

How bim technologies are beneficial for contemporary digital design

[Design](#), [Architecture](#)



BUILDING INFORMATION MODELLING Department Building Information Modelling Introduction Building Information Modelling is an architectural component that mainly covers the geometry fields, spatial relationships, information related to geography, managing a project and post construction activities of the project. It carries out activities ranging from design, construction to demolition. It maximizes sanity in the building construction field. The method not only embraces traditional design techniques but also gears towards information sharing between designers, architects and engineers. Embracing this protocol enables achievement of goals and components in the building process, hence a major shift from the ancient computer-related methods of design. It does possess a whole range of advantages in the modern digital designs.

Benefits of Building Information Modelling

The designers are shifting massively to this new technology due to its immense benefits. The concept is simple to use by the engineer, contractor, clients and manufacturers provided there is sharing of information. The engineer regulates energy consumption. The contractor monitors the building process. The client provides a useable space while the manufacturer deals with product maintenance through servicing it and maintaining its performance (HM Government, 2012, p 6).

It is an integral component in the building industry. Most construction firms are using the protocol, which not only conserves time and money, but also creates artistic impressions worth winning admiration. Utilization of Building Information Modelling enables the project construction at minimal losses.

Majority of the projects comprises incorporation of 18 disciplines involved in

design and fitting (Succar, 2009, p 360). The process in working utility process rotates around collaboration with the client, unification of data creation, management and sharing and coordinated information model. There is also a technique of detecting any of a crash or wastage. To streamline the construction site, ground is well prepared for efficient, and accuracy. The data in extraction from the BIM is also useful in setting up the drilling depth. Adoption of the BIM enhances the performance levels. The project progress is fast, accurate and saves resources in use. The Model in use can check for the architectural clash in the building station. The amount of the materials in use are clear too as the model can calculate the same. The three dimensional technology under use generates modelling scales that are easily visible hence enhancing communication among the constructors. The feedback among the stakeholders is timely hence decrease in the cost (Bryde et al. , 2013, p 975).

The cyclic process of managing the projects is easier when the digital aspects are incorporated. Monitoring and evaluation do occur in all its stages. Its management is through the digital technology. It levels the information into a simple tool to aid into infrastructure or building construction. The tool requires strict multidisciplinary construction in the building industry, and peaceful solutions to the conflicts emerging from the different ideas.

The success in the implementation of BIM demands leads to advancement in technology. However, it demands a team with competencies and skills in construction. The manager must also have excellent skills in designing and engineering. With these skills at hand, the manager can enhance the

development of a relevant tool utilized in the construction process; facilitate decision-making and communication, risk management and identification of tracking errors(Yan & Damian, 2008, p 16).

The management process cannot remain a success without the involvement of the client. The client remains instrumental in the provision of an enabling environment and other special tools needed for efficient operations. He should provide to the designer and constructors all the mandated materials to save time and funds. The client need not be rigid with a certain framework of the project, but should be flexible enough to listen to the multidisciplinary team ideas. All these concepts aid in the successful management of the BIM projects in the countries adopting the system.

The figure below indicates the summary of individuals and processes involved in BIM project management:

Conclusion

BIM stands to bring a faster revolution to the technology, ushering in an era of better, faster and cheaper construction processes. It is of great importance in many projects. The three-dimension aspect is at the dispensation of offering complex architectural designs and shapes, and at the same time handles sophisticated calculations. In long last, it brings up an aspect of creativity in designing industry, simplifying the work day by day.

Bibliography

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