



# Project Controls Expo – 18<sup>th</sup> Nov 2014

## Emirates Stadium, London

### **BIM and the Project Control Bicycle**

# About the Speaker

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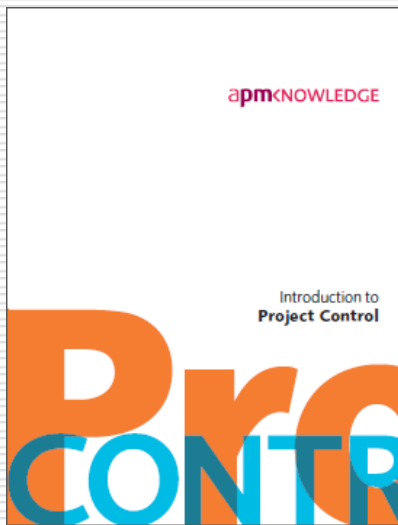
**Adrian Malone**

**Director, Faithful+Gould, Atkins Group.**

- ❑ Responsibility for BIM and Knowledge Management
- ❑ 20 years' experience working in the construction industry
- ❑ Senior Roles in client facing and corporate project environments including Rail, Mobile Telecoms, Construction, Facilities Management
- ❑ Member of the RICS Technology Steering Group, the RICS Global BIM Working Group, RICS Certified BIM Manager
- ❑ Founding committee member of the APM (Association for Project Management) Knowledge SIG (Specific Interest Group)

# Project Control

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‘A **cycle trip**, however simple, is a unique, **transient endeavour**; even if you’ve done similar trips many times before, one of a host of factors may have changed – the weather, the road conditions, the traffic, etc. This time, the weather forecast is for torrential rain, but even so, a loved one needs you to make the trip faster than ever before to bring back some chocolates before a particularly good film starts on TV at 8 o’clock. The **core work of this ‘project’ is pedalling the bike**, but a bike is unstable; just **riding it requires constant attention to both balance and steering**, but you also have to **avoid obstacles and navigate**. Projects are like cycle trips. They’ll take you to your objectives, but **only if you stay in control**, and it’s necessary to **stay in control in order to avoid a nasty crash.**’

# Building Information Modelling (BIM)

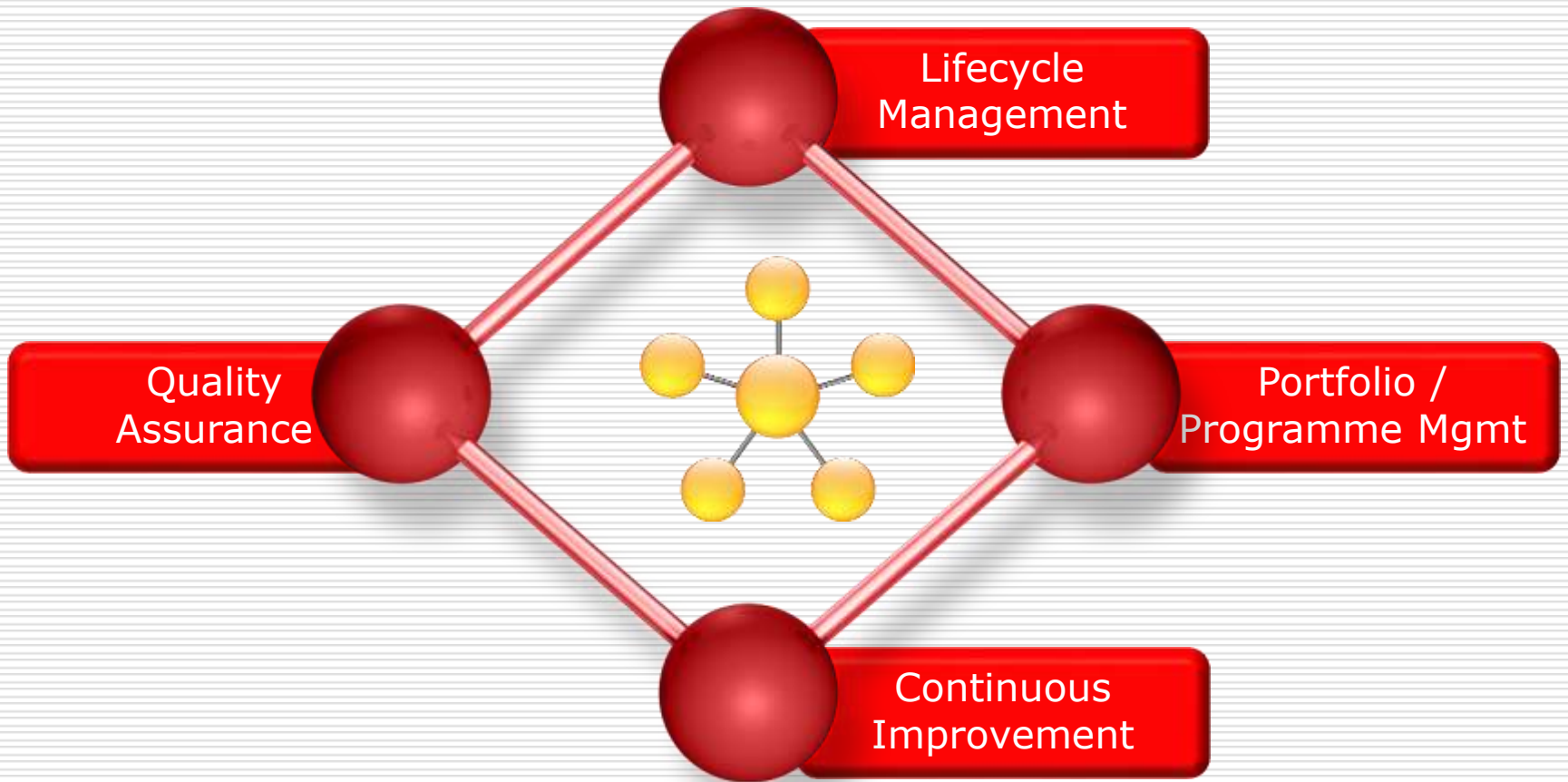
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‘BIM combines technology with new working practices to improve the quality of the delivered product and also improve the reliability, timeliness and consistency of the process.’

RICS

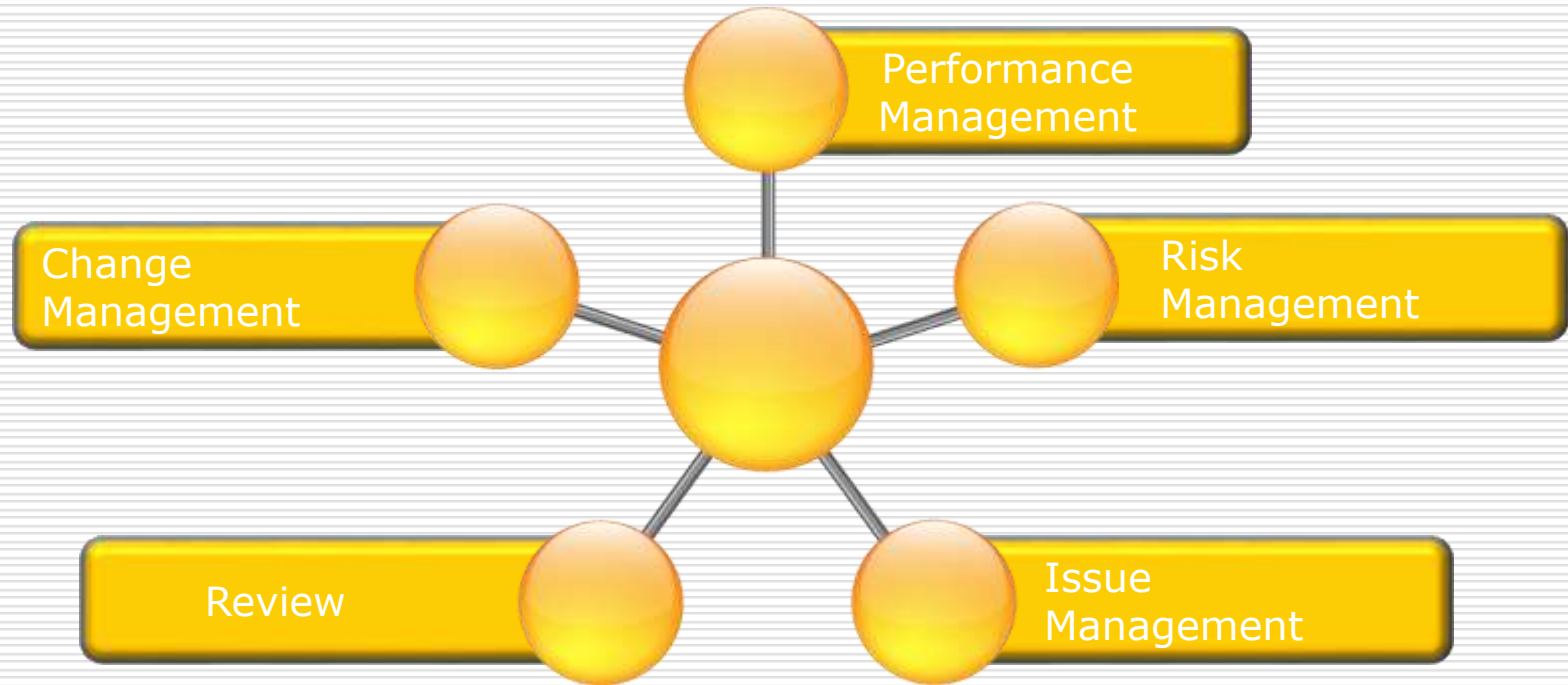
# Outer Loop Processes

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# Inner Loop Processes

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# BIM as Technology - Time

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- Route Planning
- Progress Tracking
  
- 4D BIM
- Scheduling
- Programme management

# BIM as Technology – Cost

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- Quantification
- Cost Control
  
- 4D BIM
- Scheduling and Programme Management



# BIM as Technology – Quality

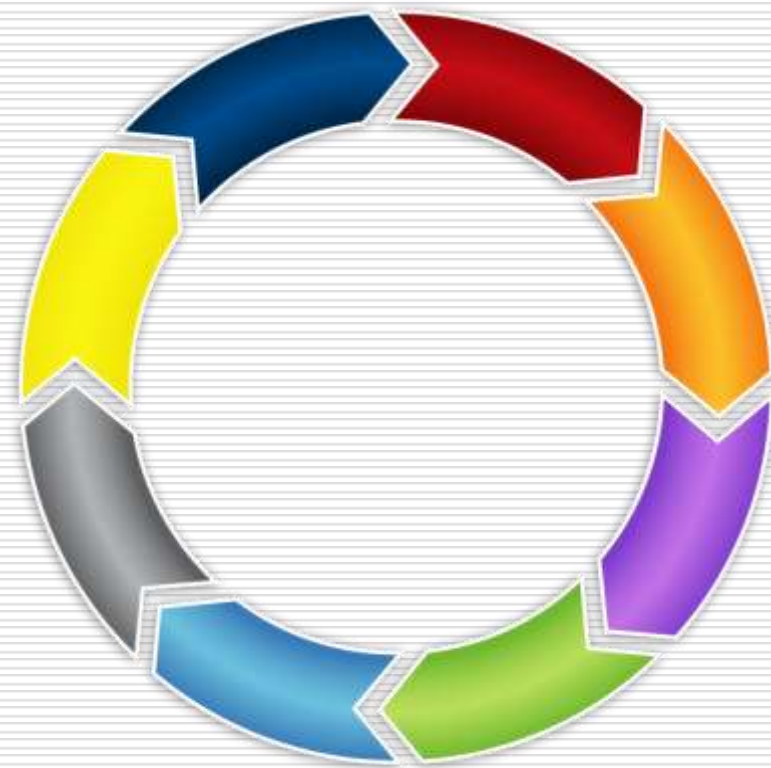
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- Co-ordination
- Risk Management
- Issue Resolution
  
- Clash detection
- Information Exchange Specification
- BS1192:2007

# BIM as Process

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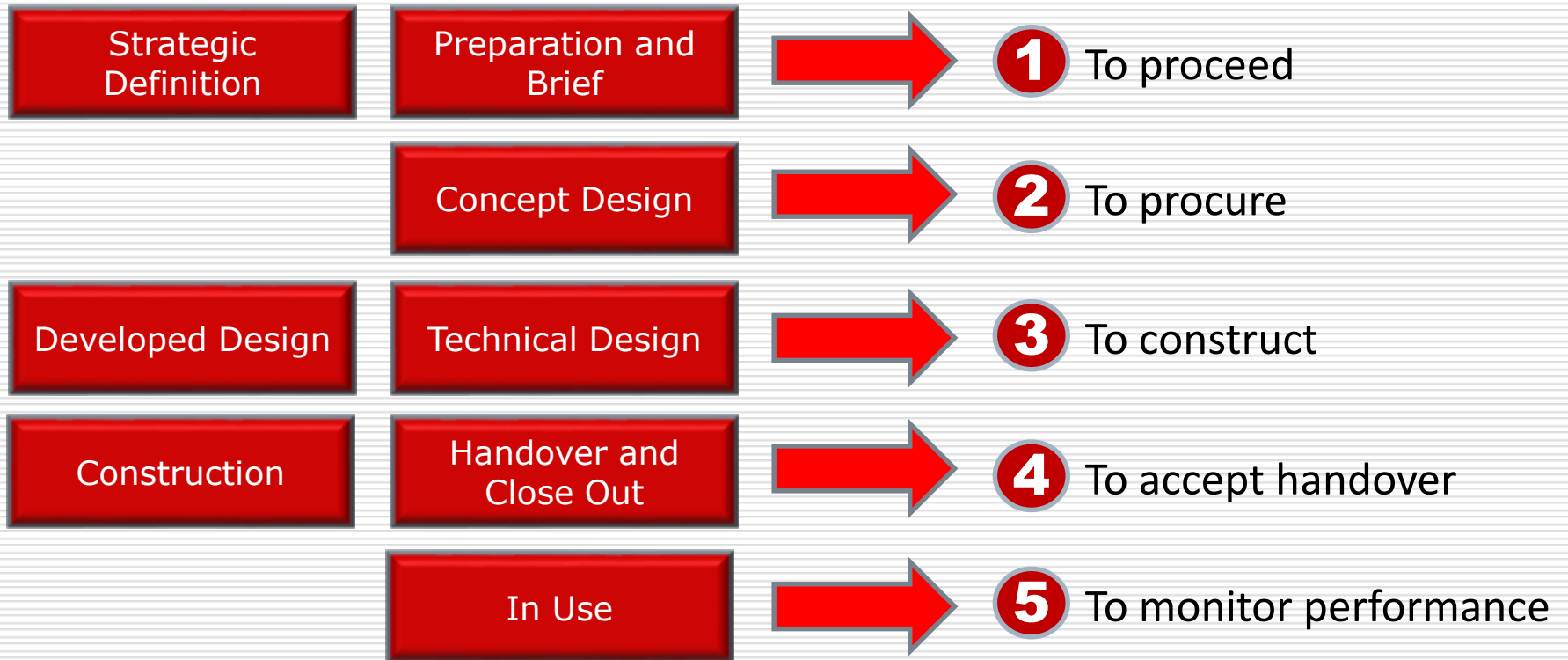


## RIBA Plan of Work 2013

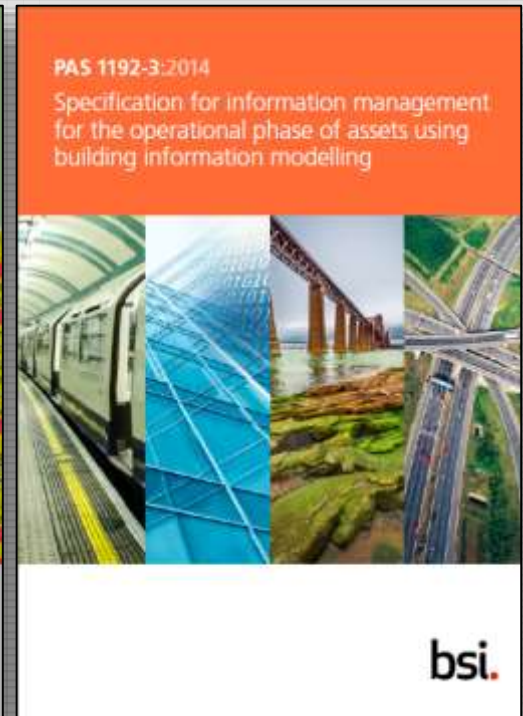
- 0 - Strategic Definition
- 1 - Preparation and Brief
- 2 - Concept Design
- 3 - Developed Design
- 4 - Technical Design
- 5 - Construction
- 6 - Handover and Closeout
- 7 - In Use

# Data Drops

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# BIM in Context



# Case Study – Birmingham City University



<http://www.fgould.com/uk-europe/articles/bim-optimisation-facilities-management/>

# City Centre Campus



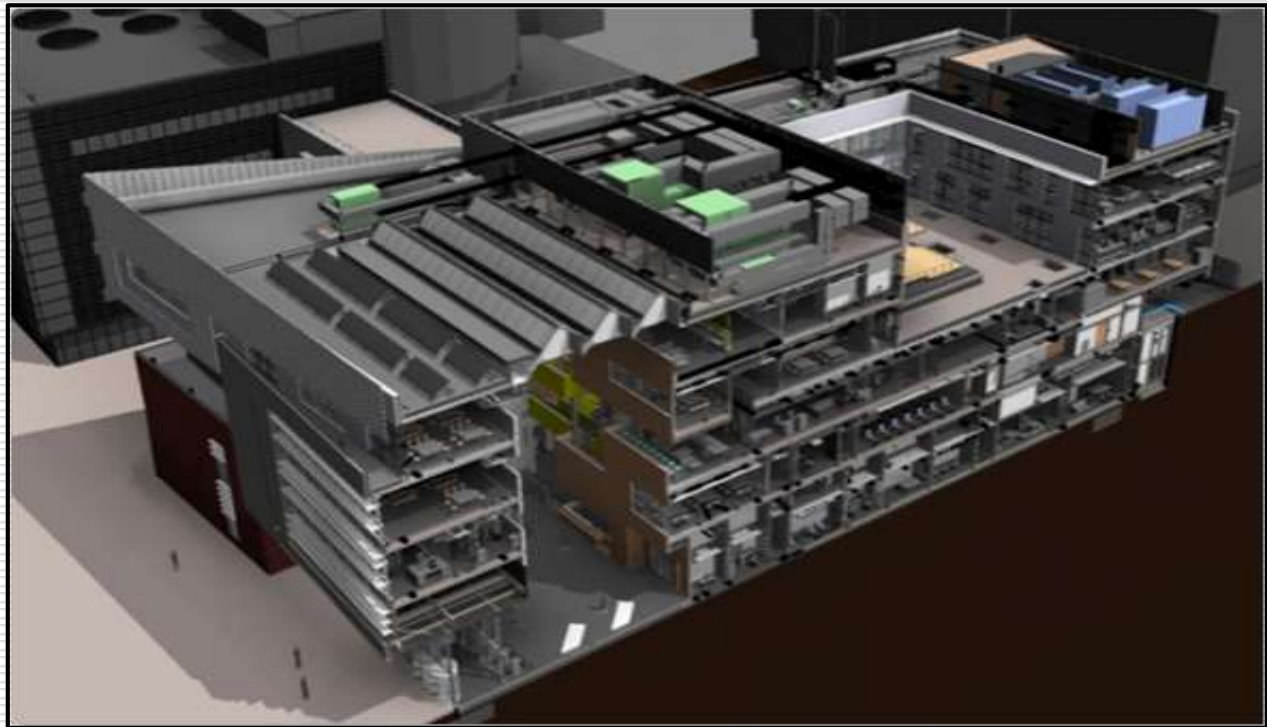
# Initiation

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# Design

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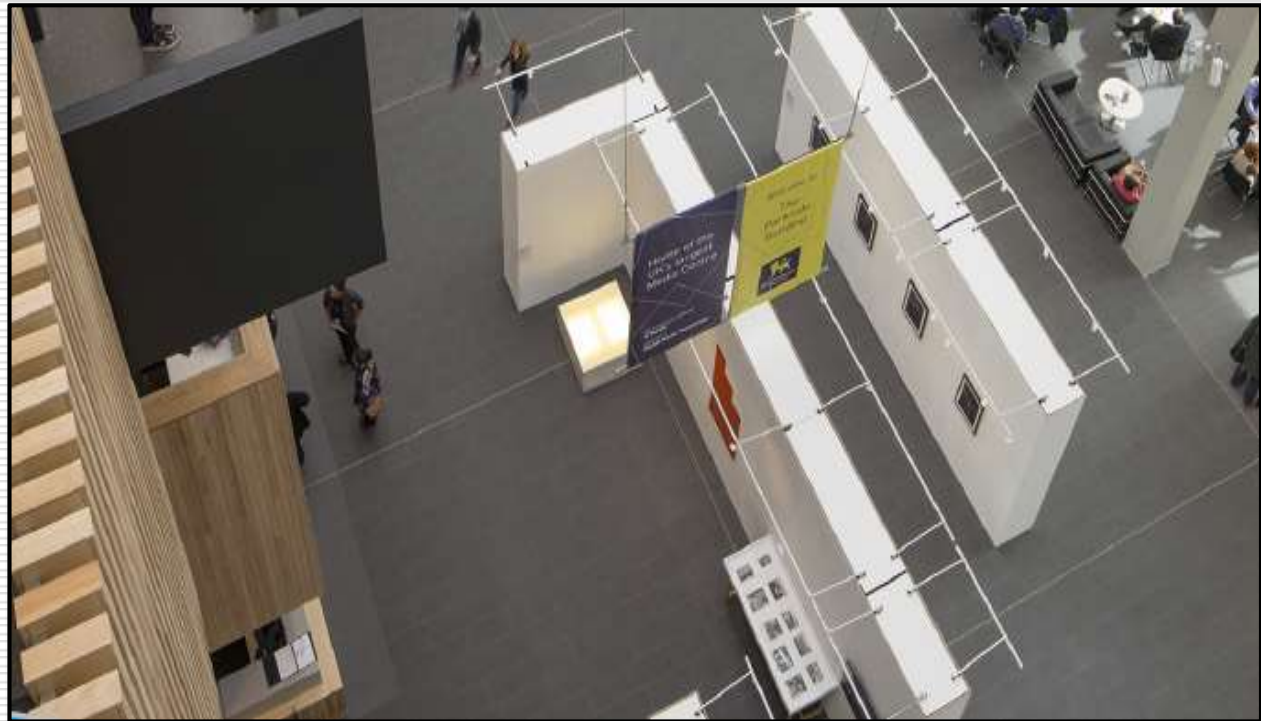
# Delivery (Construction)

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# Handover and Operation

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# Questions

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Thank you.....