Classifying and Linking the Condition of the Asset
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History of topscan?

- 25 years of experience working with Asset Owners
- Originally translating drawings into CAD format
- Introduced an Asset Condition Survey service
- Partner with a large number of CAFM systems
- Ideally placed to support all stakeholders starting their BIM process through:
  - 3D Point Cloud Scanning
  - Revit Model Creation
  - MEP & Fabric Condition Surveys

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Classifying within the BIM environment

- Turns information from data-centric to model-centric
- Information is key= Water is life… you can still drown
- Beware the "industry standard"
- Classification enables management of risk
- A sustainable model is one which saves clients money in the medium to long term

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Data Standard

BIM enabled model file sizes can restrict its effectiveness and therefore limit its benefit
- Accurate
- Appropriate
- Accessible
- Interrogatable
- Manipulatable

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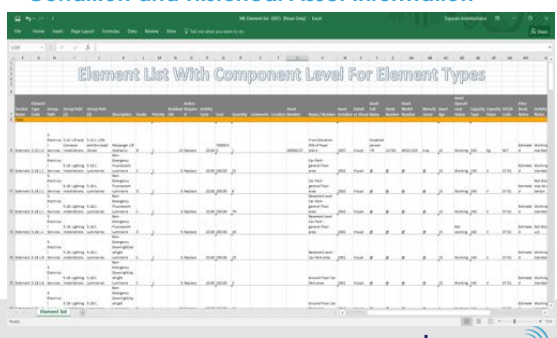
Classifying Assets- Risk Management

The surveyor will populate the assessment parameter fields with a condition rating, within the range of A-D depending on ranking for each asset type. The entry grade of the current condition for an asset is in accordance with the following criteria;

- **CONDITION A**: (Good) within the first half of the expected life, performing as intended and operating effectively.
- **CONDITION B**: (Average / Satisfactory) over half way through the life expectancy, performing as intended but exhibiting minor deterioration.
- **CONDITION C**: (Poor), past the expected life, exhibiting major defects and/or not operating as intended.
- **CONDITION D**: (Bad), life expired and/or serious risk of imminent failure.

Each category has a gradient of 1-4 so A1 is brand new, A4 means it is verging on moving in to the B category due to its age / condition

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Condition and Historical Asset Information

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Data within your Model

•More than just "What & Where"
  • Make/Model & Serial Number
  • Parent/ Child relationship
  • Maintenance/ Installation Calendar
  • Replacement/ Service Costs
  • Compliance Standard
  • Asset History
•BIM enabled Asset Registers allow wider engagement of stakeholders through model centric presentation of information

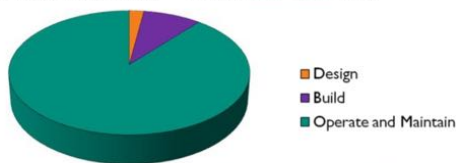topscan

Accessing your Asset Information-Sustainability

BIM vs. BIM Linked
Cloud based vs Hosted
Smart Device vs Desktop

  • Appropriate
  • Accessible
  • Interrogatable
  • Manipulatable

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Benefits of Classifying Asset Condition within BIM?

Whole Life Asset Cost – 1 : 10 : ~~100~~ ~~80~~ 66?

  ■ Design
  ■ Build
  ■ Operate and Maintain

Lower costs   Faster delivery   Lower emissions
33%   50%   50%

reduction in the initial cost of construction and the whole life cost of built assets.   reduction in the overall time, from inception to completion, for newbuild and refurbished assets.   reduction in greenhouse gas emissions in the built environment.

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Return on Investment

Creating a central data-rich model accessible by all stakeholders allows for better informed decisions which should reduce "unexpected costs".

This data rich model, when populated with accurate information will then become the single reliable resource for operational maintenance, capital planning and user engagement and allow for effective investment delivering value for money across your estate.

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