BUILDING INNOVATION
Emerging Technologies Series

Digital Technology Implementation: AECO Viewpoints

Track: Strategy and Business Value

Session Description

This dynamic panel discussion will bring together a distinguished group of experts representing each core sector—architecture, engineering, construction, and owners from the built environment—to share insights on their digital journeys.

This session will provide a frontline look at the latest advancements from NIBS and explore how these initiatives are driving innovation in digital twins and beyond. Each panelist will offer a unique perspective on implementing digital technologies, discussing the real-world challenges they face, solutions they've embraced, and opportunities they see on the horizon.

Attendees will gain a comprehensive view of how different AECO sectors are adopting technologies to tackle critical issues, from enhancing design precision to improving project collaboration, tracking sustainability goals, and maximizing asset performance.

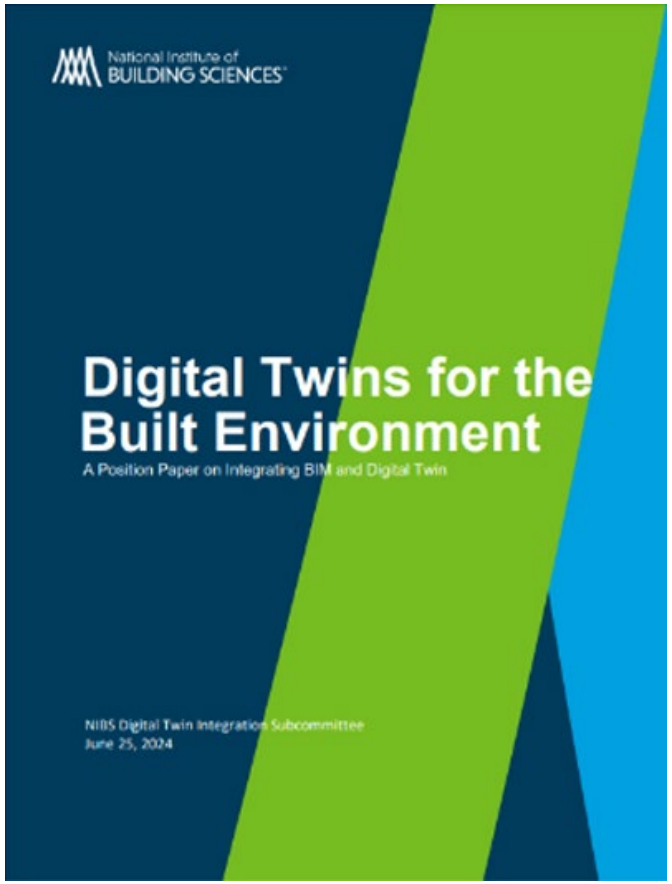
NIBS Digital Technologies Updates

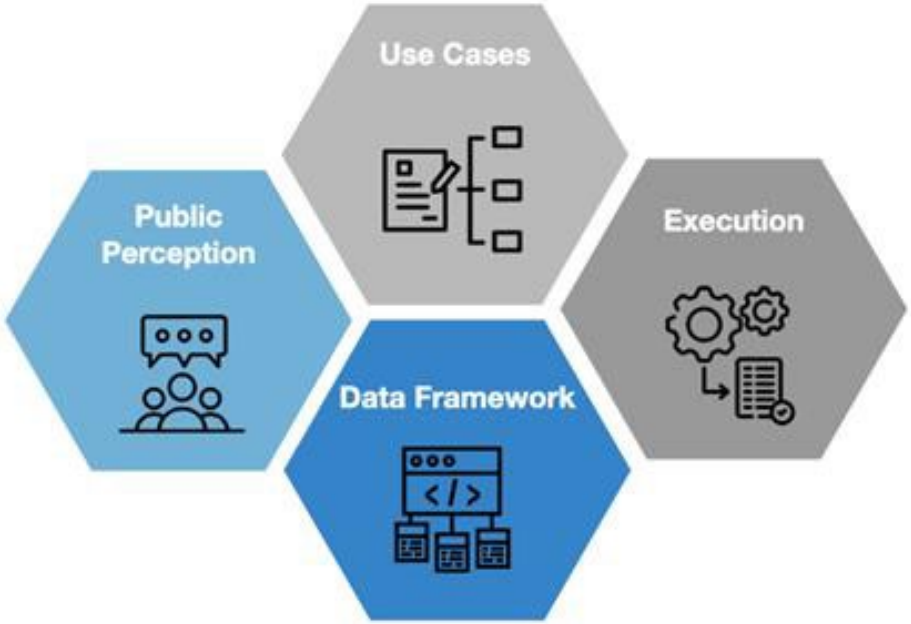
NATIONAL BIM STANDARD
United States® V4

Digital Technology Council

NCS
United States National CAD Standard®

Digital Twin Integration - Position Paper





National BIM Standard - United States® V4

NBIMS Vision:

To develop a clear, industry-focused set of standards and guidelines that can be used by capital facility (buildings and infrastructure) owners and teams to define their information requirements, procure the services needed to successfully obtain quality information, and enable a project team to deliver a high-quality facility along with facility asset information.

NBIMS-US™ V4

https://www.nibs.org/nbims

Owner AECO Technology Adoption Study

A nation-wide owner survey to:

- Track digital transformation progress and identify knowledge gaps across the AEC industry
- Generate actionable insights for owners and key stakeholders
- Reveal opportunities and challenges to guide strategic decision-making

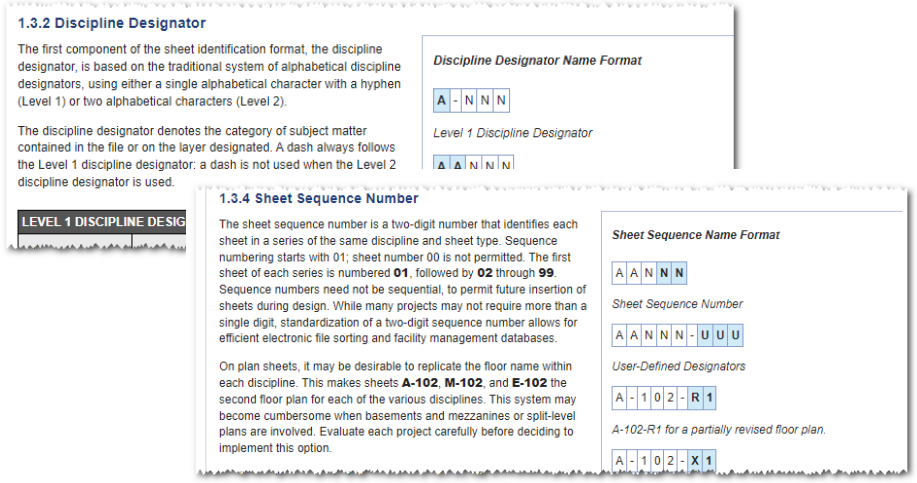
National Institute of BUILDING SCIENCES™ DODGE CONSTRUCTION NETWORK AUTODESK esri™ Trimble

United States National CAD Standard® (NCS)

Version 7 Coming Soon

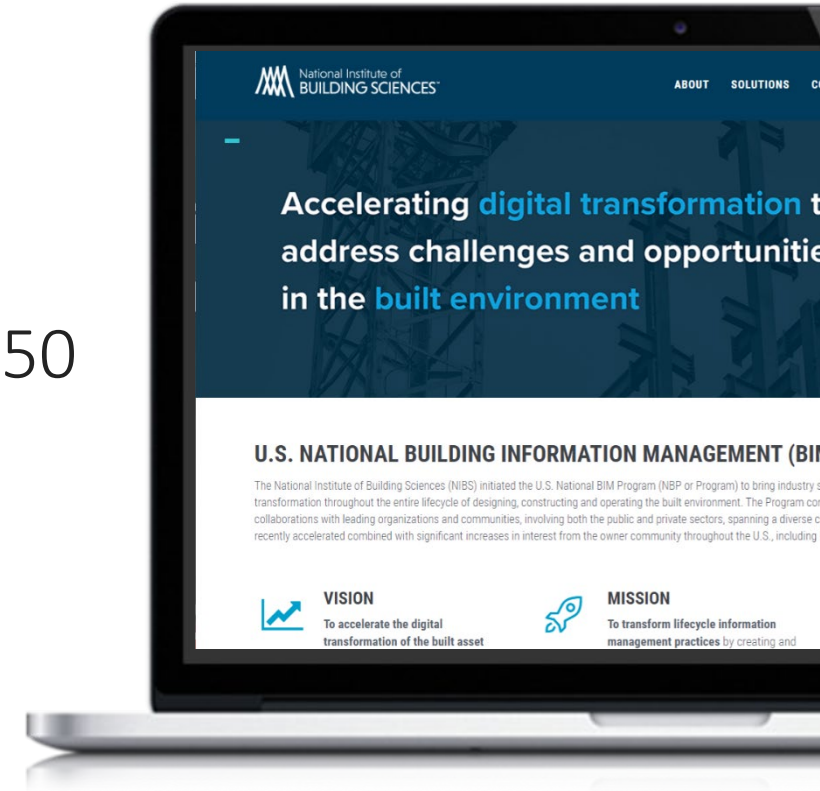
Updates include:

- Unified verbiage to increase clarity and reduce confusion
- Modernized terminology
- Categorized required, informational, & historical content
- Removed duplicates or conflicts



Additional Activities

- NBIMS Workgroups
  - Product Data Requirements Workgroup
  - Information Exchange Workgroup
- Digital Twin Integration Committee
- National BIM Program
  - Development of U.S. Annex & Guide for ISO 19650
  - U.S., Canada, U.K. tripartite efforts to drive national policies for technology adoption
  - Owner case study framework and samples
  - Stakeholder-specific value statements



Panelists

Moderator:
Johnny Fortune
Executive Director,
U.S. National BIM Program
NIBS

Robert L. Brown
Sr. Proj. Control Systems Mgr.,
Dallas Fort Worth
International Airport

Marcus Farquhar
BIM Program Manager,
Federal Programs,
WSP Global Inc.

Hannu Lindberg
Vice President,
Construction Technology,
DPR Construction

Kurt Maldovan
Global Solution Director,
Digital Delivery,
Jacobs

Adoption

How would you characterize the state of digital technology adoption across the AECO industry?

What trends are making Digital Twins more relevant today?

- Organizational
- Stakeholder Groups
- Industry-wide

Impact

How are Digital Twins transforming processes, and what are the benefits?

How do you approach creating, consuming, facilitating, and maintaining Digital Twin ecosystems?

- Processes
- Deliverables
- Integration

Collaboration

How have Digital Twins improved collaboration on multidisciplinary projects?

What strategies have helped you integrate Digital Twins with internal and external stakeholders?

- Supply Chain
- Planning and Scheduling
- Communication
- Project Coordination

Challenges

What barriers have you faced in adopting Digital Twins, and how have you worked to overcome them?

How do you address data security and governance challenges when using Digital Twins?

- Managing Data Requirements
- Cost
- Stakeholder Buy-in
- Interoperability

Workforce

What skills are critical for leveraging Digital Twins, and how are you preparing your teams?

How do you foster a culture that embraces Digital Twins in traditionally risk-averse teams?

- Skills Gaps
- Training and Development
- Cultural Change
- Human and Technology Interaction

Transformation

Can you share an example of how Digital Twins have reduced environmental impacts?

How do Digital Twins contribute to lifecycle management and long-term efficiency?

- Connection to Resilience
- Emergency Management
- Energy Management

Future

What advancements in Digital Twin technology will drive innovation and adoption in AECO?

What advice would you give firms starting their journey with Digital Twins?

How far are we from seeing widespread digital transformation in the AECO sectors?

Contact Us

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Thank You