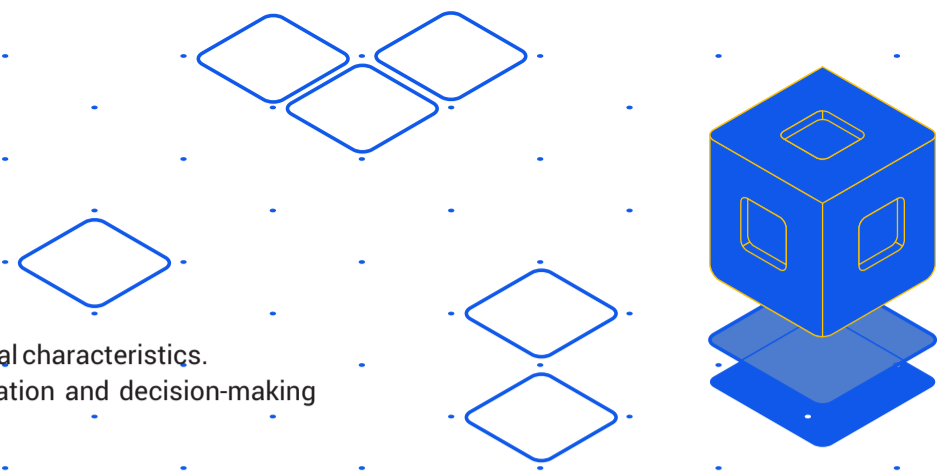


# 7 REASONS WHY BIM IS IMPORTANT FOR BETTER PROJECT COORDINATION



## BIM (Building Information Modeling)

is a digital process that creates and manages a detailed 3D model of a building's physical and functional characteristics. It integrates all project data into a single shared resource, enabling better collaboration, visualization and decision-making throughout the building's lifecycle.

### CHALLENGES IN PROJECT COORDINATION WITHOUT BIM

### ADVANTAGES OF BIM MODELING IN PROJECT COORDINATION



#### COMMUNICATION GAPS

Traditional communication leads to misunderstanding and delays in decision-making in project execution.



#### ENHANCED VISUALIZATION

3D models allow stakeholders vision the project before it's built, facilitating better understanding and decision-making.



#### MANUAL CLASH DETECTION

Identifying clashes with old ways is time consuming and prone to error, resulting in rework during construction.



#### EFFICIENT CLASH DETECTION AND RESOLUTION

BIM reports clashes between HVAC, MEP-FP systems by managing clash detection through virtual 3D models.



#### INACCURATE COST ESTIMATIONS

Estimating material quantity take-offs and costs becomes inaccurate, risking in budgeting overruns and resource shortages during construction.



#### ACCURATE QUANTITY TAKE-OFFS AND COST ESTIMATION

BIM automates quantity take-offs and cost estimates for civil and structural engineering projects by extracting data directly from the 3D models.



#### LIMITED COLLABORATION

Integration between different teams makes it difficult to share project information, which causes delays and misunderstanding.



#### ENHANCED COORDINATION AND COLLABORATION

BIM helps aligning all stakeholders (architect, engineer, and contractor) to work together efficiently by sharing 3D models and data in real-time from design to construction.



#### SUSTAINABILITY CHALLENGES

Achieving sustainable design through traditional methods becomes more challenging, resulting in environmental impact.



#### ENHANCED SUSTAINABILITY AND ENERGY EFFICIENCY

BIM analyses building performance for resource optimization and green building strategies, enhancing sustainability and energy efficiency.



#### DOCUMENTATION COMPLEXITY

Manually managing and updating project documentation can lead to errors and inconsistencies.



#### ENSURING REGULATORY COMPLIANCE AND STREAMLINED DOCUMENTATION

BIM ensures design meets local regulations, providing thorough and up-to-date documentation for smoother approvals and legal adherence.



#### FACILITY MANAGEMENT ISSUES

Facility managers have difficulty maintaining and optimizing building systems efficiently after construction.



#### FACILITY MANAGEMENT AND LIFECYCLE SUPPORT

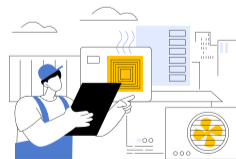
BIM serves as a database for facility management, aiding in the efficient operation and maintenance of buildings throughout their lifecycle.

## A WALK-AROUND BENEFITS OF BIM ACROSS SERVICES

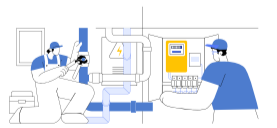
BIM for Architecture



BIM for HVAC



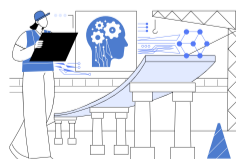
BIM for MEP Engineering



BIM for Civil Engineering



BIM for Structural Engineering



BIM for Construction

