THE ULTIMATE BIM SUMMIT

In partnership with bre
Mervyn Richards OBE
Presentation on
The Value Proposition
“It was quite impossible for the surveyor to take out quantities from drawings such as sometimes come from the architect’s office, imperfectly finished and possibly incorrect”

The Present Condition of the Building Industry
A paper and discussion reported in RICS Transactions Vol. XXXIII (1900–01)
An Industry Problem

• The problem in our industry, that BIM Level 2 is trying to change, has been known for over 100 years.

• Government research and reports during the past 25 years has confirmed that the problems still exist.

• This is a problem that we, the industry, must face up to.
• We will not change and become more effective and efficient until we do.
• We will not improve our environment, our profits and our salaries until we do.
• We will not maintain a lead position in the world unless we do.
Change is required

• BIM Level 2 and the HMG Government wants change to occur on all Government Procured projects.

• The Government has Mandated that this was required from 2016

• There is evidence that some private developers and Major Constructors are already asking for change to occur and they are requesting BIM Level 2 as well.
What is the problem?

1976 Building Research Establishment
A discrepancy of 10mm
in one dimension cost £3,000
and seriously affected
the contractors programme.

Lack of coordination demonstrates
Waste at 10-20% (Egan and Latham)
What is the problem?

Lack of design coordination and ambiguity causes rework on site. WASTE.
Impact of ambiguity
Reliance on technology
Change is required

• The definition of insanity is said to be doing the same things repeatedly while expecting different outcomes. Sadly, this is too often reflected in the delivery of major infrastructure and capital projects.

• Time after time, our approach embraces the same contracting and construction techniques, the same relationships, and the same arguments. Yet we continue to be surprised when things go wrong.

Source: The McKinsey Global Institute (MGI's) Reinventing construction
Change is required

- Despite huge amounts of research and effort by construction professionals and project owners around the world, a disturbingly large percentage of projects still fail to complete on time or to budget, with 90 percent of megaprojects facing cost overruns, according to research from Oxford University. Whether in the public or private sector, the industry’s reputation for predictable, consistent, and reliable delivery is uneven.

Source: The McKinsey Global Institute (MGI's) ‘Reinventing construction’
Blockers to Change

• Lack of industry standards!

• Right resources. Too expensive to upskill staff!

• We want to do it the way we always have!

• Lack of support from the business managers – benefits unknown!

• 3D is too expensive to produce!

• If I have to change I cannot promise delivery on time!
What do we need to change

• Move to a less adversarial nature and embrace Collaboration
• Collaboration has many advantages
  • Mitigates Risk for all.
    Client
    Design Teams
    Constructors
• Returns Best Profit for all
• Greater return on investment (Training and Education)
• Repeat business (Satisfied Client)
What do we need?

• Standards and processes (BS1192)
• Adversarial nature of our industry (Protocol)
• Technology platforms incompatible (Building Smart)
• Lack of process in the industry for collaborative working. BS1192 and PAS1192 2 and 3)
Industry Standards Available

• Standards Methods and protocols have all been tested and proven to work, produced and made available free at the point of download. (Avanti programme)

• The BIM Protocol and the BIM level 2 series of documents are available at the

  • www.cic.org.uk/download.php?f=the-bim-protocol.pdf
  • http://bim-level2.org/en/
The Value Proposition
BIM L2 cost too much!

• Q. It cost too much!
• A. It has been proven to repay all investment within the first project (Avanti programme)

• Q. My trained staff will leave!
• A. Do your current trained staff return profits or cause you rework?

• Q. Client/Employers do not ask for BIM L2!
• A. Why wait for the employer to ask for it when it will make you more efficient and competitive than others.

• Q. Its only the client that gains!
• A. Everybody gains in the BIM L2 process (Avanti Programme)
What can BIM L 2 do for me?

- Gives Value to everybody
  - Employer
Gives Value to everybody

• Employer

• Greater Satisfaction
• Better business provision and outcomes
• Value for money (Reduced Cost in delivery)
• Increase quality (Reduced Cost operation)
• Deliver digitally for sustainable data in use
• Deliver on Time and Cost.
Give Value to everybody

- Design and Construct Supply Chain
Give Value to everybody

Supply Chain
(Business Vision and Mission)

• Increase Company Profile
• What is our ethos (leader not a follower, first not part of the herd)
• Increase efficiency (25%)
• Increase productivity (20% more efficient)
• Increase profitability (increased margin by +100%)
• Greater satisfaction for staff
• Satisfy the client
• Win more work
Give Value to everybody

• Proven Savings and increased Efficiency
  
• At Home and Abroad
Give Value to everybody

Proven savings on real projects:
(UK Research)

- Client/Employers cost reduced by 20%
- 25% reduction in design iteration to completion
- Deliver on time
- Reduce risk
- Constructor double their margins.
- Less rework on site, no suprises, greater satisfaction
Give Value to everybody

Proven savings on real projects: (Not just the UK but Europe as well.) (Finland and Sweden)

• 25% reduction in consultancy time
• 60% reduction in quantity take offs
• 90% reduced cost for handling defaults during production
• 30% reduced cost for interactive visualisation
The Value Proposition

• This is a proposition that provides the industry with greater value, increased profits, increased work winning, an upskilled workforce with the ability to earn more.

• Everybody wins!

• Questions
Thank You