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Constructing Excellence Innovation: People & Data

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Agenda

- Introduction
- Setting the scene What is Innovation?
- The Targets Construction 2025
- People
- Data
- Summary

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Setting the scene What is Innovation?

Questions

- What is innovation?
- What is the value of innovation and how do we measure it?
- How and who will deliver innovation?
- What are the barriers and how can these be overcome?
- What are you / your company doing to encourage innovation?



The Target - Construction 2025

Lower costs

reduction in the initial cost of construction and the whole life cost of built assets

Lower emissions



reduction in greenhouse gas emissions in the built environment

Faster delivery



reduction in the overall time, from inception to completion, for newbuild and refurbished assets

Improvement in exports



reduction in the trade gap between total exports and total imports for construction products and materials

People

Smart

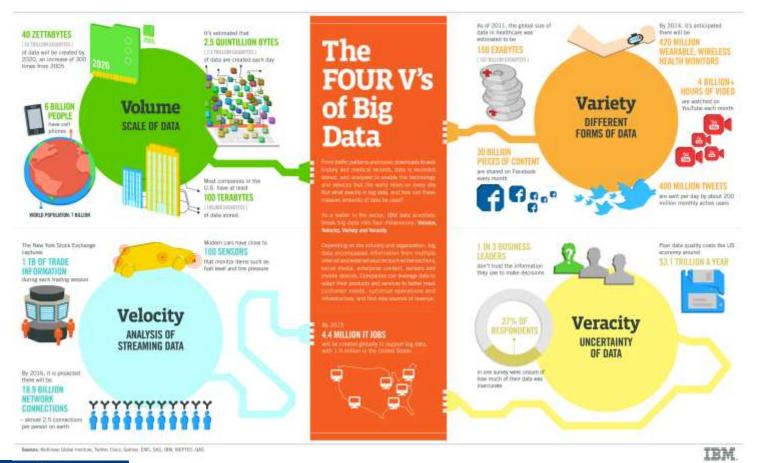
Sustainable

Growth

Leadership

Narrowing it down – People & Data

- People attracting talent and building innovative teams
- Data access to data, structure of data and the diverse uses to which data can be put



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http://www.ibmbigdatahub.com/sites/default/files/infographic_file/4-Vs-of-big-data.jpg⁶





We need diverse teams

If everyone is the same and thinks similarly, nothing will change

White, middle class man (applying) + = An industry of white, middle class men White, middle class man (employing)

We need more talent

Who Could These Talented People Be?

Consider new sources and new skill sets

The main issue is being unable to attract new talent.

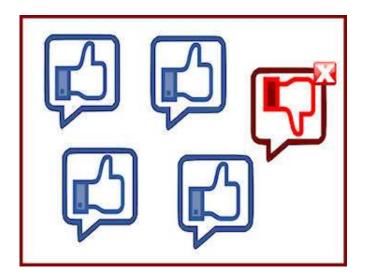
Construction needs to be an attractive, inclusive and viable career choice.

- Attractive jobs are those which provide:
 - Flexibility
 - Potential
 - Personal satisfaction
 - Recognition and reward

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A Holistic Industry Reputation

- Great news stories vs bad
- People's personal experiences
- Who is responsible?



How About...?

- Performance assurance throughout the supply chain
- Inform domestic clients
- Create a legacy of accessible best practice
- Sponsor development programmes for SMEs
- Help them to help us improve our reputation

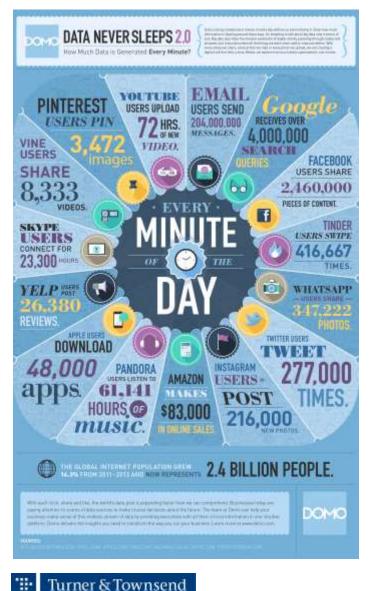




Data - Definitions



Data – The Challenge



BIG data – too much to handle

pen data perceived and real risks:

- **Intellectual Property**
- The capital investment cost
- Lack of understanding
- Loss of control

Megatrends will change the industry

The Challenge - Megatrends



Source: UN Department of Economic and Social Affeirs.

Open Data – Benefits

- IP Risk if you share something it gets more valuable
 - The data has no value, the value is how you use the data
- Data analytics across datasets
- Open data transparency reputational benefits
- Bypass authority, bypass bureaucracy, reduce cost, create efficiency
- Utilising the intelligence of the masses
- Effective collation of data
- Showcasing social and cultural value



Open Data – Realising the Benefits

- Well planned and structured data
- Accessible data
- Automatic, real time data collation
- Standardise data entry
- Separate data and the system used to view / analyse it
- Merge data sets
- Improve communication
- Create a competitive environment



Summary

Big data is so big, you can pay your consultant whatever you like and not get all the answers very accurate but narrow solution but if you open your data you find things you would never have thought of.

- We need a paradigm shift in thinking to meet the targets set in 2025
- Access pools of untapped talent
- Open access and share data

- G4C event coming up next week:
 - Open vs. Secure, getting the balance right with construction project data
 - Wood Lecture Theatre , University of Westminster, NW1 5LS
 - 18:00 20:30

The future of construction is something that will be created, not entered into.