UTILISING BIM FOR REFURBISHMENT PROJECTS
INTRODUCTION TO THE OLD POST OFFICE PROJECT

RIBA Competitive Interview
JDDK appointed in August 2014
Grade II Listing
Refurbish 3,350m2 office space
Completed October 2016
Construction cost ~ £1.8m
CLIENT BRIEF

Workspace for 180 – 200 staff
Café, Lecture, Exhibition, Gym
Environment to inspire
Promote wellbeing, attract & retain recruits
Maximise collaboration
BIM exemplar, to Level 2
Staff engagement
Lunchtime presentations
Graffiti wall
Postcard from your desk

Postcard from my desk

Dear Architect,

If I was designing this I would........

I appreciate not everyone is going to get generous vistas of scenic downtown Newcastle, but even a view of my colleagues would be better than feeling I've been put in the naughty corner.
CAPTURING INFORMATION – HERITAGE RESEARCH

Archive research
Regional significance
Discovered original drawings
Understand original building
Inform interior design
CAPTURING INFORMATION – LASER SURVEY

Only PDF plans available
Commissioned full laser survey
Importance of survey brief
Vital piece of info to refer back to for verification
INFORMATION CONTROL

Common Data Environment
Captured information shared
Available to client, design team
and later the contractor
DESIGN – TESTING AND SHARING IDEAS

Beyond sketching
Testing alternative options
Presenting ideas to the Client
DESIGN – COMPLEX GEOMETRY

Fragmented building with complex floor levels
Revit survey helped understand complex geometry
How will spaces fit together?
Avoided intrusive surveys
DESIGN - COLLABORATION

Revit as primary means of collaboration
Central model with linked models
Resorted to other techniques at times
Clash detection – M&E
DESIGN – STANDARDISED OBJECTS

National BIM Library

Used a range of standardised objects
DESIGN – LINKING MODEL AND SPECIFICATION

NBS Create
Easier to use NBS Plus
Both full and performance specification clauses
TENDER AND CONSTRUCTION

Small to medium contractors still getting to grips with BIM
Quizzed on BIM approach at interview
Issued federated model
No contractor design elements
Revit model was phased
BIM TOOLKIT

Arrived during the programme

BETA testing

Could have helped contractor
HANDBOOK – COBie DATA

Limited range of items in refurb projects
Most of the building is ‘existing’
COMPLETED BUILDING
COMPLETED BUILDING
LESSONS LEARNT – E.I.R. AND B.E.P.

Employers Information Requirements
Key part of briefing process
Knock-on effect for later stages
Pre-Contract BIM Execution Plan
NBS BIM Toolkit
LESSONS LEARNT - COBie

Handover information compromised
Has to be planned through the project