BIM – Building Information Modeling

Trevor Callow

Fall 2024/C CON251

Arizona State University

11 September 2024

**BIM – Building Information Modeling**

BIM, also known as building information modeling, is a software that allows for buildings to be created and planned out. This software “integrates structured, multi-disciplinary data to produce a digital representation of an asset across its lifecycle, from planning and design to construction and operations” (Autodesk 2024b). BIM is a popular software that many companies globally use. These companies are primarily engineering, construction, and architecture companies. BIM allows for these companies to have a visual plan and allow for the whole building to be seen before any boots touch the ground. This software, “allows teams to collaborate and coordinate their work in real-time, reducing conflicts and errors during the construction process” (Autodesk 2024a). Overall, BIM is an amazing software with many uses in industry and can be extremely beneficial for many companies around the globe.

# What Programs does BIM include?

Bim has a ton of programs that are built in and used through it. Many of these programs are used in construction, engineering, and architecture. Among them the most popular ones are Autodesk Revit, Trimble Connect, Revizto, and Dalux (Alanzo 2024). Each of these softwares play a crucial role in allowing industry to work as effectively as they can and allow for the tools need for a job or project to continue and be completed on-time and on budget. Autodesk Revit is one of the more popular software which it allows its users to create and see objects in 3D and allows for the visualization of buildings or objects from all sides in detail and to the right sizings. Trimble Connect is a construction software that works as a communication relay with projects, technology, and information (Solutions 2017). Revizto is a design review software which allows for QA exercises to be performed in a safe environment (Revizto 2023). Dalux is a software that helps optimize the construction industry by allowing for smarter and more effective decision making and modeling. Overall, these softwares are all part of BIM and allow for the software to work together as a unit to complete the Job in the best way possible.

## How can BIM be utilized to increase productivity

BIM can be utilized in almost every area of a project. For instance, in the drafting of the project BIM can be utilized for its 3D modeling capabilities and its materials tracking software. This will allow for the designer to have a better way to track what is needed and allow for the costumer to see in a 3D vision what their place or product can look like. The next part of the project that BIM can help increase productivity in is the building or creation process through its parts list software and its team collaboration features. These features allow for team members to communicate and track progress and work together effectively to finish the task at hand. This also helps cut down waste when on sight and allow for the proper use of materials to be used without too much waste. It also allows for members to work within the time frame and for everyone to be in the loop. Overall, BIM is an amazing software which can allow for drastic increases in productivity.

**Conclusion**

Overall, BIM is a software that is used through almost every industry. Bim allows for many companies and contractors to work efficiently and with peak performance. BIM is a software that has many use cases and is an amazing product to have utilized in your projects.

References

Alanzo. (2023, February 24). *My top 10 best BIM software programs*. Plannerly. https://plannerly.com/10-best-bim-software-programs/

Autodesk. (2024a, July 18). *BIM benefits: Why use bim?* https://www.autodesk.com/solutions/aec/bim/benefits-of-bim#:~:text=Design%20and%20construction%20coordination%3A%20BIM,begins%2C%20saving%20time%20and%20money.

Autodesk. (2024b, July 25). *What is BIM: Building information modeling*. https://www.autodesk.com/solutions/aec/bim

Revizto. (2023, August 8). *Bim for architects. BIM software in architecture*. https://revizto.com/en/solutions/bim-for-architects/#:~:text=Revizto%20enables%20users%20to%20easily,in%20a%20non%2Ddestructive%20environment.

Solutions, I. B. (2017, March 28). *Trimble Connect in 10 Minutes*. YouTube. https://www.youtube.com/watch?v=pNfKhoITDHM