

Unlocking Cost Savings Across Construction Projects

Building Information Modeling

Building Information Modeling (BIM) enhances communication in construction projects by providing visual representation, 2D/3D visualization, clash detection, improved coordination, data-rich information, visualization of project phases, and facilitation of stakeholder input. This integrated approach fosters greater transparency, collaboration, and efficiency, ultimately leading to better project outcome

Did You Know?

Approximately 98% of construction projects exceed their budgets. Factors such as material price fluctuations, which can increase costs by up to 10% annually, coupled with unforeseen site conditions, contribute to this trend. Moreover, an estimated 43% of projects experience schedule overruns, further exacerbating financial strain. Proactive risk mitigation and accurate forecasting are critical to addressing these challenges, ensuring projects remain financially viable and on track for success.

COST CHALLENGES



Managing construction costs presents numerous challenges, including material price fluctuations, unforeseen site conditions, and regulatory changes. Inaccurate estimates, scope changes, and delays can also strain budgets and timelines.

BIM AS A SOLUTION



BIM supports lifecycle cost analysis by integrating cost data with building information. This allows stakeholders to evaluate long-term cost implications associated with design decisions, material choices, and maintenance strategies, enabling informed decision-making to minimize total cost of ownership over the building's lifespan.



2D Overlay



3D Visualization



Enhanced coordination



Data-rich information

BIM PROJECT BENEFITS



1

Early Clash Detection

BIM enables early clash detection by simulating the interaction of building components virtually. By identifying clashes between structural, architectural, and MEP (Mechanical, Electrical, Plumbing) systems during the design phase, costly rework and delays during construction are minimized..

2

Improved Project Coordination

BIM promotes better coordination among project stakeholders, including architects, engineers, contractors, and subcontractors. By providing a centralized platform for collaboration and communication, BIM reduces misunderstandings, change orders, and associated costs resulting from conflicts or discrepancies in project documentation.

3

Schedule Optimization

BIM facilitates schedule optimization by enabling more accurate construction sequencing and phasing. With the ability to visualize the construction process in 4D (3D model plus time), project teams can identify potential schedule conflicts and mitigate them proactively, minimizing delays and associated costs.



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