

# A TASK FOR BIM

*The value of the whole BIM approach is ultimately determined by how well BIM performs in individual tasks.*

BIM is great and promises a bright future for everyone clever enough to get on board. This is what you hear in seminars, publications and marketing. But where the rubber meets the road, namely **when BIM is actually used for performing specific tasks in real projects**, the benefits seem rather elusive. And the higher level benefits you hear about so much cannot materialize if BIM is not performing in the multitude of small tasks, which together create the bigger picture. This is why it is imperative to focus on the individual tasks, and to realize that the whole power of BIM must grow from **being superior in performing these tasks**. There is no alternative to this, there are no shortcuts.

**The underlying benefit of using BIM is automation**, i.e. less manual work. With automation comes efficiency and predictable quality. At this point it is important to note the subtle difference between 'less manual work' and 'no manual work'. The goal is not to eliminate all manual work, only the manual work that is better taken care of by computers than people. With predictable quality we mean that anything done by a computer will repeatedly give the same result, whereas when people are involved the results will most likely be different each time. Each time a software application calculates the space areas of a complex building the result will be the same, but when two people calculate the same manually their results will be different. This is not to say that the areas calculated by the software application would be correct, only that the calculation is very fast and the result the same each time.

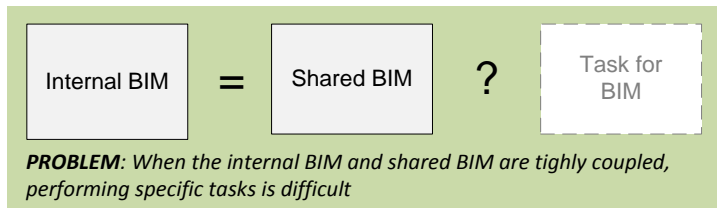
**This brings us to the first obstacle; distrust.** Using BIM is fast, but what is the point if the results cannot be trusted? To combat distrust we recommend responsibility. When someone takes responsibility for a BIM this already goes a long way in dissolving the distrust others naturally feel for this data. It is possible to counter the current 'use it at your own risk' mentality also by technical means, but we believe the responsibility route to be more fruitful. If an architect takes responsibility for example for the space areas, others will certainly be more inclined to trust those areas. But why on earth would the architect willingly take that responsibility? This is kind of a stupid question, isn't it?

**Designers take responsibility for their work all the time**, it's part of their job and they get paid for it. Why should BIM be any different? This is because designers simply don't trust their own BIM in the same way they trust their own drawings. Today drawings are produced from BIM, but there are many highly sophisticated tools in modeling applications for creating and publishing drawings. With BIM there is an export button, and if you are lucky, a cryptic dialog for defining which part of the BIM is exported. And out goes the exported BIM into the world, good luck, you're on your own.

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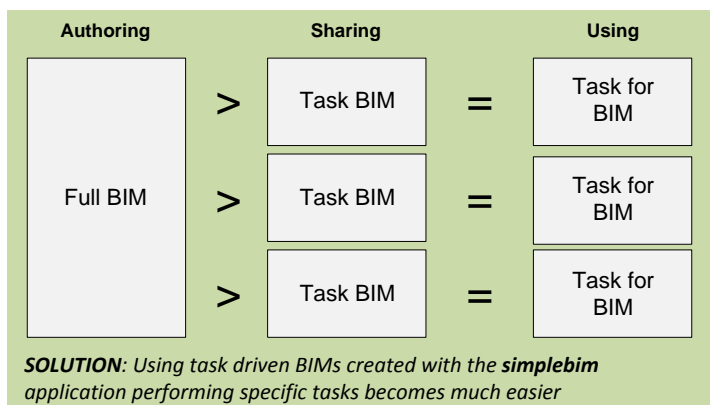
**We propose a task oriented solution** that is a combination of technology allowing designers to better control the contents of the BIM they share with others, a task oriented process and a business model where designers are compensated for creating a BIM they take responsibility for. Task oriented is the key. It removes the ambiguity from the technology and provides a clear and simple business motivation. Because the benefits of BIM come from its performance in individual tasks, a BIM that can be used efficiently and reliably for performing a task is valuable.

Not in some abstract, ideological high level sense, but as something immediately useful and measurable. Also the technology can be focused on what is needed by a task, making software simple to use and its output reliable; something you can trust and take responsibility for.



**Without software even the best ideas remain just ideas.** This is why we created the simplebim application, a new kind of software that addresses the issue of using BIM efficiently in the context of individual tasks.

The first goal is to improve clarity, to demystify BIM. Equipped with a better understanding of your own or somebody else's BIM you can be more confident in sharing or using the data. The second goal is to decouple the internal use of a BIM from the BIMs that are shared with others. As long as these two are tightly coupled, creating BIMs that are useful to others sets many counterproductive requirements to the use of modeling tools. Often the most efficient way to create and document a design does not produce a BIM that is useful to others. Sometimes this is even impossible because different uses may have conflicting requirements. We believe this is best solved by software that provides efficient tools to massaging the 'internal BIM' into one or more task driven 'shared BIMs'. Although BIM is very different from drawings, there is a clear analogy to how drawings are created from BIM. Modeling applications have highly evolved and sophisticated tools for creating different kinds of drawings, like floor plans, sections and details. Nobody dreams of a singular 'export drawings' button, but somehow a magic 'export BIM' button should be possible. In theory BIM should make also sharing drawings obsolete, because from the BIM anybody could create the required drawings themselves. In reality this is not the case, because the author of the BIM is the best expert of that BIM and thus best equipped to create the necessary drawings. The aim of our simplebim application is to provide the sophisticated tools the BIM author needs for creating the value adding shared BIMs, and to have the confidence to take professional responsibility for them.



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**How is this making things simpler?** Isn't this adding new software into the process, making things just more complicated? In an ideal world yes, in the real world no – and real projects tend to happen in the real world. It is our observation that creating a BIM, that in addition to fulfilling the original design and documentation tasks also satisfies a complex set of BIM requirements, is more work and more challenging than deriving these additional shared BIMs. And because the shared BIM is more valuable to its user than an internal BIM, it contributes to the overall benefits of using BIM in a project. But there is really not much point in arguing this in theory, because theory has its home base in the ideal world. Instead the benefits can be proven by using the simplebim application in projects, which is what really counts. We are not proposing a clean and crisp theoretical solution here, but a **practical solution that addresses and efficiently solves real world problems.**