



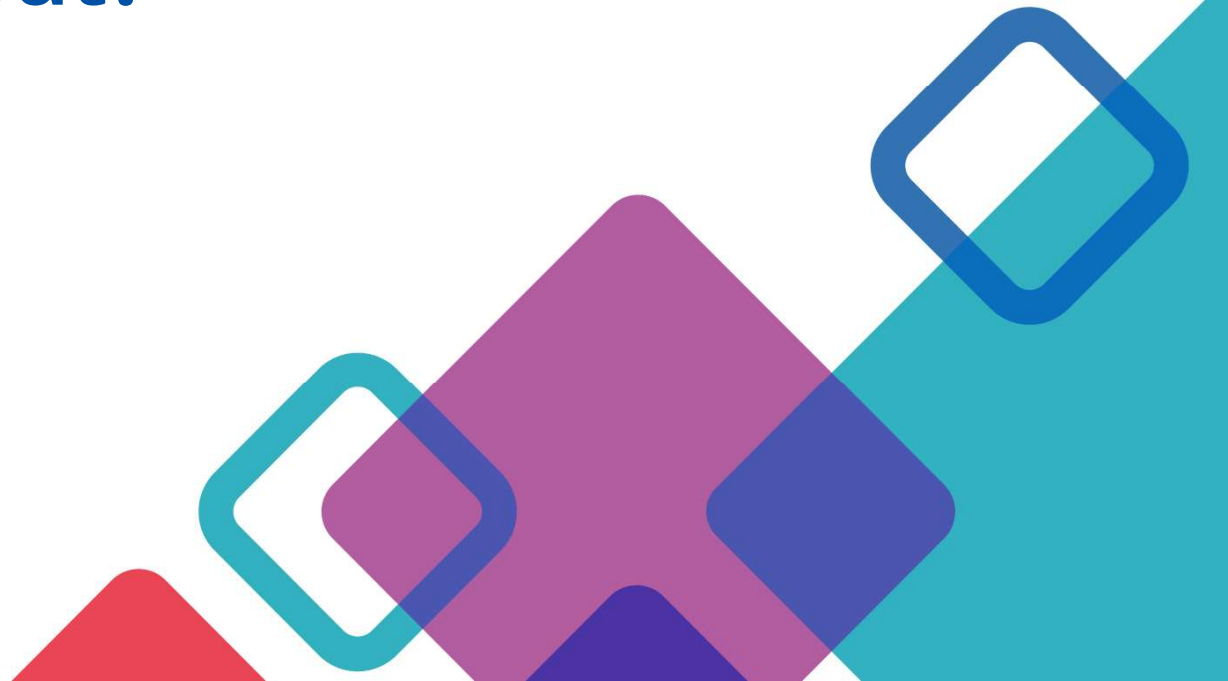
What is this BIM I keep hearing about?

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Principal at BIM DnA Group

CEO (Past President) buildingSMART Canada

Chief Strategy Officer of AECO Innovation Lab

Director of Design Technologies at Diamond Schmitt Architect

Director of Digital Practice at MJMA

BIM Manager / Architect at Moriyama + Teshima

Founder and Former Chair of torontoBIMcommunity

Licensed with the OAA and an OAA Mentor

University of British Columbia - Master's of Architecture

Ryerson University - Bachelors in Architectural Science



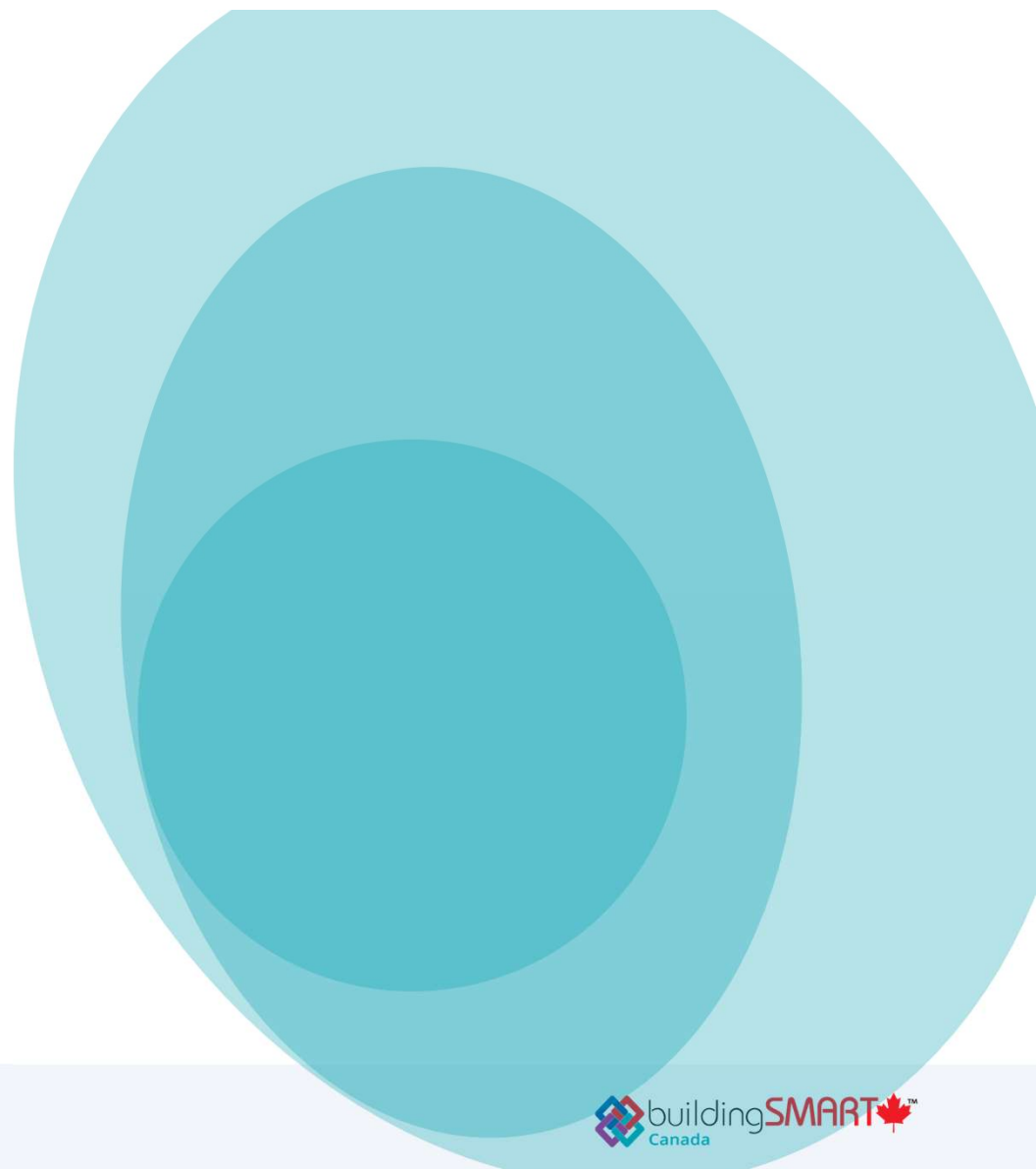
Who's here?

Who has a good understanding of BIM?

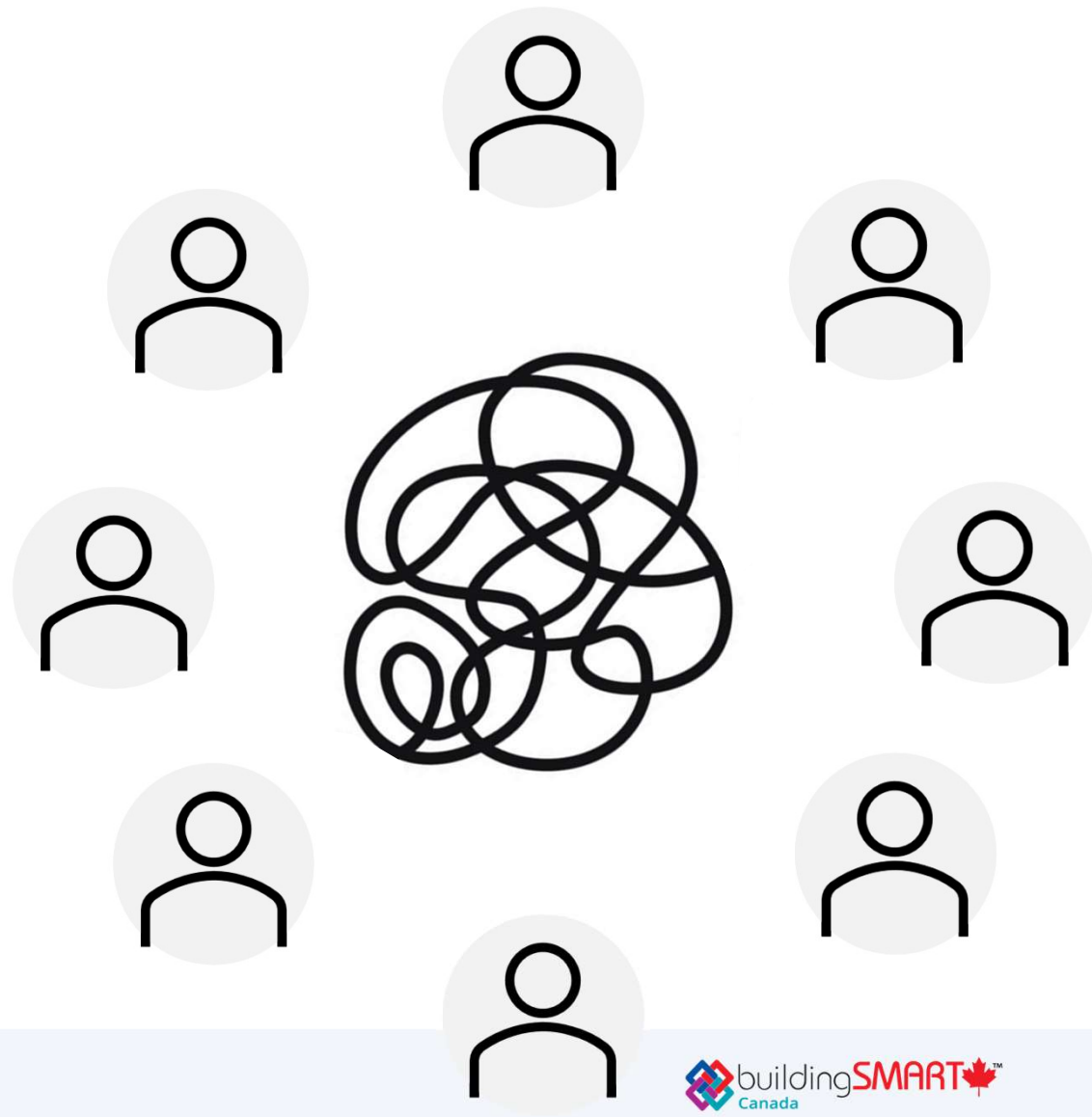
Who has some knowledge of BIM?

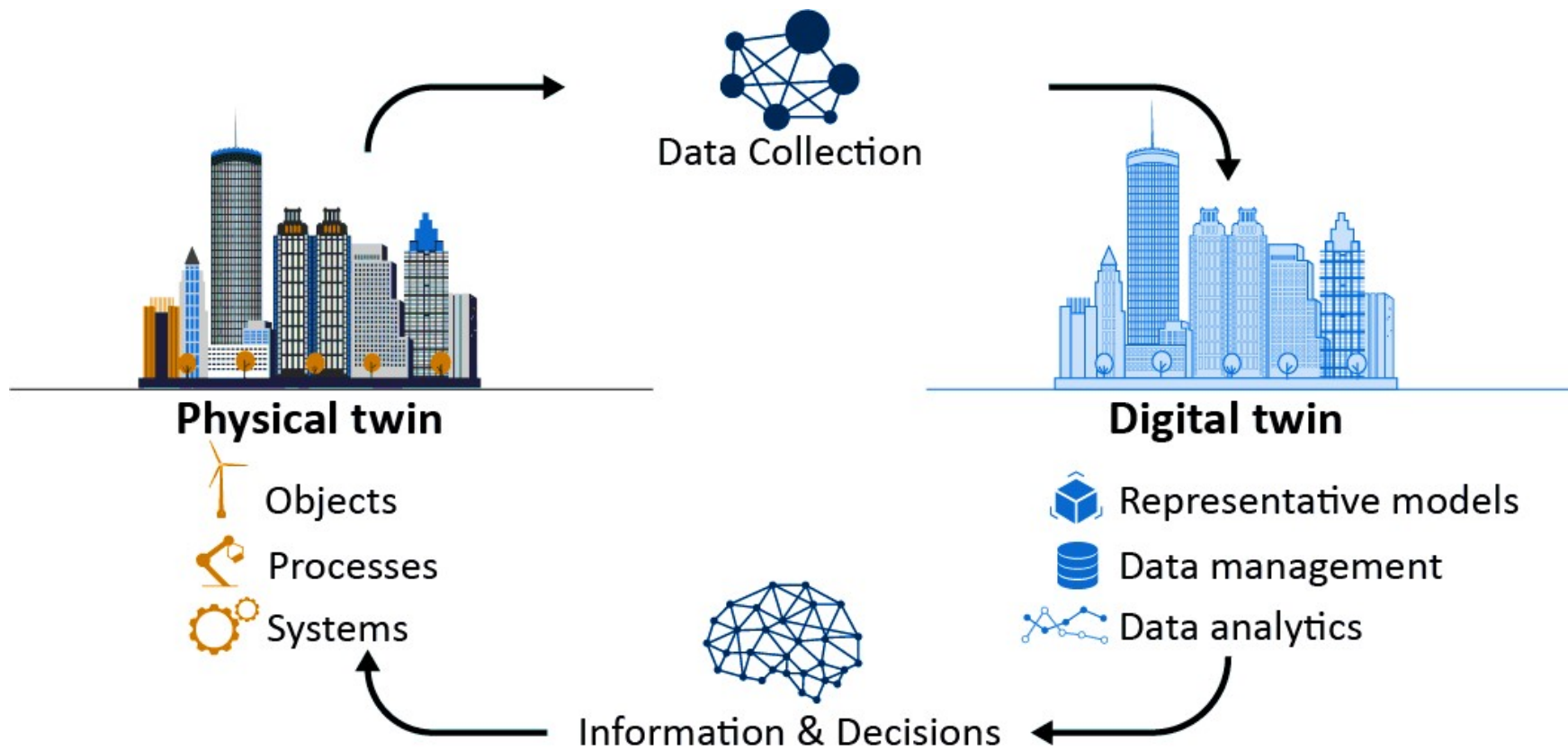
Who is here to learn more?

Why

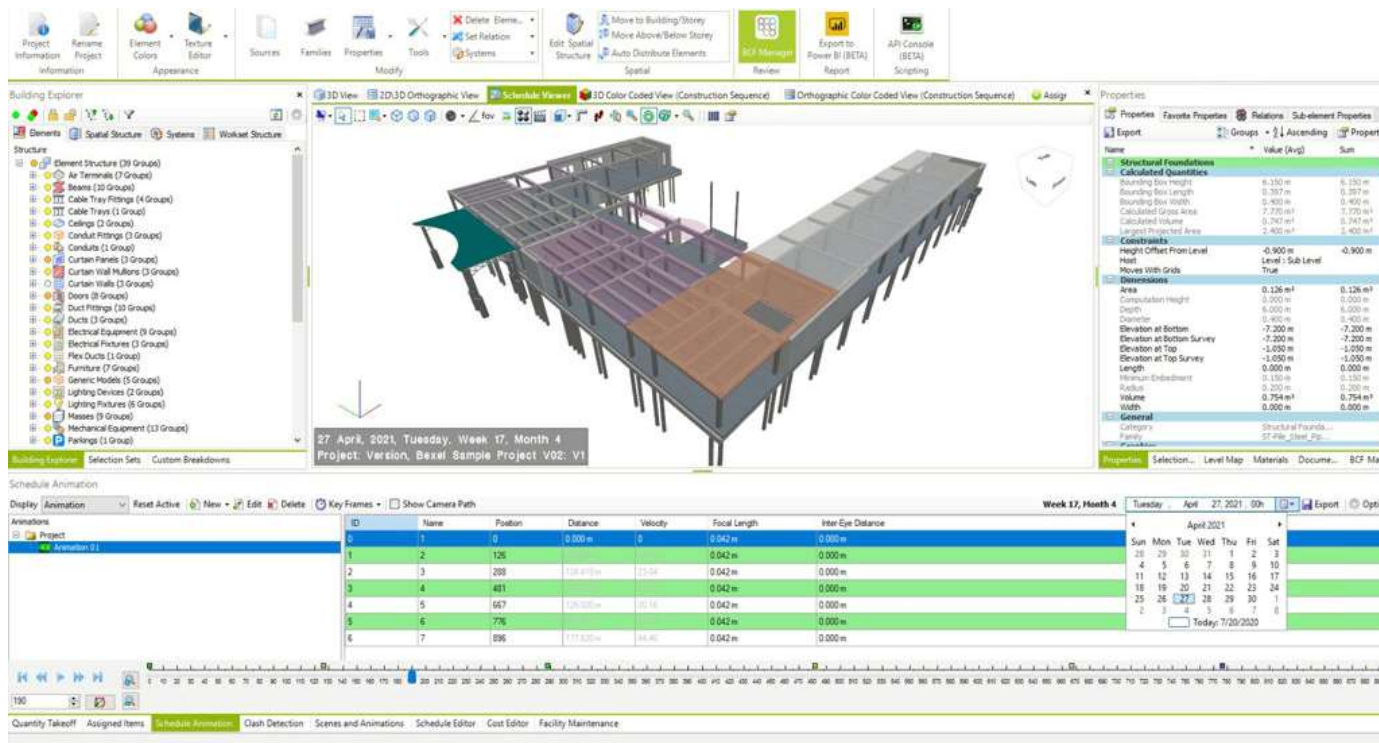








Takeoffs & Estimating

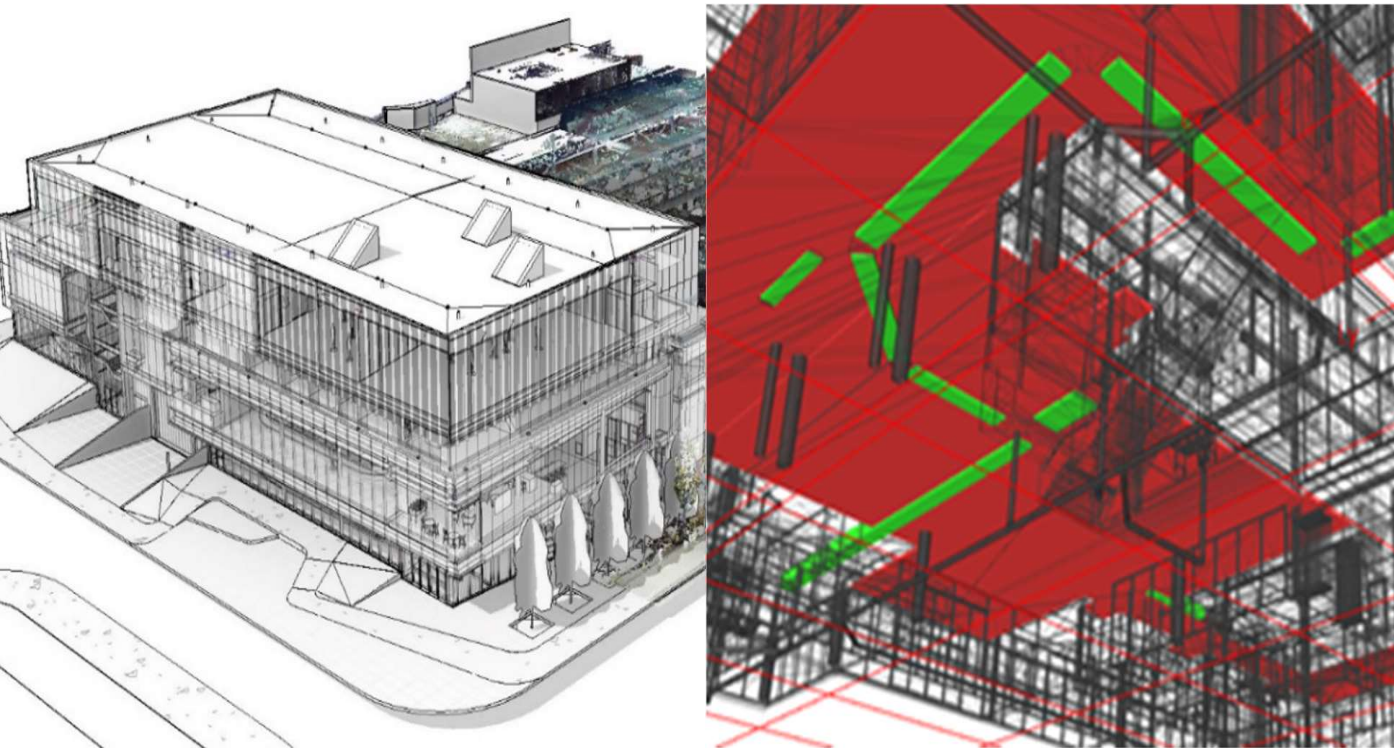


BIM models can provide detailed quantities, including precise roof areas, slopes, penetrations (vents, skylights, etc.), and materials.

This helps roofers:

- Create faster and more accurate bids
- Reduce waste and over-ordering
- Spot complexities early (like odd roof geometries)

Fewer Surprises

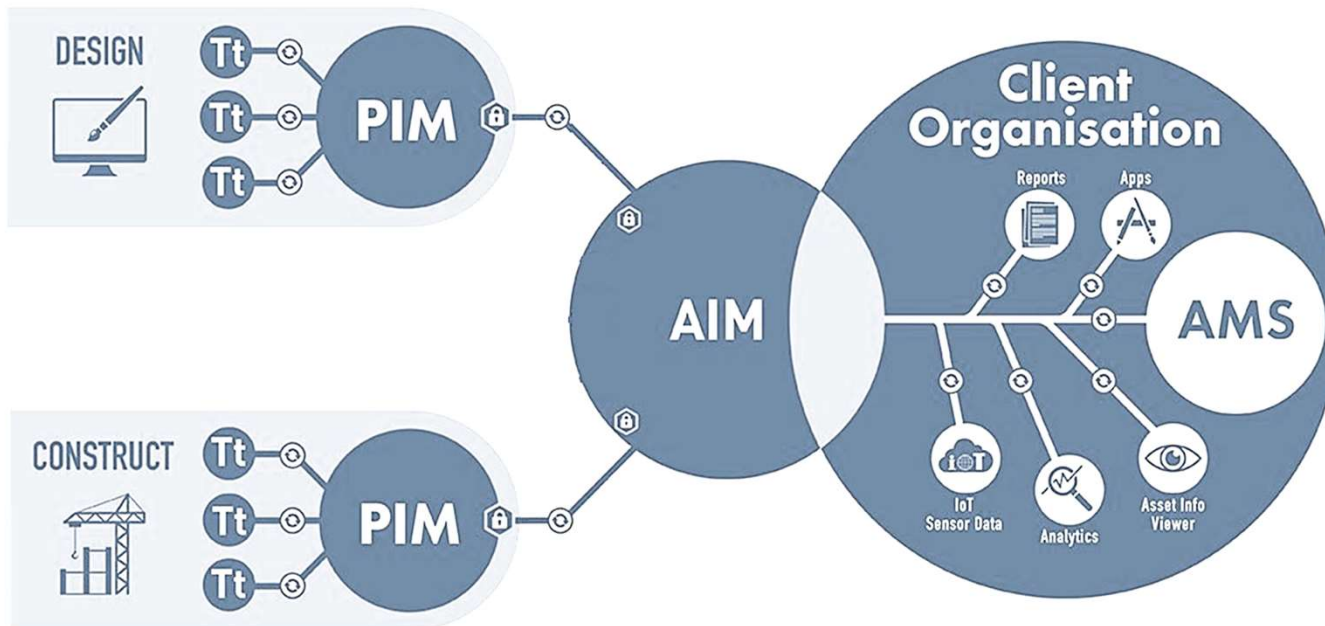


Roofers can see clashes ahead of time — like HVAC units, solar panels, or structural elements that interfere with roofing components.

That means:

- Fewer surprises on-site
- Reduced rework and delays
- Better coordination with other trades

Asset Information Model



If the roofing data lives in the BIM model, it becomes part of the digital twin or FM (facility management) record.

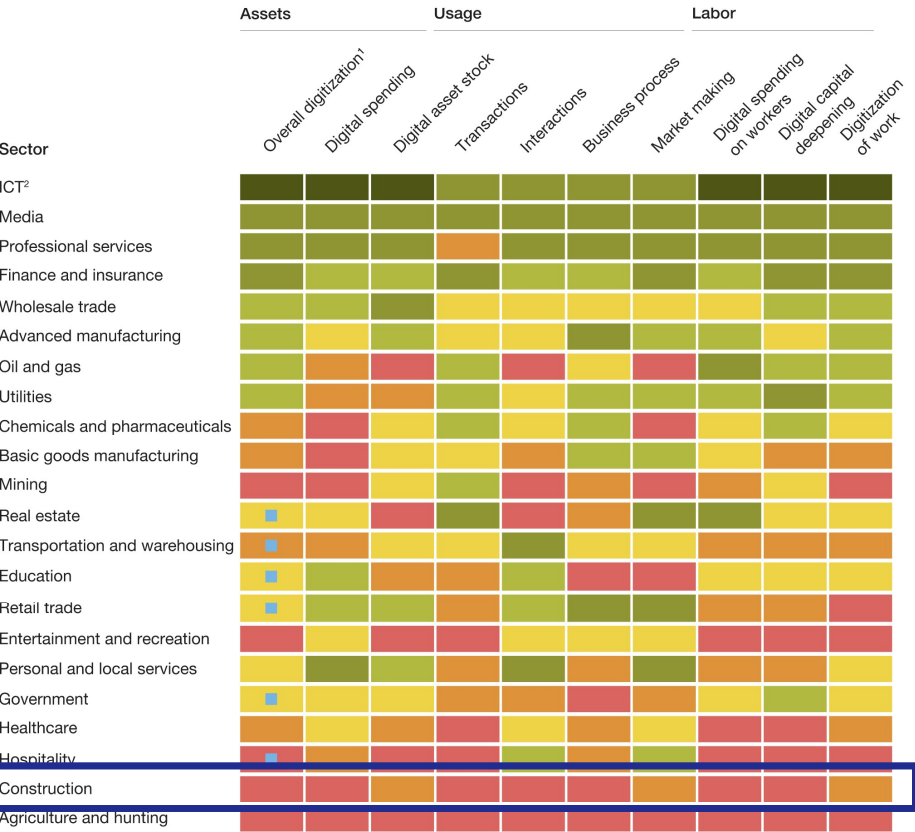
This benefits:

- Warranty tracking (e.g. membrane types, install date)
- Future repairs or retrofits
- Avoiding damage during building upgrades

The construction industry is among the least digitized.

McKinsey Global Institute Industry Digitization Index; 2015 or latest available data

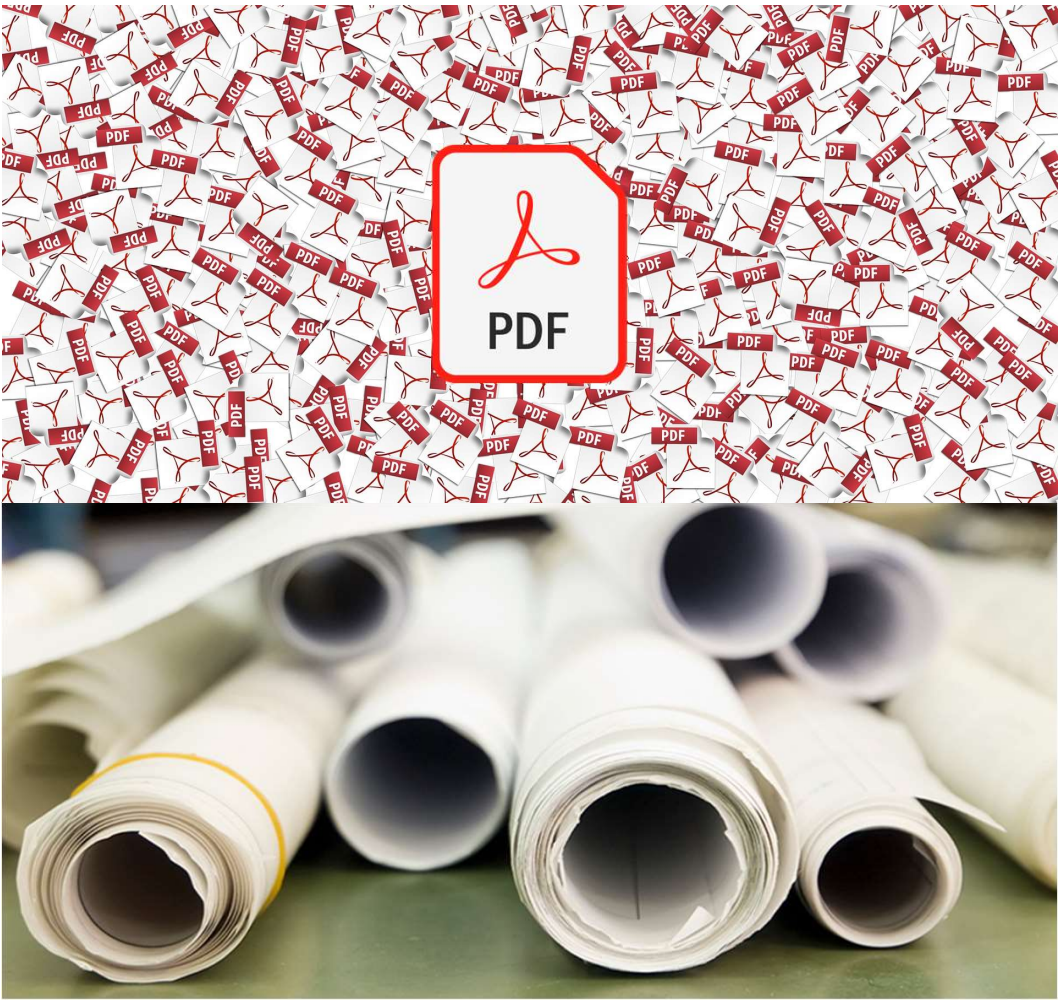
■ Digital leaders within relatively undigitized sectors Relatively low digitization Relatively high digitization



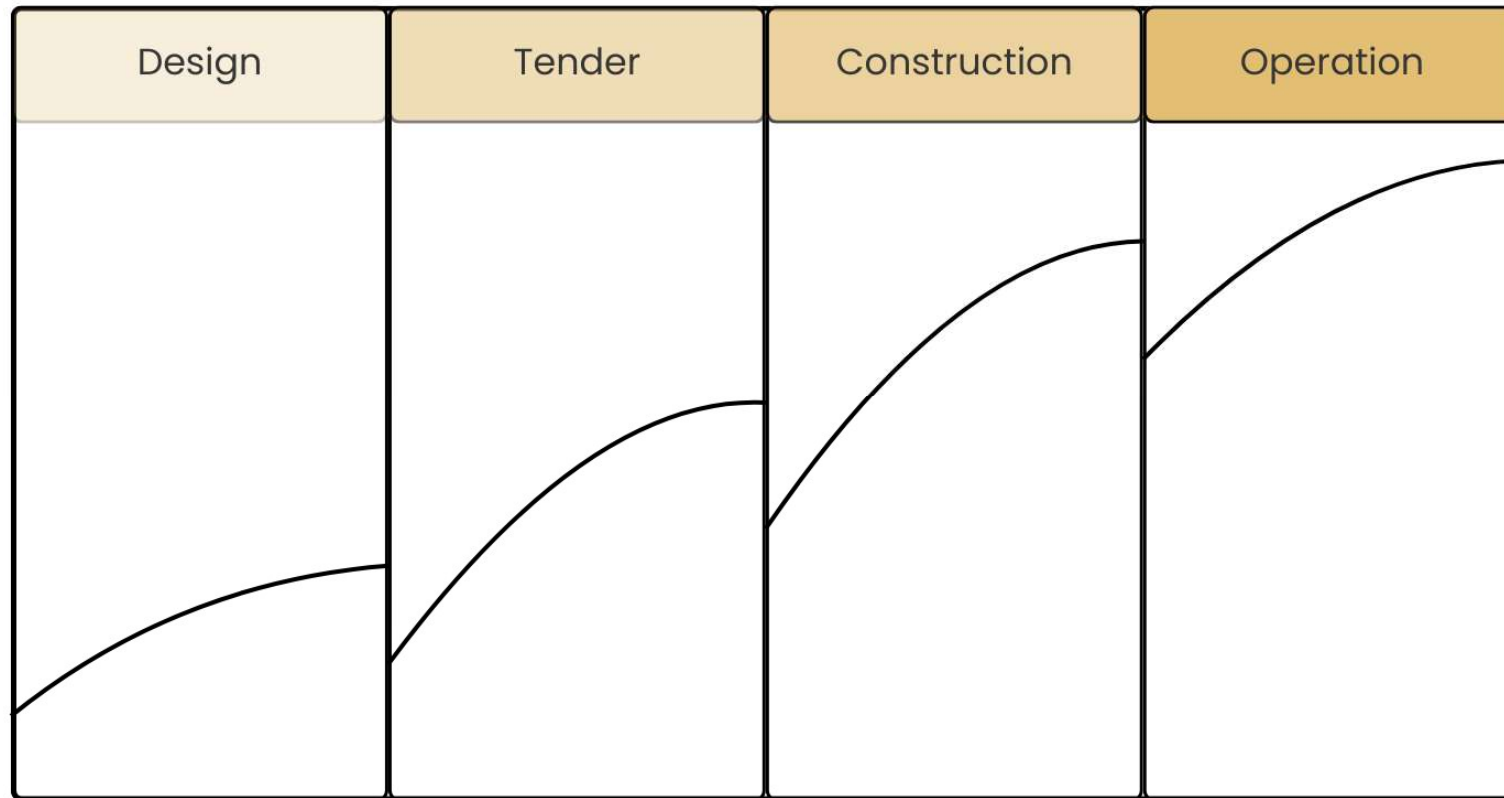
¹Based on a set of metrics to assess digitization of assets (8 metrics), usage (11 metrics), and labor (8 metrics).

²Information and communications technology.

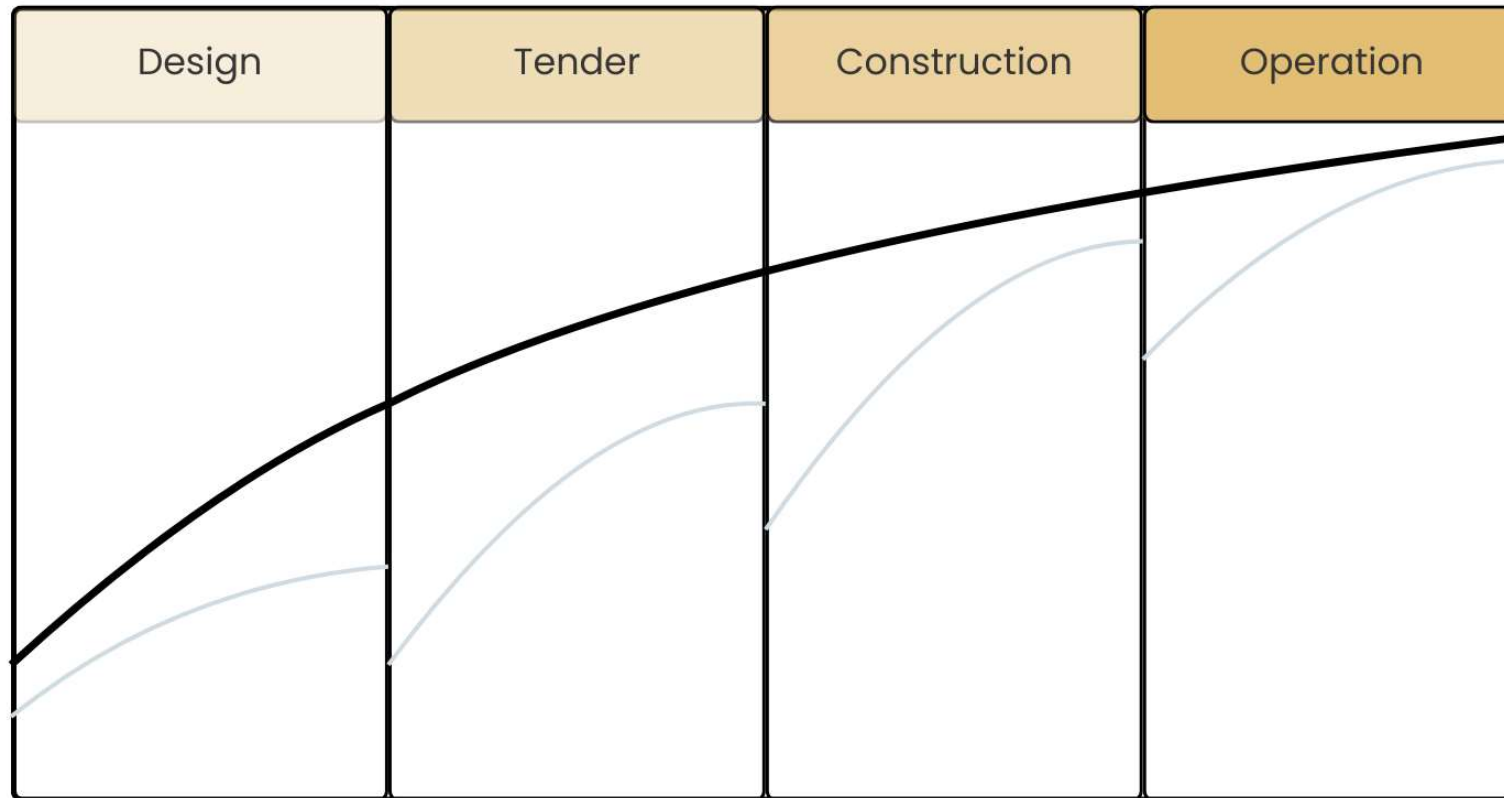
Source: AppBrain; Bluewolf; Computer Economics; eMarketer; Gartner; IDC Research; LiveChat; US Bureau of Economic Analysis; US Bureau of Labor Statistics; US Census Bureau; McKinsey Global Institute analysis



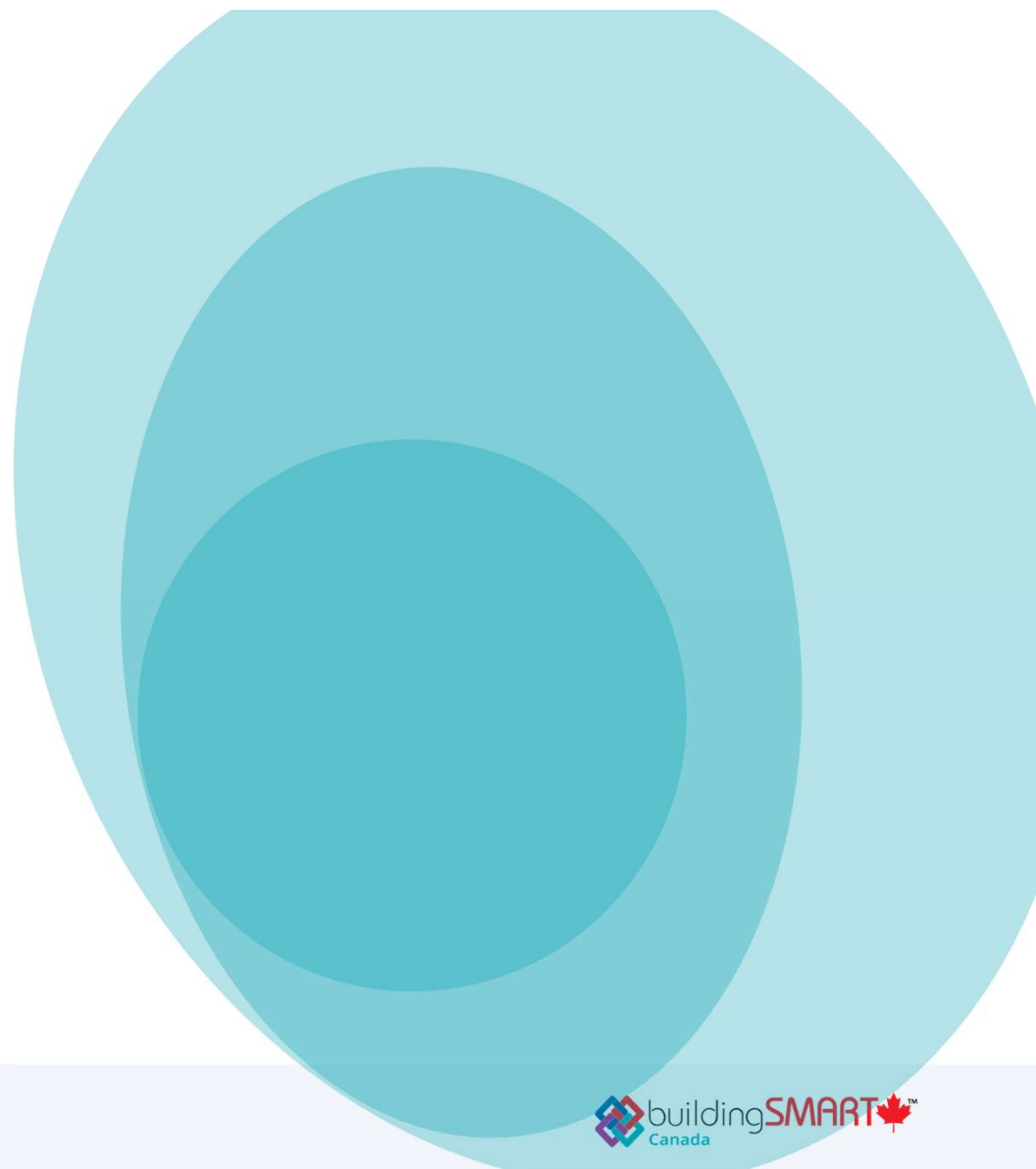
Information - Traditional Workflow



Information - BIM Workflow



What



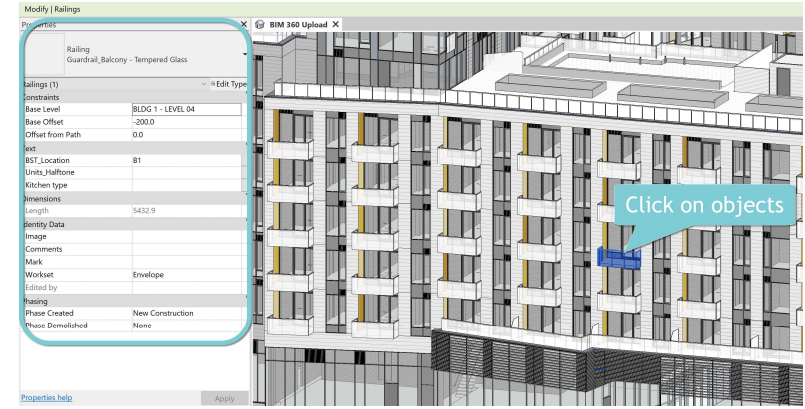
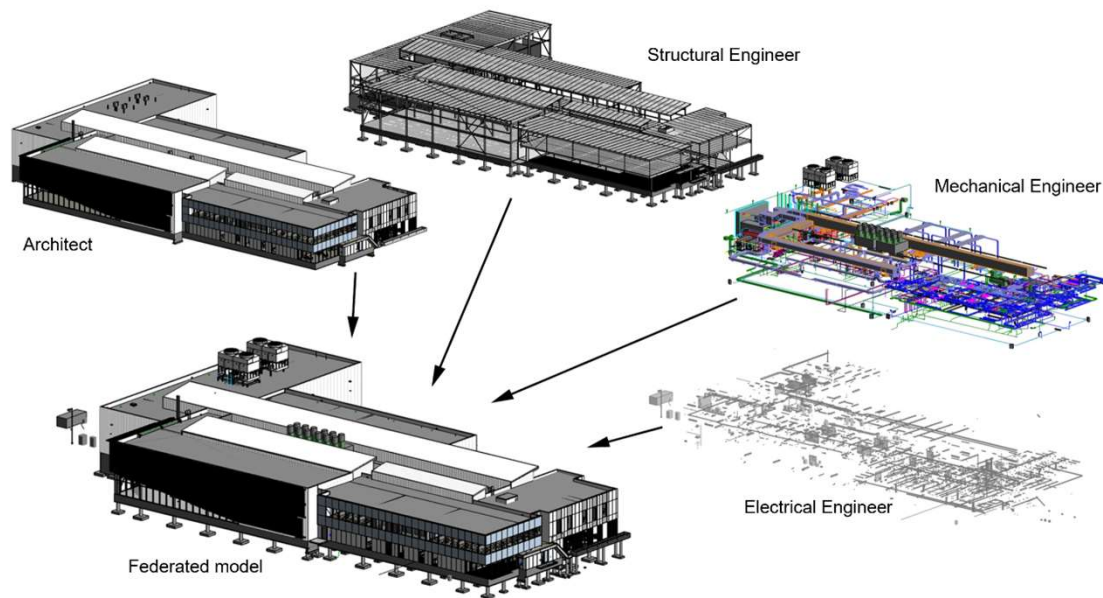
BIM: Building Information ...

Defined as representing 3 separate but linked functions

VERB



BIM: Building Information Model



BIM: Building Information Modeling



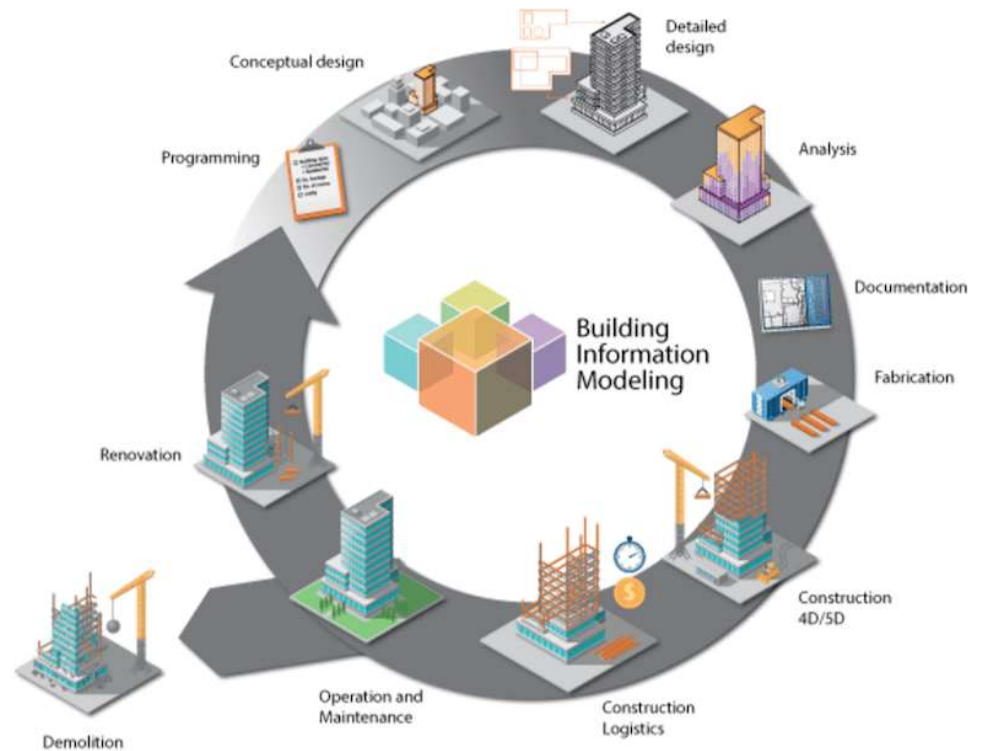
International
Organization for
Standardization

Process

ISO 19650-1	ISO 19650-2	ISO 19650-3	ISO 19650-4	ISO 19650-5	ISO 19650-6
Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - information management using building information modelling Part 1: Concepts and principles	Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - information management using building information modelling Part 2: Delivery phase of assets	Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - information management using building information modelling Part 3: Operational phase of assets	Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - information management using building information modelling Part 4: Information exchange	Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - information management using building information modelling Part 5: Security-minded approach to information management	In Development

BIM: Building Information Management

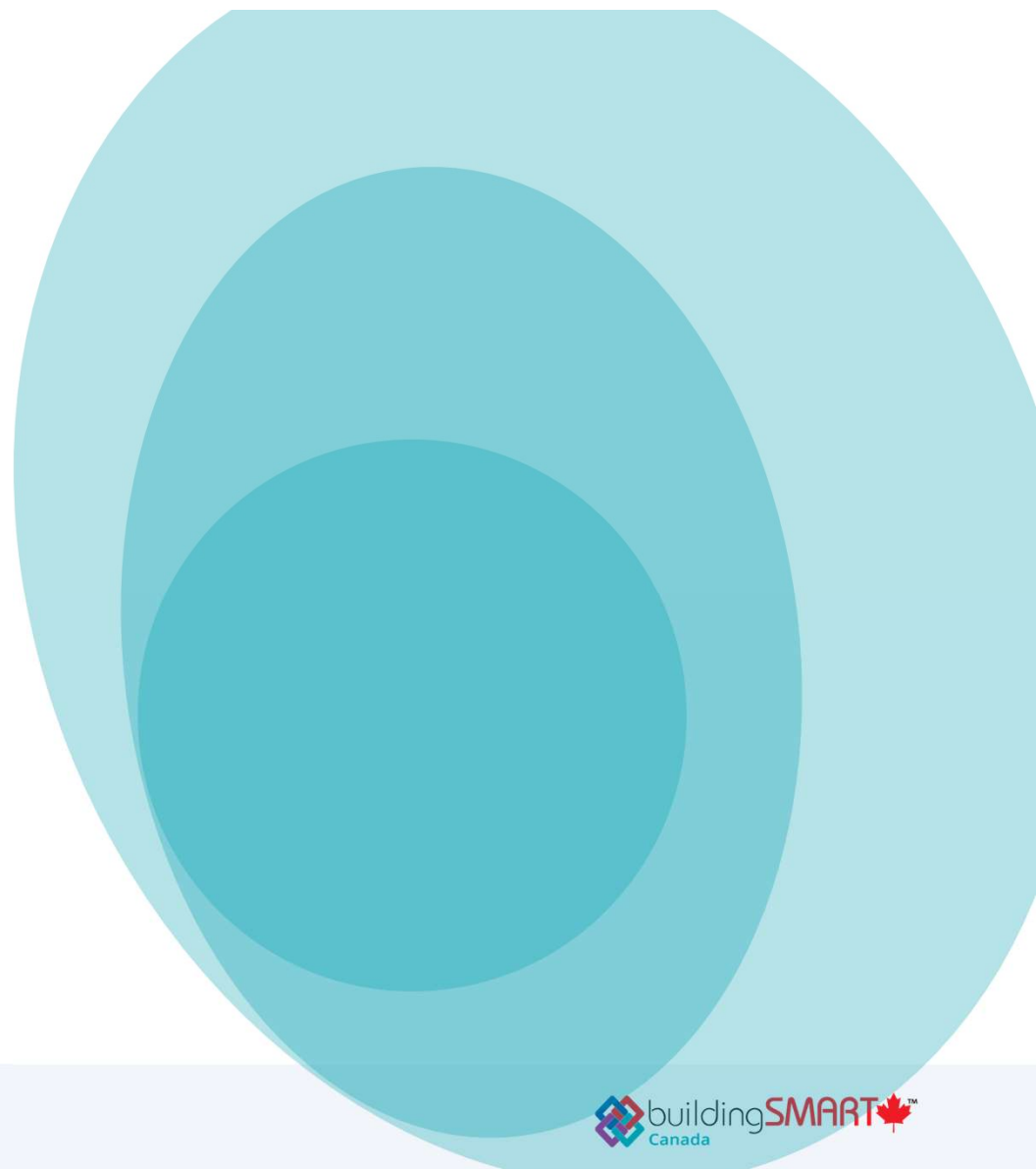
openBIM[®]
Information




BIM is the use of a **shared digital representation** of a **built asset** to facilitate design, construction and operation processes to form **a reliable basis for decisions.**

Definition according to ISO 19650-1 / ISO 29481-1:2016

How

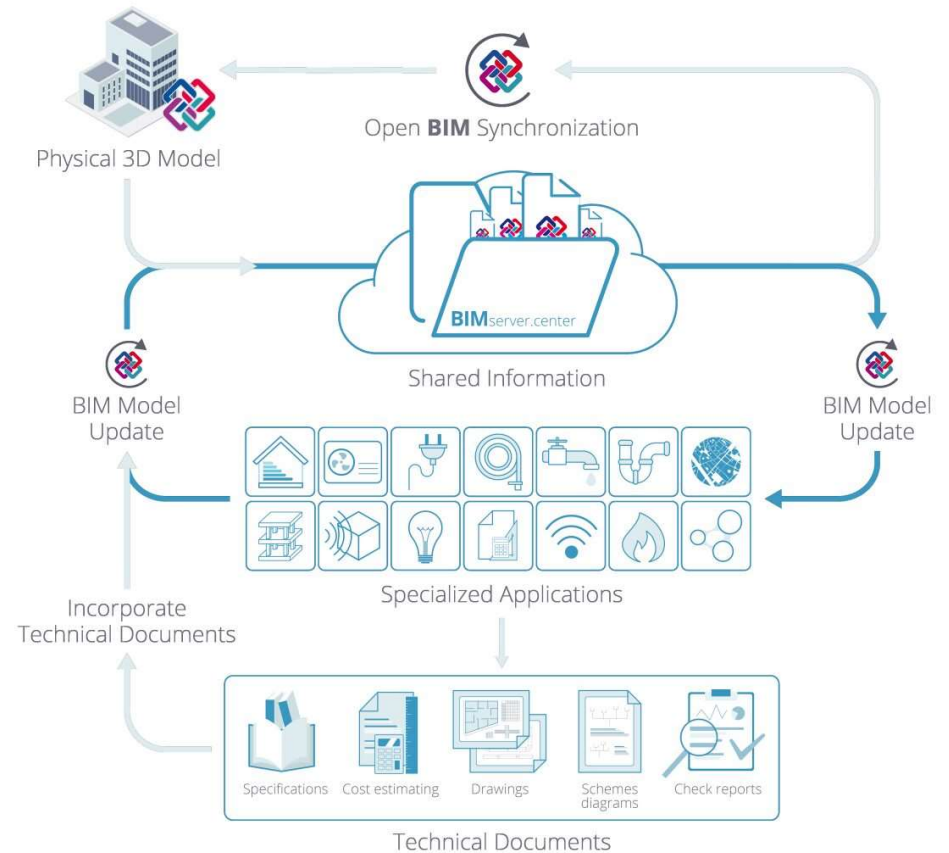




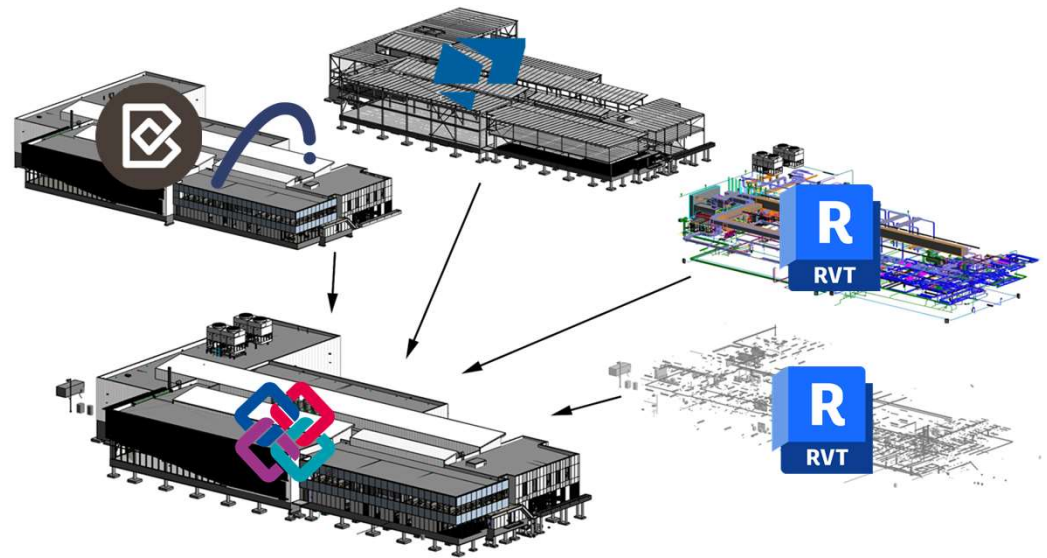
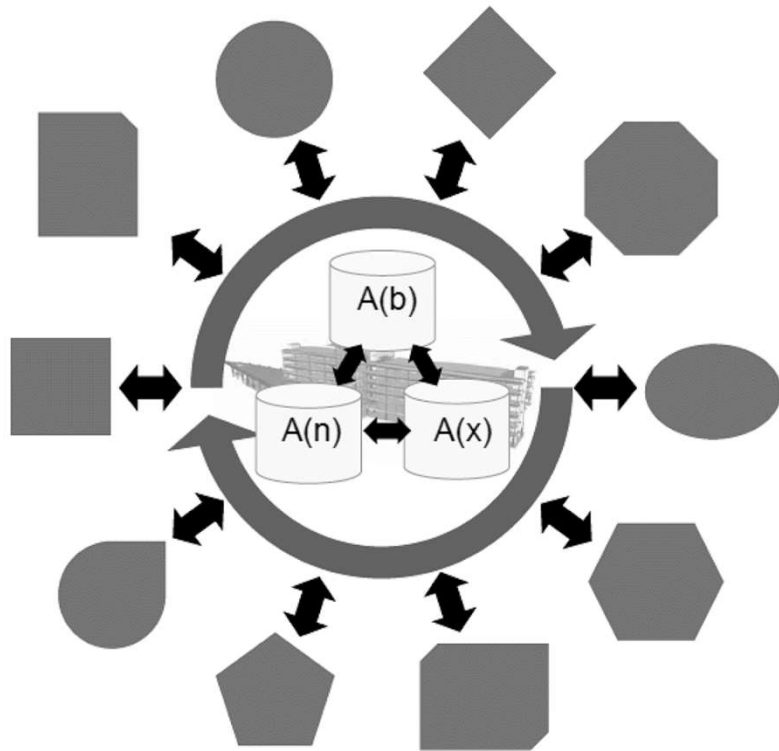
*believes in
collaborative approaches
based on openBIM tools, technologies and processes*



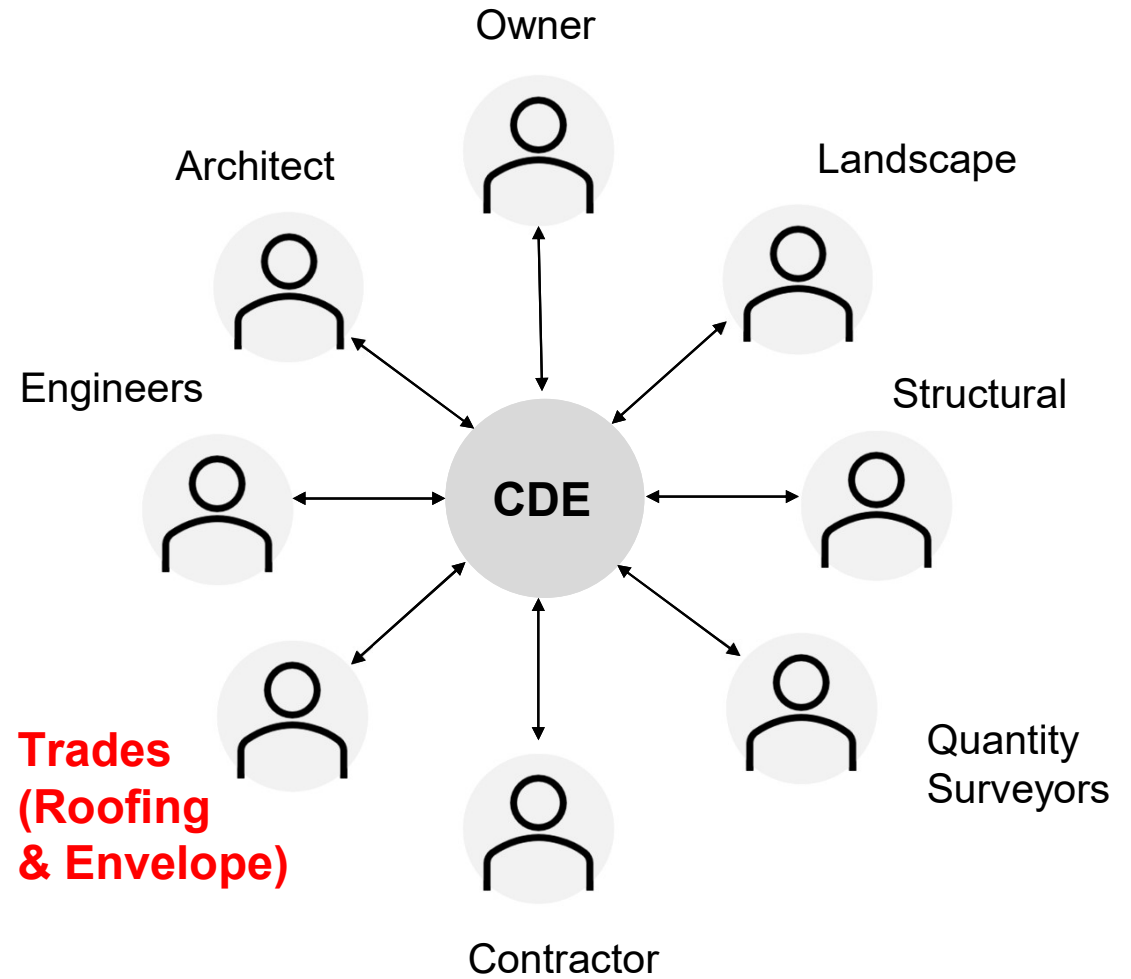
openBIM
*enables global universal
data-sharing for BIM data
regardless of proprietary
BIM platform or BIM tool*



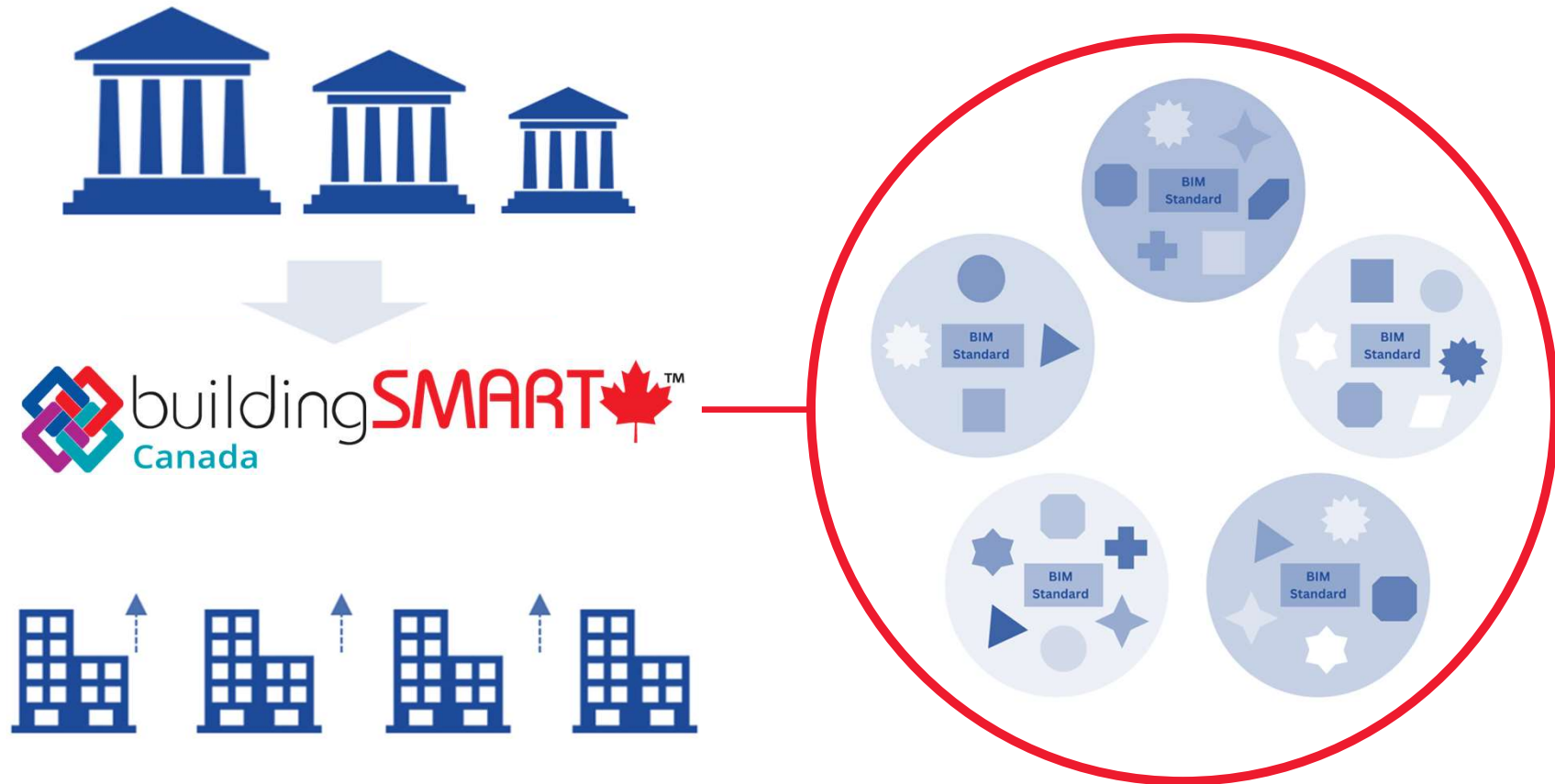
What does open look like?



Collaboration



Mission





Questions

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