

Leadership Breakfast Meeting Notes – Thursday 4th June, 2015

In many respects, if the problem can be articulated then a solution can be found. The problem for the Construction Industry was defined in *Construction 2025* and it has the following dimensions:

- Reducing whole life costs and moving away from a purely capex perspective
- Faster production and therefore improving productivity
- Focusing on outcomes and this in itself means defining value
- Reducing carbon
- Reducing the trade gap in terms of people and materials
- Better understanding of barriers to innovation

The solution needs to encompass;

1. Skills Gap – skills development / resources
2. UK Productivity – Particularly in Construction which is remarkably low. How can we improve across an industry?
3. Innovation
4. Collaboration
5. Image of industry

Skills Gap

- Pipelines of future workload. Purpose is to give the industry confidence to invest. Visible pipelines of work will help break the reluctance to invest created by low profit margins. Not only from the government but from all clients across the industry.
- Initiative of skills academies (e.g. EDF Hinkley Point/ HS2)
- Campaigns – to transfer from other industries into construction e.g. armed forces into construction.
- Schools initiatives – how do we get the next generation into our industry?

Productivity

- Productivity can be enhanced by embracing new technology including offsite manufacture, greater standardisation and new robotics. However some of this will be a fresh approach to projects and a departure from the currently held view that all projects are one-off's.
- Achieving more with the same resource.
- BIM – Starting to transform the industry.

Innovation

- Encouraging innovative thinking and practices should create more value by integrating the supply chain and BIM in a system that allows this.
- Low profitability - low margins have led to low investment in R&D
- Procurement barriers, act as a barrier to innovation. Bank Station has concentrated on outcomes which has created different cultures and relationships.
- Other barriers to innovation include lack of pipeline or belief in our pipeline. Lack of joined up approach.
- Priorities include;
 - Industrialisation, mass construction
 - Housing, the industry is very traditional and challenges are enormous.
 - Smart infrastructure, buildings, use of technology.
 - Business models, addressing what it is between supplier, contractor and insurer. Is there a better way to encourage innovation?
 - Retrofit, how do we get better performance out of existing assets?

Collaboration

- Recognise supply chain collaboration
- Early supplier engagement. Use of BIM, can't use BIM without collaboration.
- Mismatch with drive for collaboration and perceived value for money.
- Commercial tensions often get in the way.

Image

- All of the above affects our image. The industry continues to struggle with its image which is "pale, male and stale" If we want to attract and retain the younger generation, females and ethnic minorities we need to improve our image. With only 14% of females and a similar percentage of ethnic minorities there are still groups that have yet to be connected with.
- Technology, innovation and collaboration can all help. It's circular.

This left 3 posers for the meeting to consider;

1. How can we make step change for new technology in construction?
2. How can we unlock innovation for greater collaboration
3. Is this the key for improving our image?

Many of the problems start with procurement and the ability to identify value. The Treasury is moving towards this. However it might be worth the Government reconsidering its position as at the moment it operates in a dysfunctional way with inconsistency between Departments. It may be worth considering a Department for Infrastructure which would include Housing, Hospitals, Schools and Transport.

Finding a solution to the ills of an industry is often more difficult than defining the problem. Nevertheless there are three catalysts that could help to realise the vision for 2025, namely:

1. Government organisation and policy

- Government role relates to macro economy, tax, regulation
- Government needs to pull key infrastructure priorities
- Re-stream Whitehall via a Ministry for Infrastructure
- How about centralised specialised teams? Procurement and delivery.
- Innovation exists in SMEs – but needs Government support to pull it through.
- Barriers to setting up new factories such as planning permission

2. Learning better and positively from overseas

- Many such firms have huge R&D budgets, e.g. for robotics
- Learn from other cultures, e.g. Japan front end loading
- Home grown talent vs migrant workers – a job for life around the world

3. Great enablers of innovation

- It takes 10 years for a step change to occur
- Great enablers are data; technology; procurement; collaborative working; funders
- Buy outcomes procured from integrated supply chains
- What can we learn from Government policy developments on BIM and zero carbon?
 - Signal to the market that in X years' time Government will do XYZ – and stick to it
 - Let suppliers radically innovate around this including business models