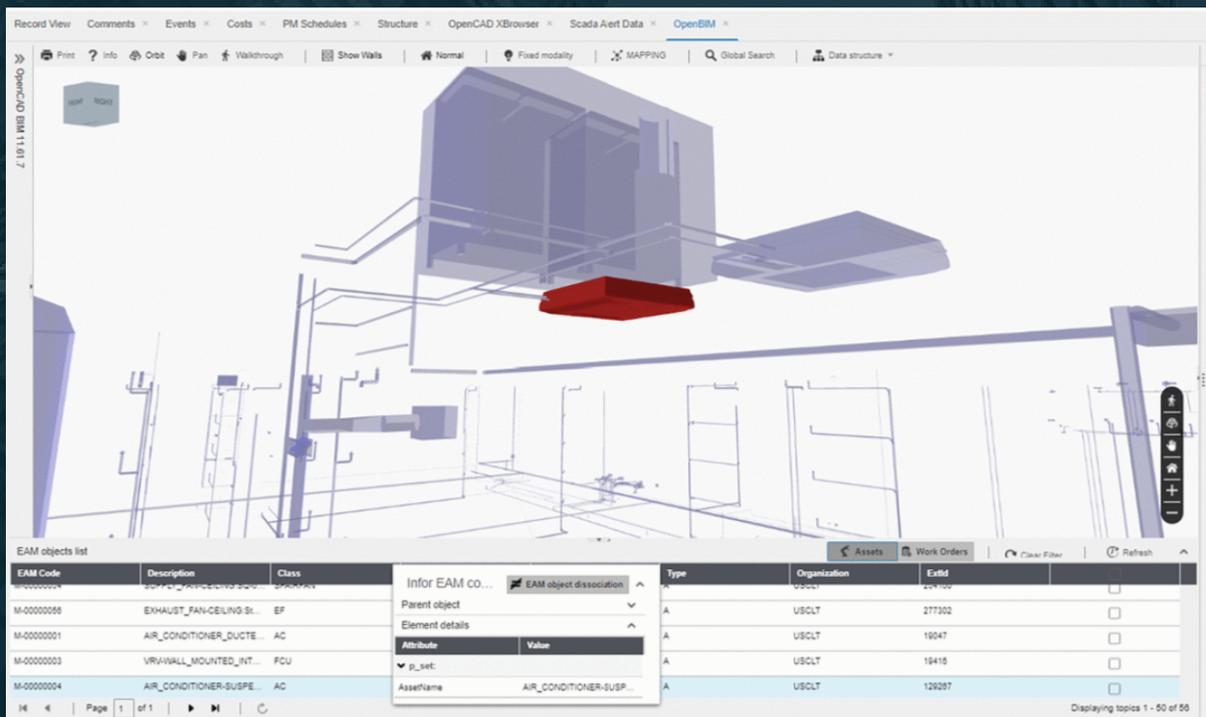


# Facilities Maintenance and the Benefits of Incorporating BIM (Building Information Modeling)

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Building information modeling (BIM) is being used more and more to plan, design, construct, operate and maintain everything from buildings, utilities, infrastructure among many others. BIM allows the addition of 3D modeling into the process starting at the planning phase. With the 3D model it allows designers to identify if there is a potential issue in the design since the entire project is visible in the 3D model. This helps to reduce costs since there is less potential rework when these issues are identified early.

Incorporating the BIM model into your Enterprise Asset Management system allows for many benefits on the maintenance side of the equation. The earlier you can incorporate it into EAM, the sooner you can see the benefits and achieve the savings that come with it.



Source: Infor BIM

By incorporating BIM into your EAM system, it allows your Maintenance Technicians to easily locate the Assets within the facility. This helps to save time when they need to identify shutoffs in case of an emergency whether it is Plumbing, Gas, Electrical, etc. It also allows the Maintenance crew or planner to easily identify other Assets or Areas within the facility that will be impacted by a potential shutoff or power interruption while the work is being performed. There is also a time/cost saving involved since a newer employee would no longer need to perform walk throughs with a senior employee to identify the locations of all the Assets. The EAM system can also keep track of warranties on the Assets and identify the maintenance crew when they create a work order that the particular asset is under warranty and allow the creation of a warranty claim if needed. The last but not least benefit is the safety benefits that are included such as Lock Out Tag Out (LOTO). By including the BIM model into your EAM System, you can also identify the location of isolation points and also Lockout Boxes to ensure that power is not accidentally restored while work is being performed.

Of course there will be some differences depending on if the Facility is a new build vs an existing build. With a new build you have the ability to identify the Assets during the planning phase and start incorporating the BIM, warranties, etc., as you go. Having this information early in the process rather than receiving it months after from the construction contractor will certainly assist the facility operator who may be dealing with new equipment that has a high failure rate within the first couple of months. With existing buildings most of the data is stored in either hard copy documents or digitized and saved in a location that is not easily accessed where the equipment resides. In this instance time would be needed to create a BIM and to incorporate the information into it.



*Source: Princeton University*

In summary there are many benefits to include BIM into your EAM system and Facilities Management plan. There are always going to be challenges with any system but with proper planning they can be mitigated. The ability for your maintenance workers to have access to all the information required to perform their job in an efficient manner is key. The BIM functionality on the EAM side may not be available today on the mobile devices but I am confident that functionality is in the works. In the meantime there are ways to address the challenges whether it is through the use of attachments, shared folders, etc. There are methods to provide the documentation to your workers and improve their efficiency and reduce your maintenance costs.

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