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**CONSULTING
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BIM for Design Management Concepts, Goals & Tools

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Introduction

Gandy & Roberts:

- ✓ Structural Engineering
- ✓ Civil Engineering
- ✓ Hydraulic Engineering
- ✓ Industrial Building Design
- ✓ **BIM Consulting**
 - **Training and implementation services for consultants (Architects, Designers, Project Managers)**
 - **BIM Modelling Services**
 - **BIM Management services during Design and Construction (The Hedberg, Whale Point, (MONA Divine Comedy), Ornatas)**
 - **BIM Training and Support for Builders & Contractors**

Agenda – BIM for Design Management (DM)

1. Traditional DM Issues
2. Goals of using BIM processes for DM
3. BIM tools and methods for DM
4. Prerequisites
5. Summary

Traditional DM Issues

- Design and actions based on outdated information
- Design inconsistencies between disciplines
- Things get overlooked on plans
- Visualisation of design issues and design intent
- Inefficient process to resolve issues
- Accountability due to intransparency of designs
- Change Management

Goals for DM with BIM

- Better Design Coordination and Collaboration
- Provide up to date information efficiently
- Resolving design issues quicker
- Improve Accountability
- Improved transparency of designs and decision making
- Ability to re-use design models (Integration)

Tools & Methods 1

- Common Data Environment (CDE)
 - (*Trimble Connect, ProjectWise, BIMX, Fieldwire, ACONEX, BIM360,*)
 - Document Transmittals/Efficient sharing of data (Models, Drawings, Specs, Program, Issues...)
 - Accessibility to data (Anywhere anytime access)
 - Track Issues/RFIs
 - Send notifications to team members
 - (Access to 3D Viewer for individual and federated design models)
 - (Activation of mobile devices (Tablets, Smartphones, Laptops))



Tools & Methods 2

- [Access to 3D Viewer](#) for individual and federated design models
- Activation of mobile devices (Tablets, Phones, Laptops)
- [Design Reviews](#) prepared for discussion at project/construction meetings
- Comparing Versions ([Drawings, Models](#))
- [Clash](#) and virtual design checks

Prerequisites

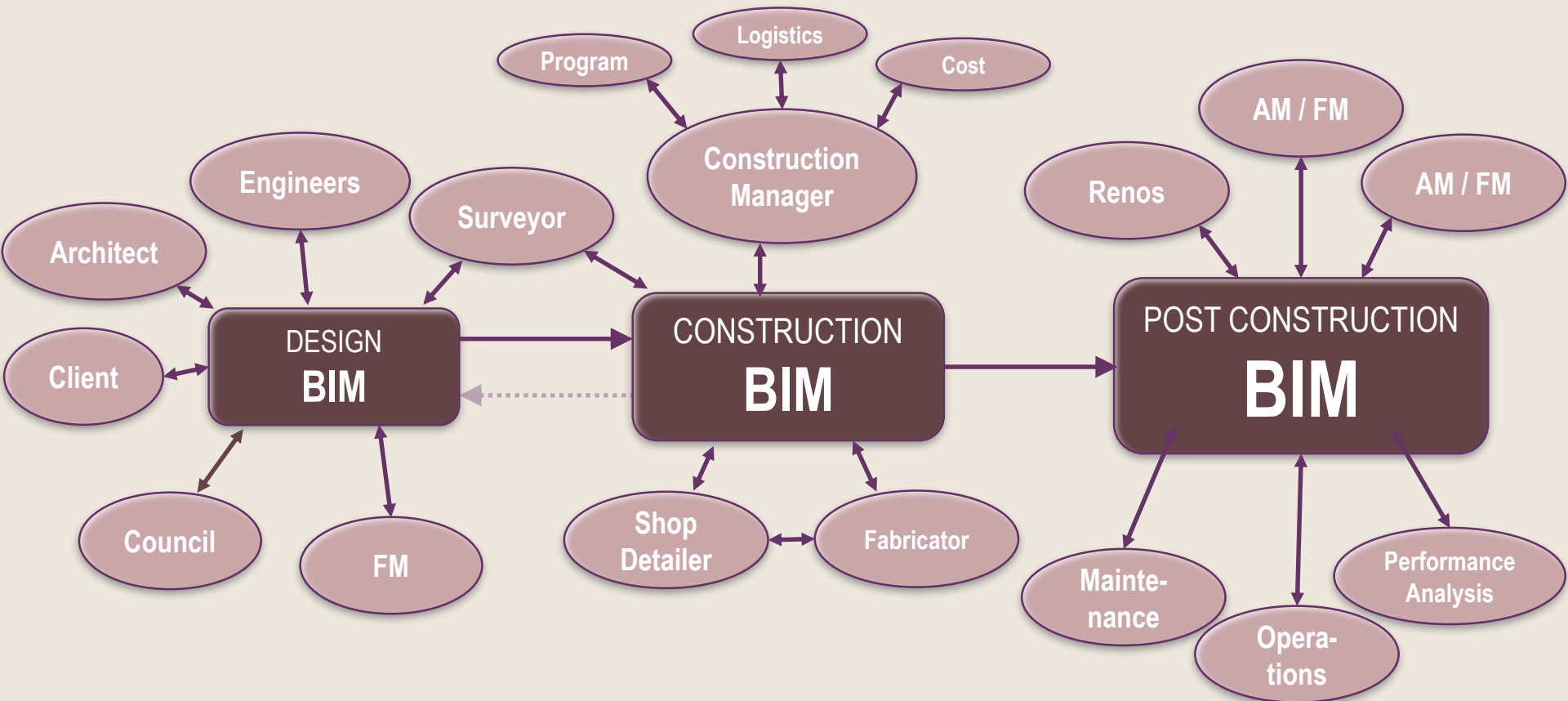
Management of BIM

- Issuing plan documentation consistently
- Model Coordinates/Units/Orientation
- Overcome model sharing and other technical difficulties
- Follow Best Practice guides
 - Retain model ID's
 - Modifying instead of recreating
 - Proper categorisation
- Fit for Purpose BIM Model Audits

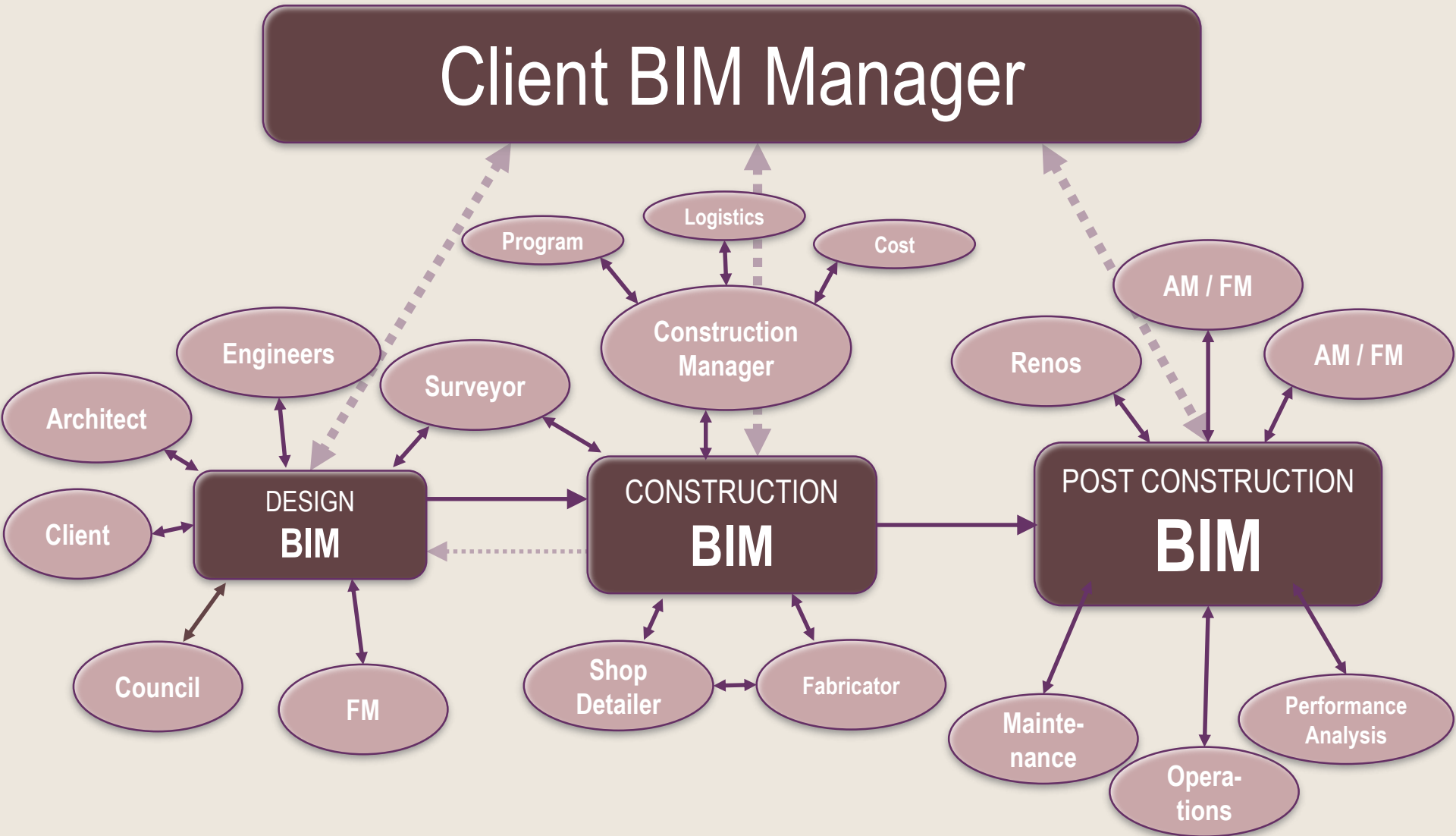
Other Considerations

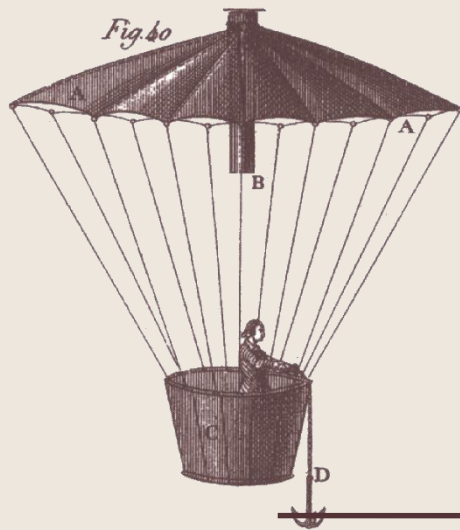
- Costs for Managing Coordinated BIM
- Costs for BIM Modelling
- Cost Savings
- Project partner's skills and software
- Roles are changing
 - Very technical
 - Dedicated BIM Managers

“Traditional” Project Structure



Optimised Project Structure





BIM for Design Management Why Wait?!
