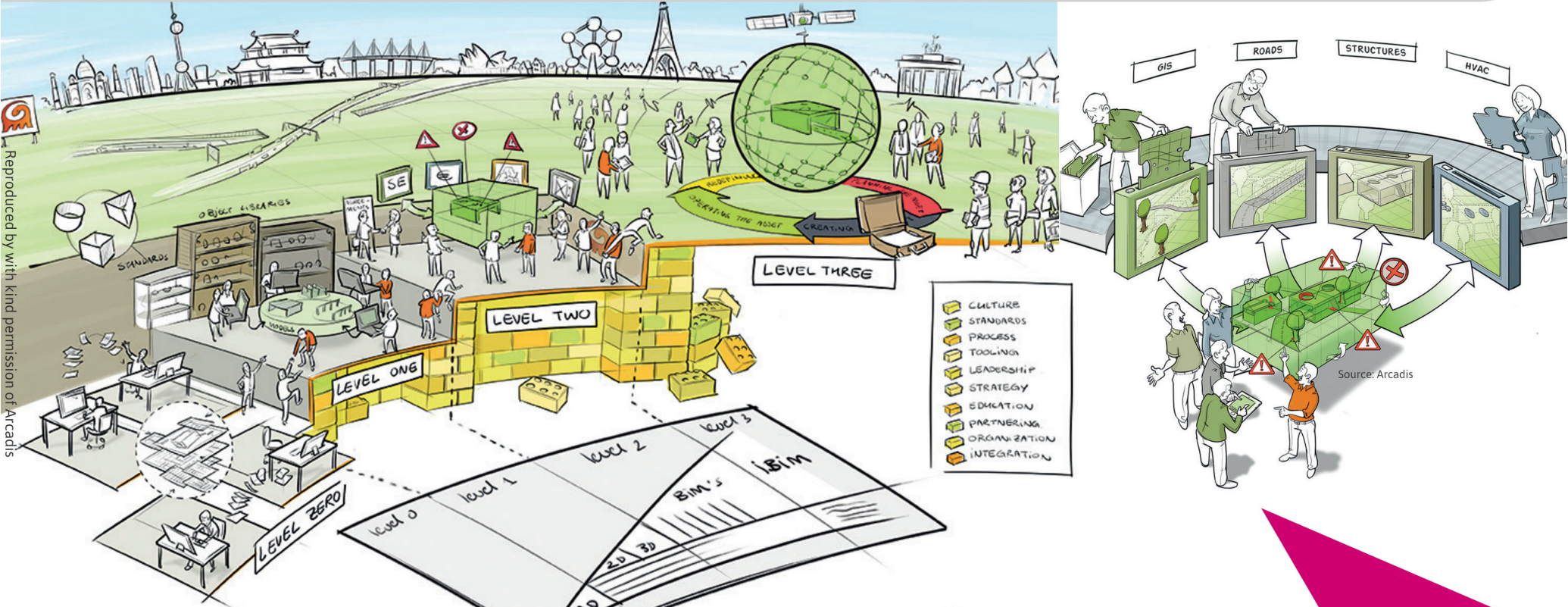


# BIM Maturity: What are BIM Maturity Levels?



Level 0	Level 1	Level 2	Level 3	BIM MATURITY
CAD	Object orientated models	Federated BIM	Collaborative BIM	
<p>This is the <b>conventional</b> way of working in the construction industry, which is still in use by most designers and contractors. Using CAD platforms to create drawings, use text editors like WORD to create specifications and Excel to calculate costs.</p> <p>Geometry in 2D and 3D CAD is <i>represented by lines between defined points</i>.</p> <p>Sharing information is <b>limited</b> to the exchange of these separate paper forms of information and analysis are difficult because the computer cannot interpreted the data.</p>	<p>One great advantage of the <b>object-based approach</b> is that teams work in a <i>virtual(3D) model</i>. There is immediately an understandable representation of the design available, and it is also much easier to make changes.</p> <p>Object orientated design, even when used by just one discipline, delivers <b>significant economic benefits</b> and is widely adopted, especially for structural design and increasingly for architecture.</p>	<p>A <b>federated model</b> is a joined up view of multiple, separate models which enables the analysis of integrated aspects of the design.</p> <p>Applying Federated BIM requires some coordination within a project to enable models from different disciplines to be used together. The models that are created in different software-tools should be made available in such a way that they can be combined into a federated model.</p>	<p><b>Integrated BIM</b> implies the bringing models from one company, or from together of models could involve an entire project team in which different companies are involved.</p> <p>For integrated BIM in one company or project team, there is some hierarchical control over the disciplines involved and therefore it is easier to organise this approach. The next step is to work with external partners on integrated models, potentially connecting with suppliers, sub-contractors and clients. Working with all stakeholders in one (view) model is also known as <b>'big BIM'</b>.</p> <p>Collaborative, or Level 3 BIM, has the potential to deliver <b>more benefits than federated BIM</b>. Human interpretation is automatically bypassed when working in collaborative BIM, allowing the object orientated design to be transferred seamlessly to the supplier who can put this into his machinery for production.</p>	