as a Fishery company, making decisions about their business. Participants understand some sustainability-related concerns facing renewable and nonrenewable resources and learn how to manage them. The session will also emphasize the relevance of the lessons to the construction industry and how such games can enable enhanced learning.
16:00 - 16:10	<b>Closing Remarks, Dr. K E Seetharam, ADBI</b>
16:10 - 16:30	Break
16:30 - 17:30	<b>Lab Tour: Virtual Reality-based Construction Training</b> <i>Dr. Nikhil Bugalia, Assistant Professor, Department of Civil Engineering, IIT Madras</i>  Experience the intricacies of real construction sites through immersive VR simulations and their application in training and skill development.  <u>Location:</u> VR lab Building Science Block, Department of Civil Engineering, IIT Madras

**Venue**

The workshop will be in-person in Hall 2, ICSR, IIT Madras

(<https://maps.app.goo.gl/J2QjHwxdteljLHaJ57>)

For further information, please contact: Nikhil Bugalia at [nbugalia@civil.iitm.ac.in](mailto:nbugalia@civil.iitm.ac.in) or Ashwin Mahalingam at [mash@civil.iitm.ac.in](mailto:mash@civil.iitm.ac.in); IITM or KE Seetha Ram [kseetharam@adbi.org](mailto:kseetharam@adbi.org); ADBI.