

Why is the Construction Industry turning to BIM?

The wind of change is sweeping through an infrastructure landscape, helping in a new era of innovation and efficiency in the AEC (Architecture, Engineering, and Construction) industry. With advancements in technology such as Building Information Modeling (BIM) rapidly becoming the standard for architects, engineers, and contractors.



Let's delve into the reasons why BIM is poised to revolutionize the construction industry:

- 1. Enhanced Collaboration:** BIM facilitates seamless collaboration among various stakeholders involved in a project. Architects, engineers, contractors, and clients can work together in a coordinated manner from the design phase to construction completion.
- 2. Efficient Project Management:** By creating 3D models that encompass all aspects of a building project, BIM helps in visualizing the entire project lifecycle. This leads to better decision-making and efficient project management.
- 3. Cost Savings:** BIM enables better cost estimation and identification of potential clashes or issues before they arise on-site. This proactive approach not only saves time but also minimizes costly rework during construction.

4. Sustainability and Energy Efficiency: With BIM's ability to simulate energy performance and environmental impact early in the design phase, architects can create more sustainable buildings that are energy-efficient and environmentally friendly.

5. Regulatory Compliance: In a fast-evolving regulatory environment, BIM aids in ensuring compliance with building regulations and standards by providing accurate data for documentation and approvals.

It's clear that Building Information Modeling is set to play a pivotal role in shaping the future of its construction sector. The adoption of BIM not only promises increased productivity and efficiency but also sets new standards for sustainable development practices within the infrastructure industry.

openBIM and ClosedBIM

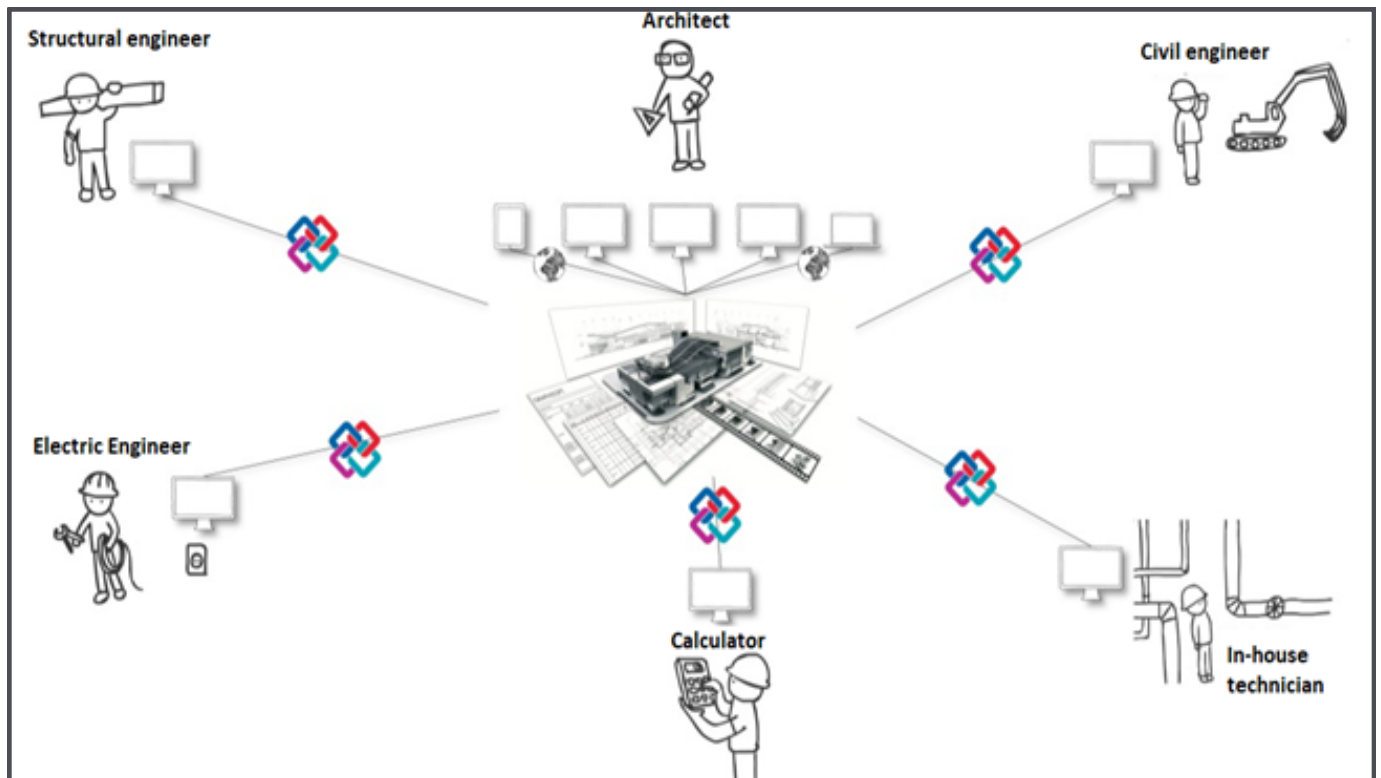


*OpenBIM refers to a common language and set of standards, allowing architecture, engineering, and construction (AEC) teams to share information regardless of preferred software.

*OpenBIM standards provide a common framework for data exchange and communication among different software platforms and stakeholders.

*buildingSMART international is the worldwide authority driving the digital transformation of the built asset environment, through creation and adoption of open international standards.

OpenBIM is format that allows each and every project member to access the information model without hampering the native design. It is a universal approach to collaborate with design, realize and operate buildings based on open standards like Industry Foundation Classes (IFC), BIM Collaboration Format (BCF) and others.

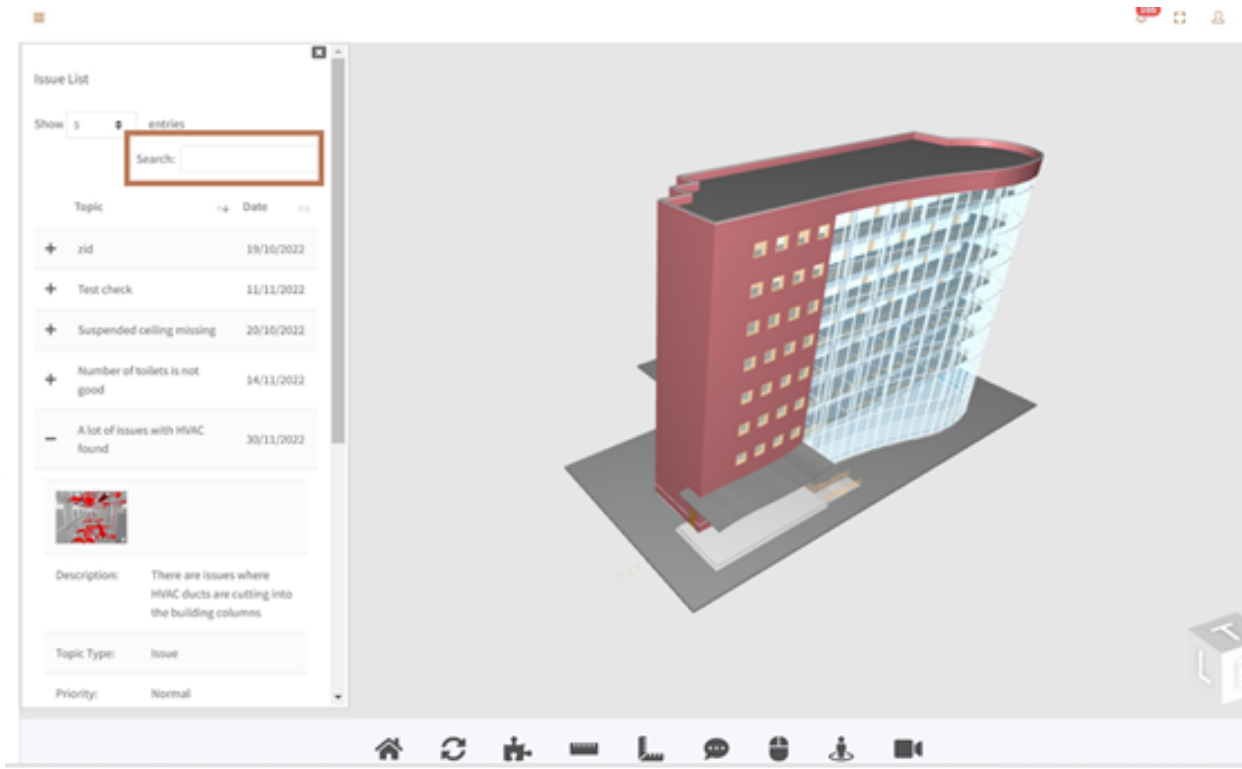


openBIM extends the breadth and depth of BIM deliverables by creating common alignment and language by following to international standards and commonly defined work processes.

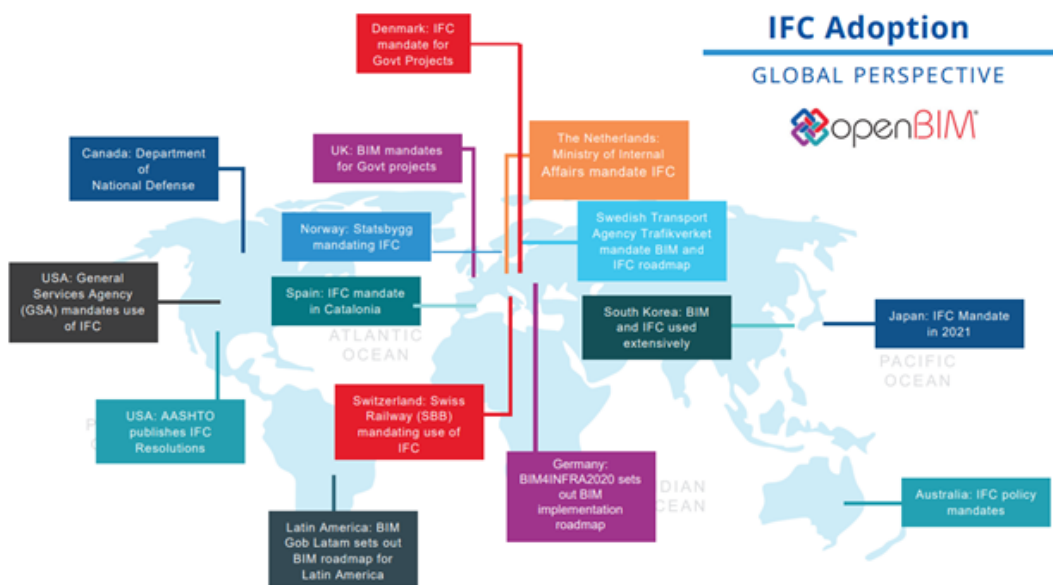
ClosedBIM is an environment where the same software platform must be used throughout the building process to create a unified digital representation of the project. It involves several exchanges using the BIM tools of the same provider to ensure interoperability and prevent incompatibility issues.

3D BIM viewer allows users to:

- View the IFC models
- Visually inspect model issues
- Create BCF issues
- Measurement
- Clip models
- Hide/Isolate model entities
- Design calculations and documentation from the BIM model
- BIM clash detection
- AI- based BIM model filtering and checks (direct contextual conversation)
- Compare BIM models
- Run compliance check (BIM validation)



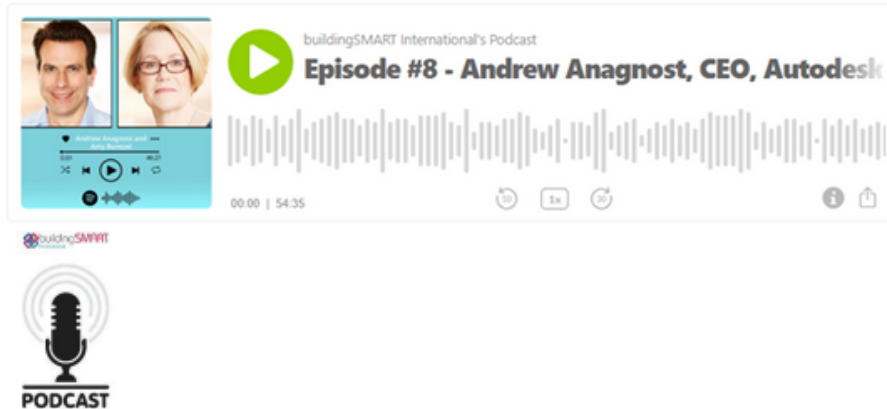
IFC Adoption- Global Perspective



Digital BIM model submissions will be mandatory for building permits in Dubai starting from 01/01/2024 using IFC format (openBIM).

<https://www.dm.gov.ae/documents/circular-9-1-2/>

Vendor Support for **Open Standards** Podcast Highlights- Andrew Anagnost Autodesk, CEO



“Customers need an interoperable ecosystem... interoperability is key to a successful digital future for AEC and quite frankly, we’re proud that we have roots in the early discussions on this especially around openBIM”

The importance of having conversations like this, and having organizations like buildingSMART, can help drive some of the critical process changes that need to happen to drive an ecosystem that is more sustainable and efficient. It’s not just about technology, it’s about changing the ecosystem to work better”.

Episode link: <https://www.buzzsprout.com/1609339/8383669>

Vendor Support for **Open Standards** Podcast Highlights- Jack Dangermond ESRI, President and Founder



“One of the common intersections with the great work you guys are doing in building standards, so we can interoperate with the whole built environment to support the work of your listeners...”

Do we support open standards? Any company is a damn fool if they don’t support open standards. If you’re going to work in a modern world, you must be open and interoperable with other companies... Company’s today have to be open and to innovate in highly competitive markets”

Episode link: <https://www.buzzsprout.com/1609339/8329446>

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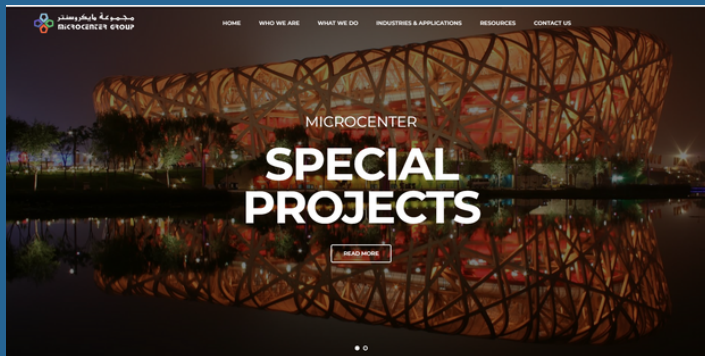


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