

Constructing Excellence Collaborative Working Champions

Collaboration 2025 - Worst and best case scenarios

Background

On a 10 September meeting in London, the CE collaborative working champions (CWCs) discussed the prospects for integrated collaborative working in 2025. The UK government/ industry strategy *Construction 2025* provided some context, setting three strategic aims:

1. Smart construction and digital design.
2. Low carbon and sustainable construction.
3. Improved trade performance

... and suggesting six drivers of change:

1. Improved image of the industry.
2. Increased capability in the workforce.
3. A clear view of future work opportunities.
4. Improvement in client capability and procurement.
5. A strong and resilient supply chain.
6. Effective research and innovation.

The CWCs extended their discussion via a series of questions shared on Twitter, with the resulting 'tweetchat' captured in Storify.¹

1. Will collaborative working be "business as usual" in 2025?
2. Is BIM causing you to revisit your collaborative working approaches?
3. Will sustainability be a key driver for your collaborative working?
4. Will clients be selecting by value in 2025?
- 4a Will you procure your supply chain by value in 2025?
5. Share your examples of exemplary collaboration

Following the initial discussion, two scenarios were sketched out and discussed via Google Docs. Apparent use/misuse of terms such as 'collaboration' and 'sustainability' featured strongly; optimistic views considered 'whole life costing' and social cohesion, but pessimists feared continuation of short-termist, lowest price, adversarial approaches, partly because clients rarely measure value other than financially. The two scenarios are attached to stimulate further debate.

¹ See Storify timeline at <https://storify.com/EEPPaul/collaborative-working-in-2025>. In addition to the dozen CWCs discussing the topic face-to-face in London, the hour-long tweetchat attracted 40 online contributors.

Collaboration 2025 - A worst case scenario

In 2025, “collaboration” continues to be used mainly as a synonym for ‘working together’ at a project level, not in the CE sense of applying value-adding holistic approaches to construction. Accordingly collaborative working in planning, design, construction and asset use remains the exception, not structured and facilitated as the norm. Repeated efforts to encourage more collaborative approaches have been stifled by, among other things:

- entrenched, often adversarial industry attitudes and behaviours
- widespread client and supply chain focus on lowest price procurement
- limited investment in R&D with a corresponding impact on innovation and productivity
- reduced public sector spend (with its knock-on reduction in best practice exemplars)
- short-termist approaches to ‘sustainability’

It is sobering that, even now, we still tend to refer to the same handful of progressive exemplars: the Andover North ‘prime’ project, Building Down Barriers, the Birmingham Construction Partnership, Anglian Water’s AMP5 programme, London 2012 achievements, and the outcomes of the ‘new models of procurement’. We have few small project examples.²

Sadly, the ‘collaborative catalyst’ of the BIM mandate in the last decade did not spread beyond a handful of major clients. The industry is now somewhat polarised. At one end of the scale we have an elite group embracing data-rich ‘whole life’ approaches with integrated supply chains deploying collaborative BIM and related progressive thinking, and understanding and delivering best value business outcomes to clients with whom they have long-standing relationships. At the other, remain the majority of clients and their fragmented supply chains, still wedded to repeated lowest-price tendering, and applying low-tech approaches and attitudes little changed since the 20th century. Here any improvement tends to be focused on incrementally reducing errors during built asset delivery, reducing impact or trimming costs rather than adding real value by optimising end-user experiences and client outcomes.

Similarly, on sustainability, the UK’s elite project delivery organisations can deliver world-class projects, but the bulk of the sector - as in so much of the world - is rarely incentivised to improve the energy performance and resource impacts of either existing or new built assets.

The skills shortage continues to affect us. Graduates are keen to join the innovative organisations partnering with the ‘intelligent clients’, but education and industry thinking is still geared towards working in disciplinary silos and in often adversarial relationships. Poor industry practices and limited training opportunities in the rest of the sector do not attract a diverse pool of new entrants, and prevailing ‘old school’ attitudes and behaviours often reinforce the “poor image of construction”.

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² For example, the iESE procurement and build with Kingston upon Thames and with Kent County Council.

Collaboration 2025 - A best case scenario

In 2025 we can look back on 10 years of profound change in the 'industry' formerly known as construction. Faced with economic pressures, peak oil and population growth, the majority of today's new built assets are delivered with a clear focus on best whole life value ('outturn cost'), with clients' desired business outcomes (needs) helping set the agenda for the whole process of planning, design, construction, hand-over, operation and maintenance, potential repurposing and eventual dismantling and reuse of materials.

The sector is less fragmented, with major clients engaged in long-term 'Prime' relationships (some based on shared risks and rewards: "skin in the game"), with integrated supply chains focused on reducing lifecycle costs, delivering value, and encouraging and rewarding innovation. (Even industry organisations have become more integrated: central government has continued to lead,³ helping other clients, professions, trade groups and educational institutions understand project costs and address the inefficiencies created by 'silo' mentalities). However, we retain a (steadily diminishing) 'rump' of old-school builders that have failed to move with the times - and who find steady but low margin business from clients still focused on lowest price.

At the top end of our market, though, we can take pride in our customer service, working constantly with the occupants and end-users of our facilities, from the earliest assessment of their needs and aspirations, through delivery and ongoing support in use, to end-of-life reuse or repurposing of assets.

We overcame the skills shortages of the last decade by re-engineering many of our industry practices and processes, applying offsite manufacturing techniques, standardisation and onsite automation, and multi-skilling our operatives to cover both traditional and new techniques. Initial construction has become a safer, faster and more efficient process, using more sustainable materials; we deliver more durable end results, streamlined future repair and maintenance, and effective and safe deconstruction with recovery of usable materials at end of life

Data - created about our built assets, constantly generated by our built environment and by its users - is core to how we work, evidencing our ethical procurement and our collaborative, lean and circular economy thinking, both in the physical and virtual spheres. We have learned to trust and to reuse information. Some is carefully managed for security and privacy reasons, but a growing volume of built environment ('big') data is now openly shared and connected, helping us draw on established best practice to continually innovate and create and maintain ever 'smarter' environments.

Unconventional collaborations (eg: with health authorities, charities, digital organisations) are now commonplace, and have pioneered new construction perspectives and innovations on healthy, regenerative, smart buildings and cities.

As a result, the reputation of the sector has improved. Our re-engineering has improved safety and occupational health, made practices more high-tech, and helped workers deliver better products and services that are appreciated by clients and end-users. Of course, we still retain a substantial legacy of older built assets, but multi-skilling, the retrofit movement and use of modern IT to improve communications has helped dilute popular misconceptions.

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³ Central government got NAO and CIPFA endorsement of its policy of upfront funding to reduce lifecycle costs. Such high profile examples are increasingly the norm