

Measuring Benefits from BIM across Whole-of-life Asset Management

Research Team



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Building Information Modelling

Virtual Design and Construction

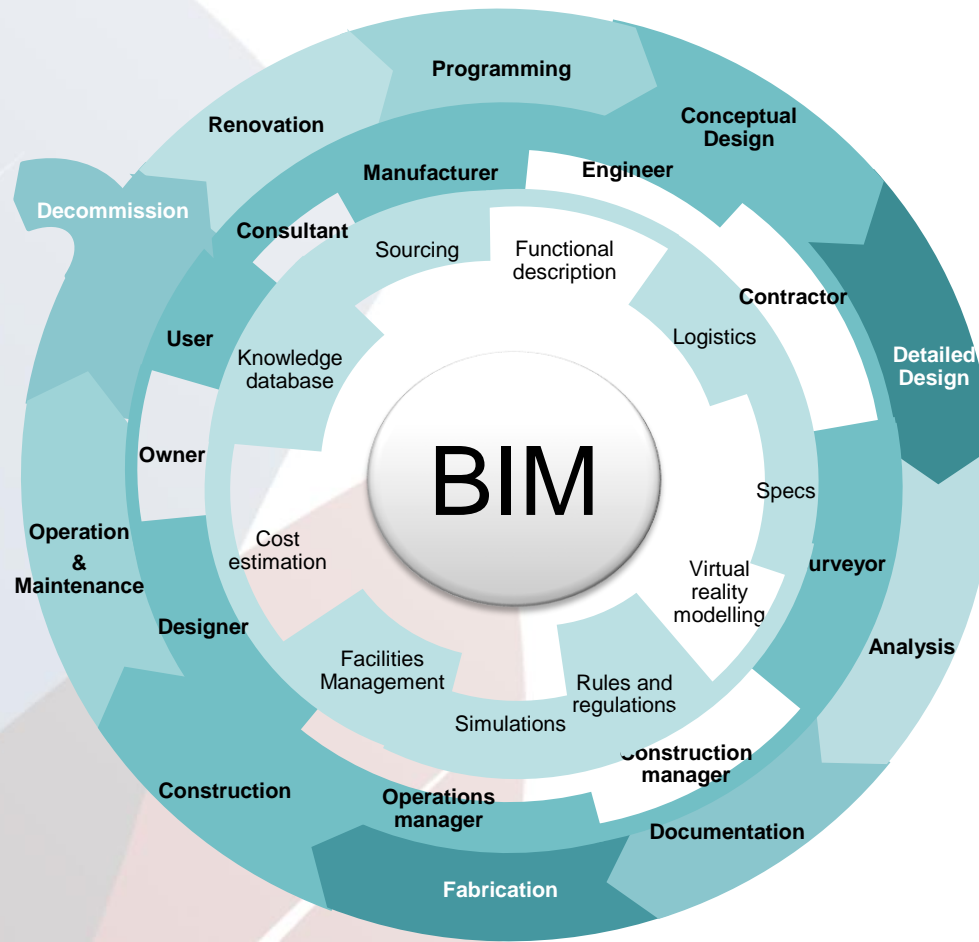
Building Information Modelling and
Management - BIM(M)

Computer-aided Visualisation and
Design

Digital Engineering

Building Information Modelling

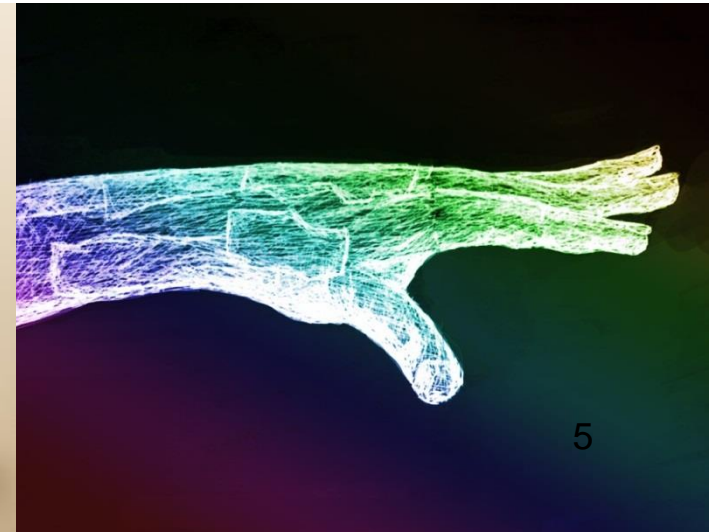
BIM can be defined as a **virtual process** that encompasses all aspects, disciplines, and systems of an asset within a **single virtual model**, allowing all to collaborate **more accurately and efficiently** than using traditional processes.



Industry Challenge

Integrated Environments and BIM

- Emerging and transformative
- Lack of performance measurement across life-cycle
- Full benefits across whole-of-life and industry still to be achieved



SBEnc Research

Project 2.34 Driving Whole-of-life Efficiencies through BIM and Procurement

- Research objectives
 - ❑ Define **indicators** to measure tangible and intangible benefits of BIM across a project's **life-cycle** in **infrastructure and buildings**
 - ❑ Pilot test a whole-of-life **BIM value realisation framework** on leading infrastructure and building case studies

Project Challenges

Inadequacy of current metrics

- ❑ Purely financial metrics shortcomings



Project Challenges

Inadequacy of current metrics

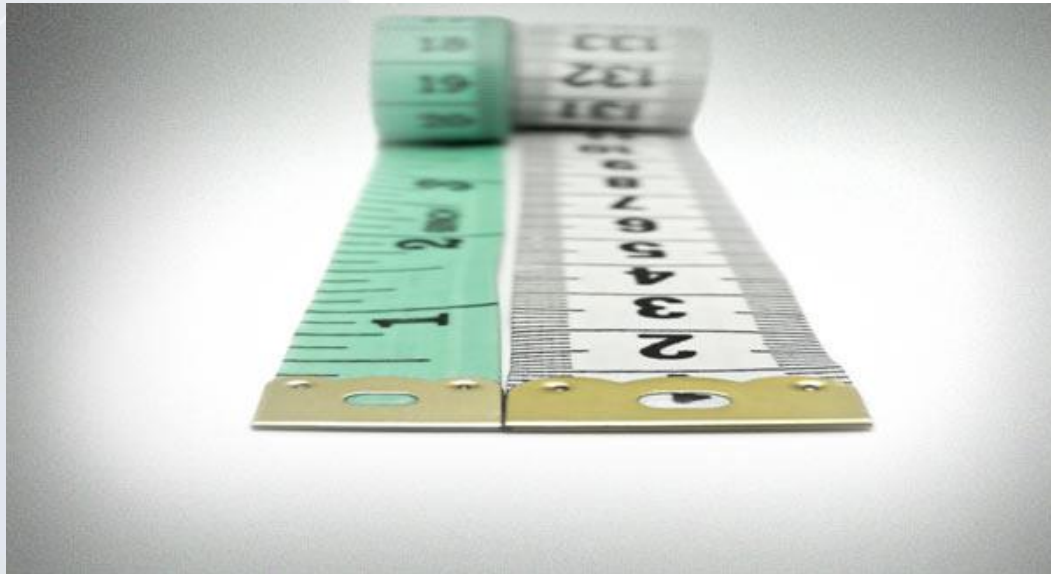
- ❑ Uniqueness of construction projects



Project Challenges

Inadequacy of current metrics

- ❑ Lack of benchmarks



Project Challenges

Inadequacy of current metrics

- ❑ Some traditional productivity measures become less relevant



Project Challenges

Inadequacy of current metrics

- ❑ Some benefits are inherently difficult to measure



Project Challenges

Inadequacy of current metrics

- ❑ Variety of stakeholders and fragmentation



Project Challenges

Inadequacy of current metrics

- ❑ Rapid change of technology



Research and Collaboration

Research activities

- ❑ Leading national exemplar case studies – design, construction, asset management
- ❑ Literature and documentation review



Research and Collaboration

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Collaborations



Case studies

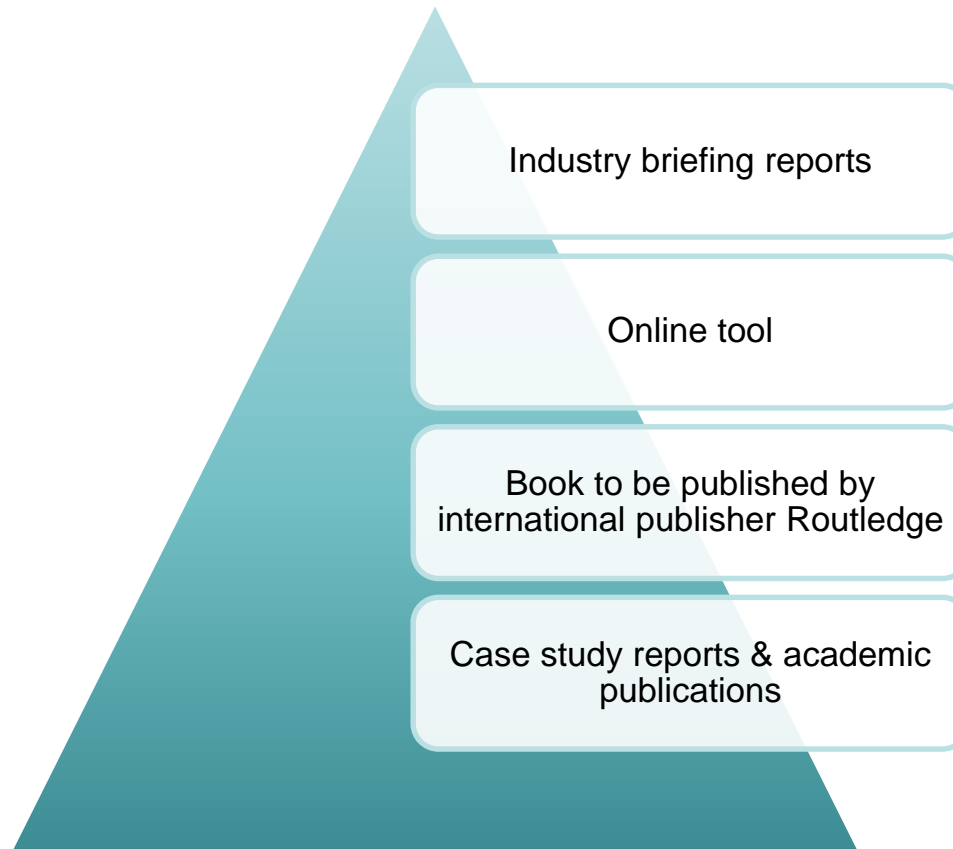
Perth Children's Hospital

- 26 benefits
- 20 tools and processes
- Benchmarks and metrics
- Lessons learned for Managers



Coming soon

Delivering Value with BIM – A Whole-of-life Approach



Coming soon

Delivering Value with BIM – A Whole-of-life Approach

Context

- BIM
- Strategy
- Case studies
- Capabilities
- Other considerations

Framework

- Detailed Methodology
- Step-by-step guide

Dictionaries

- Benefits
- Enablers
- Metrics

Acknowledgement

SBEnc Core Member Support



Project Partner Support

