



Construction Knowledge Task Group
www.designingbuildings.co.uk/CKTG

A call for support to drive construction knowledge into the digital age

Current situation

All construction industry activities are underpinned by a framework of knowledge which includes standards, regulations, codes of practice, research, innovation, policy, technical guidance, case studies, market insights, training and educational material.

Construction industry data and information are entering the digital age, driven by the development of new data sources and new analytical capabilities and by the adoption of building information modelling. In stark contrast to this, construction industry knowledge remains firmly in the 20th century. Poorly specified, managed and disseminated, it remains inaccessible, fragmented and siloed. As a result; research and innovations are not adopted, best practice is not followed, standards are not complied with, and lessons are not learned.

Successive reports have called for better knowledge management across the industry [ref], and 38% of practitioners freely admit they do not have easy access to the knowledge they need to do their job [ref]. This means the industry is less productive and innovative than it could be, and it makes more mistakes than it should. The Get It Right Initiative estimates that avoidable errors cost the industry between £10 billion and £25 billion a year [ref], and the Infrastructure and Projects Authority's *Transforming Infrastructure Performance* identified a £15 billion productivity opportunity in construction [ref].

A new approach

The industry is beginning to change following the publication of *Construction 2025*, driven by groups such as the Construction Leadership Council and the Infrastructure Client Group. The government recognises the opportunity for the industry to transform itself and has committed to support this through the Construction Sector Deal and the Industrial Strategy Challenge Fund.

The key foundations to this transformation lie not just in a digital approach to data and information, but also in a move to smarter digital knowledge. Knowledge must be treated as a highly valued resource. It needs to be prepared, managed and disseminated in a way that ensures the right people have the right knowledge at the right time, enabling them to optimise performance, improve productivity and ensure compliance.

Construction Knowledge Task Group

The [Construction Knowledge Task Group](#) (CKTG) has launched an initiative to make construction knowledge smarter, helping deliver the full value of digital construction. 20 organisations from across the industry have agreed a Memorandum of Understanding committing to developing solutions for smarter construction knowledge:

- Creating a common standard for the way knowledge is prepared, making it is easier to identify precisely the right knowledge for every situation.
- Improving access to all knowledge when it is needed, whatever its source.
- Improving methods of knowledge management, so it can be integrated seamlessly into industry systems and applied more widely and more effectively.

This initiative supports the vision for Digital Built Britain and will help deliver the full benefits that a digital approach to the built environment can achieve.

Call for support

The CKTG is now seeking wider industry input and is asking for your commitment to engage with and support its work over the coming year.

The next phase will be a process of stakeholder consultation to generate feedback about outline proposals and to identify viable delivery mechanisms. In particular, the CKTG is looking for interfaces with existing industry programmes and for funding opportunities.

Smart knowledge delivery plan

The current position				
Level 0	Level 1	Level 2a	Level 2b	Level 3
<p>Paper</p> <p>Printed documents sitting on shelves.</p>	<p>Digital</p> <p>Digital versions of printed documents on siloed servers, often with restricted access.</p>	<p>Searchable</p> <p>All industry knowledge can be searched intelligently with a single query.</p>	<p>Accessible</p> <p>All industry knowledge can be accessed using a single log in.</p>	<p>Smart</p> <p>Knowledge can be accessed by project systems, based on each team members current activities.</p>
<p>Practitioners have to know they need to know something. They then need to know about, and have access to the right physical document. This requires extensive duplicated libraries.</p>	<p>Practitioners need to know about, and have access to the right digital document. This requires multiple subscriptions to, and searches of, many fragmented knowledge sources.</p>	<p>Practitioners still need to know that they need knowledge - but when they do, and they have access to it, they find the best knowledge faster.</p>	<p>Practitioners do not have to repeatedly log into and out of multiple, fragmented systems to find what they need.</p>	<p>Critical knowledge can be 'pushed' to practitioners automatically when they need it - so they don't need to know there is something they need to know.</p>
<p>Requirements to move to the next levels:</p>		<p>A standard classification of knowledge, including: form, subject, project stage, discipline, sector, author, source, status and permissions.</p> <p>Adoption of the classification by knowledge producers.</p> <p>Custom search tools.</p>	<p>A protocol for practitioner identification.</p> <p>A third party identity authentication tool.</p>	<p>A standard classification of practitioner context, including: profession, sector, project stage and subject.</p> <p>Tools to push critical knowledge to practitioners.</p>

More information about the CKTG can be found at www.designingbuildings.co.uk/CKTG.

If you would like to discuss opportunities to help deliver smarter construction industry knowledge please contact the CKTG chair Dr Gregor Harvie at gregor.harvie@designingbuildings.co.uk.