

Main Advantages of Using *BIM* for Renovations

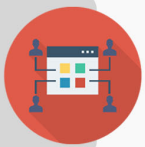
The main issue connected to the renovation of the old buildings is the lack of information. In fact, the vast majority of the documentation is on paper and it is usually incomplete. In this context, BIM (Building Information Modeling) is the best solution to approach the renovation design.

Building Information Modeling



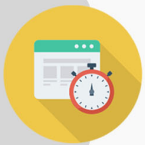
Interoperability

BIM allows sharing all the data across various applications and among all the figures involved in the renovation process. Projects based on BIM are collaborative processes.



Coordination

BIM allows improving the coordination between the different experts involved in the project. (e.g. the structural team, the architectural team...).



Time Saving

The BIM-based approach saves 80% of the time that would be spent choosing the traditional approach.

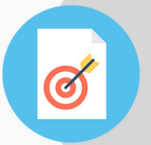


Monetary Savings

The reduction of the time in developing the project leads to sensible reductions in the costs for the overall project. Moreover, it has been demonstrated that the total cost of the construction phase can be reduced thanks to decreases in delays, changes in orders and requests for information and claims.

Accuracy

BIM generates absolute accuracy within the margin of 3% max and it helps to detect any kind of clashes.



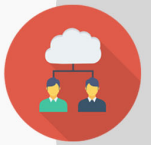
Easiness

BIM facilitates the analysis of design alternatives and cost comparisons.



Service to the client

Different design proposals can be better understood by the client (that usually is not a building expert) through a more detailed and accurate visualization.



Optimisation of the works

The function 4D (i.e. the time) allows graphical visualisation of the scheduling of the working phase and provides the virtual view of the project at any moment of the timeline. This functionality provide better management of the logistical aspect.



Prior analysis and simulations of alternatives are useful to identify the best solution and identical considerations can be performed also for the costs (5D) of the project. Preliminary investigations can highlight the differences between various scenarios and support the design team in the choice of the optimal solution.