

Question	Answer(s)
<p>I would be interested to know more about how BIM can be used to calculate U-Values and estimate ongoing energy costs for the completed building. Is BIM being used for this to any great degree?</p>	<p>I haven't seen any QS using it to do this. I have demoed using the models to create a Carbon cost plan, where a mass of model objects are linked to embedded carbon values and carbon cost produced.</p> <p>Depending on the modelling platform the BIM objects have thermal performance data and such as u-value or value for the different layers in the object e.g. walls and could be used to calculate the thermal performance. If a modelling application used for specialist thermal performance.</p>
<p>When calculating sub-headings, i.e Circular Columns 50kg-100kg, will BIM automatically extract all columns under that category, i.e once you set measurement category sub-sections can BIM extract pertinent quantity?</p>	<p>No, the categorisation has to be done by the QS, I find do this rapidly in excel and import the classification properties to CostX as Cian demonstrated. It can also be done in CostX model maps using Logical if statements, the approach in excel is easier</p>
<p>Is there a model map for Cost X available that is coded to ARM and the National Matrix of Building and Site Elements and Indirect Costs available for download currently or being prepared by the working group for release, rather than each QS having to create the same?</p>	<p>No, model mapping in CostX is a function of how the model author models their scope and is different in different applications e.g. Revit model vs ArchiCAD model. A common approach by QS's to naming QS model properties and terms of a QS version of a BIM execution plan would be useful</p>
<p>With the introduction of ICMS and IPMS how is BIM being considered in the context of these processes</p>	<p>Model authors do not consider these and I don't think will. The QS will have to code this.</p>
<p>The examples are specifically to CSA elements. To compile cost plans for M&E how do you approach this in BIM, if the model does not have the detail at cost planning stage</p>	<p>If the information is not available, then you are not at Planning stage - you will just have to prepare your budget line with standard practice</p>
<p>I appreciate the need to export to an excel spreadsheet when using BIM Vision as it is not measurement software per se, however just wondering why Cian was copying from a spreadsheet for CostX. As Cost X is measurement software can everything be carried out within the software without using Excel including resuing an ARM template?</p>	<p>Cian exported the schedule from CostX to excel to allow to add the additional National standard building element ARM data. This spreadsheet is then used to import this QS classification data back into CostX. This data is then used in CostX to extract quantities by using a CostX model map into CostX dimension groups. These dimension groups are then used in the CostX workbook for your cost plan or</p>
<p>The scsi is committed to introducing the International construction Measurement Standard (ICMS). Why concentrate on NSBE? ICMS allows a reporting mechanism for cost, LCC and in the future LCA.</p>	<p>The demonstration just used NSBE, ICMS or NRM1 could equally be used to classify the BIM objects</p>

<p>Simply there needs to be a system that automatically takes off all quantities in ARM4 format, with one push of a button, ie load all drawings and specification and this can throw out a fully measured BoQ.</p>	<p>Yes, in an ideal world. But this is not, and will not, be possible - unless the QS is the designer and they prepare the model.</p> <p>We need to extract the data designed, and input the information relevant to our profession. Architects, etc. do not mark-up traditional 2D drawings annotating that a wall should be in (23) Floors, Galleries or (27) Roofs. Additionally, there are items that won't be modelled (formwork, etc.)</p>
<p>Designers / Modellers need our feedback for us as QS's to state our need's at each stage, and in order for standardised LOD's/LOI's requirements similar to the RIBA stages, would a model map for each stage not assist with developing the discussion etc.?</p>	<p>Yes, ideally QS's would produce their version of a BIM execution plan listing the requirements from models at key stages e.g. grade of concrete & formwork finish etc. A model map in terms of CostX is how the QS tells the software what object properties to use to create the model, the description, the folder structure it is stored in and the dimensions to use. The model map isn't something issued by the QS to the model authors.</p>
<p>If designers think of BIM in line with NSBE then they should be thinking of ICMS and IPMS</p>	<p>Designers don't think in terms of NSBE, they use the modelling software categories e.g. in Revit some of the categories are floors, walls, roofs, structural columns, structural framing, generic objects. Cian classified the objects with the NSBE code</p>