

From that at this level the changes

[Business](#), [Industries](#)



From the diagram, it is understandable that there are 4 levels used to measure the BIM maturity. Let's analyze them: Level 0 is the use of CAD. The information is exchanged via electronic prints or paper drafting, or combination of both. This level goes back to the Automated CAD Drafting concept, presented previously. This means that at this level the changes and all the Quality Assurance, Quality Control processes are done manually. In conclusion, at Level 0, there is no collaboration. Level 1 is the mixed use of 2D and 3D accepted as a partial collaboration process. In comparison with Level 0, the drawings are shared electronically.

The data is standardized and structured in a common data environment, however, there is no collaboration between the different disciplines. Every discipline develops and controls the information either as a 3D model or 2D drawings. On the other side, while at this level the changes are applied automatically across the building model, the Quality Assurance and Quality Control processes are still done manually.

This level refers back to the 3D CAD Modeling concept, which we already know as the first step towards true BIM integration. Level 2 is the use of 3D BIM models. At this level, all the disciplines are using 3D CAD Models, which are not necessarily shared. The design information is shared, which gives the opportunity to all the parties involved in the project to extract data from the common file format and carry out the Quality assurance and Quality control processes.

In other words, at this level parties need to use software, capable of exporting files to a common format set as a standard. This is a must in order

to ensure the collaboration amongst the different disciplines. Level 2 refers to the previously mentioned BIM Modeling concept where new dimensions are introduced. 4D is applicable during assembly and operation phases for activities such as scheduling of site activities, logistics, deliveries and time management. While 5D is related to cost estimation process. Level 3 is the fully integrated working process between all the parties involved in a project. In contrast to Level 2, at Level 3 all the disciplines use a centrally shared project model.

This means that all the parties can access and modify the same model while eliminating the risk of conflicting information. Updates are carried out in real time and there is no more need to up and download the whole models but only the parts needed by using web services. In addition, a new 6D dimension linked to the lifecycle management of a building is expected to be introduced.

This level of maturity is what the industry aims for. However, in order to jump to Level 3, all the companies within this industry have to have reached Level 2.