

Collaboration is the only way forward

The new buzz word in the digital age of construction is collaboration

It shouldn't be news to anyone reading this publication that the construction industry is undergoing a transformation, and signs of this are everywhere – BIM-simulated buildings that can be viewed with virtual reality headsets before the first brick is laid; drones flying materials around and surveying buildings and infrastructure; 3D-printed buildings and smaller parts.

FIEC's column last year covered Construction 4.0, and CECE tackled this topic from different angles in recent columns as well.

FIEC and CECE have produced a combined column this month to look at this subject again, in the context of how it is changing the way companies in the value chain – and the representative industry federations – work together.

FRAGMENTATION

Long criticised for its fragmentation, a characteristic that has sometimes been exaggerated but remains broadly fair, this way of working will become a thing of the past.

Among other things, shared access to BIM data, new business models and emerging legal implications mean that trust and openness are essential, and communication has to flow to make the construction process seamless and uninterrupted.

In the world of digital construction, there is no downtime if information is accurate and always up to date.

Everyone in the value chain needs to make sure that the information passed on is exactly what the other parties need. Bad data will lead to errors and downtime – and law suits.

It might be said that there is nothing new here, except that with the new tools, such errors are no longer necessary. However, the process may be increasingly digital, but humans are still essential, and collaboration will help to minimise problems.

As the industry is changing so fast, there is a risk that some companies may be left behind, either because of a lack of financial resources to keep up with the new technology, a lack of expertise, or even a lack of confidence.

Many companies have been sitting on the fence until now, leaving others to move first. There are risks in both choices. First movers have made significant investment and taken some risks to capitalise on the opportunity posed by digital technology. These innovators

With shared access to BIM data, communication has to flow to make the construction process seamless and uninterrupted

saw the future and embraced the transformation, not necessarily knowing that their investment would pay off.

Those playing the waiting game will not be able to continue this strategy for much longer. The market is changing and new entrants from outside the industry are coming into the world of construction.

Such change can lead to a win-win result for all players, but not if the companies concerned are working in isolation. The key to a successful transition is collaboration, both within the existing industry and with those new entrants keen to provide new services to both the industry and its clients.

There are some obvious non-construction sectors with which construction and related

Extract 2 from the manifesto

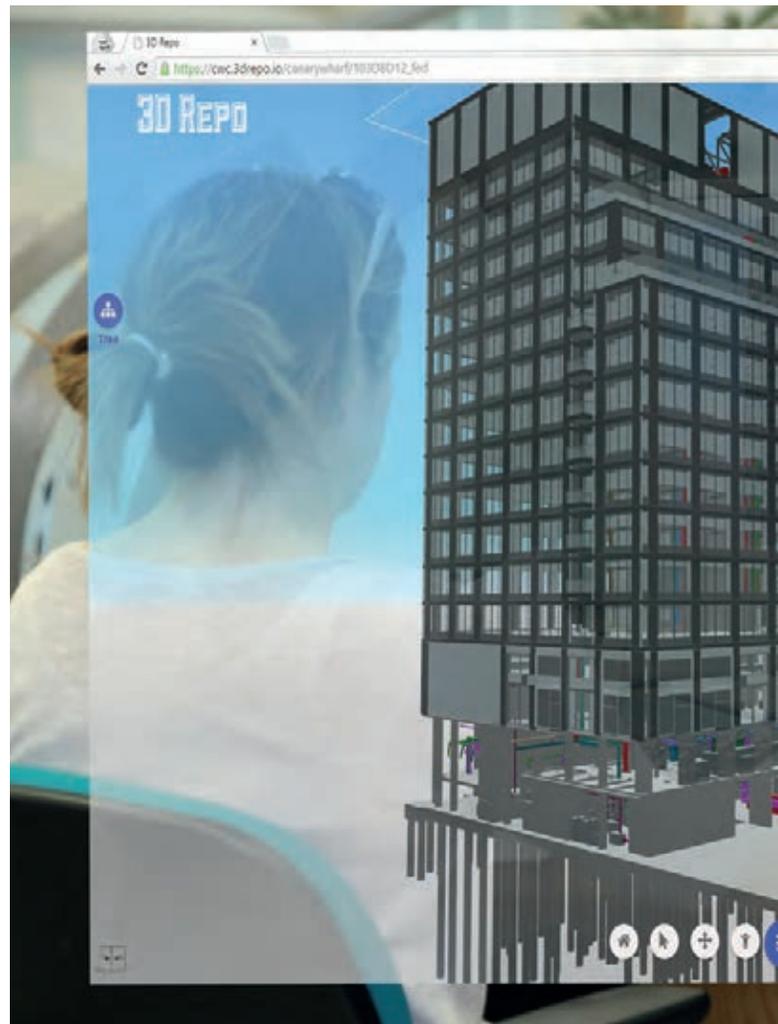
The European Union must take the political lead on digital construction.

Digitalisation of the construction industry should be a top political priority for all European institutions and should be part of the "Digitising European Industry" initiative. Against the background of the relentless pace of digital transformation, the European institutions should respond with an agile governance culture which facilitates and supports R&D ecosystems for IT, academia and the construction industry to develop market-driven R&D programmes.

Extract 1 from the manifesto

... the importance of the construction sector is also a result of its pivotal position at the crossroads of different economic sectors, which make up the construction value chain: product and machinery manufacturing, professional services, infrastructure, real estate and housing. The significance of the sector is also reflected in its ability to respond to the main challenges of the European Union: jobs, digital economy, energy efficiency, circular economy, climate change, demographic changes, health and safety, education, training and new personal data protection rules.

Digital technologies not only improve productivity and reduce project delays, but can also enhance the quality of buildings and improve safety, working conditions and environmental protection. This shows unequivocally that digitalisation is not a goal in itself but a means to achieve the European Union's priorities.



companies need to work, for example software developers.

There are also companies historically involved in manufacturing, which have developed game-changing services. Ignoring these is not an option, and in any case, digitalisation is here now. It is no longer a question of if, but the discussion is now how we need to address this together as an industry.

At EU level, the industry representatives have understood that collaboration is not just for everyone else.

MANIFESTO

Following discussions early in 2018, several major industry federations have joined together

Extract 3 from the manifesto

We need an appropriate regulatory framework on data policy
 Digitalisation is also disruptive in the field of data policy, creating a need for changes to traditional data management rules. For this reason, an appropriate regulatory framework should ensure better data quality and data management, address challenges around intellectual property rights and cybersecurity, establish who is responsible – and liable – for data ownership, and avoid abuse by monopolies thus ensuring a level playing field, in which SMEs can thrive and reap the benefits of digitalisation. Finally, standards, such as those for data, interoperability and BIM, as well as guidelines for co-operation and collaboration, can support the uptake of new technologies. However, these standards need to be accessible to all, neutral, and not-for-profit.

to produce a joint manifesto on digitalisation. This was published at the beginning of June and is supported by a whole range of federations at EU level,

representing the construction value chain.

The upbeat manifesto acknowledges the challenges faced by the construction industry but focuses on the benefits of digitalisation rather than the problems. (See extract 1 from the manifesto)

Moreover, embracing the transformation, the participating federations “pledge to collaborate intensively, to lead and support the industry in order to enable a successful digital transformation of the construction industry”.

The manifesto has been presented to the European Commission, European Parliament and the press. Indeed, another goal of the publication is to raise the political profile of the construction industry around the key trend of its digital transformation and in the light of the future political and institutional setup after the May 2019 European Elections. (See extract 2 from the manifesto)

The manifesto also points out that the value of data is paramount. (See extract 3 from the manifesto)

Extract 4 from the manifesto

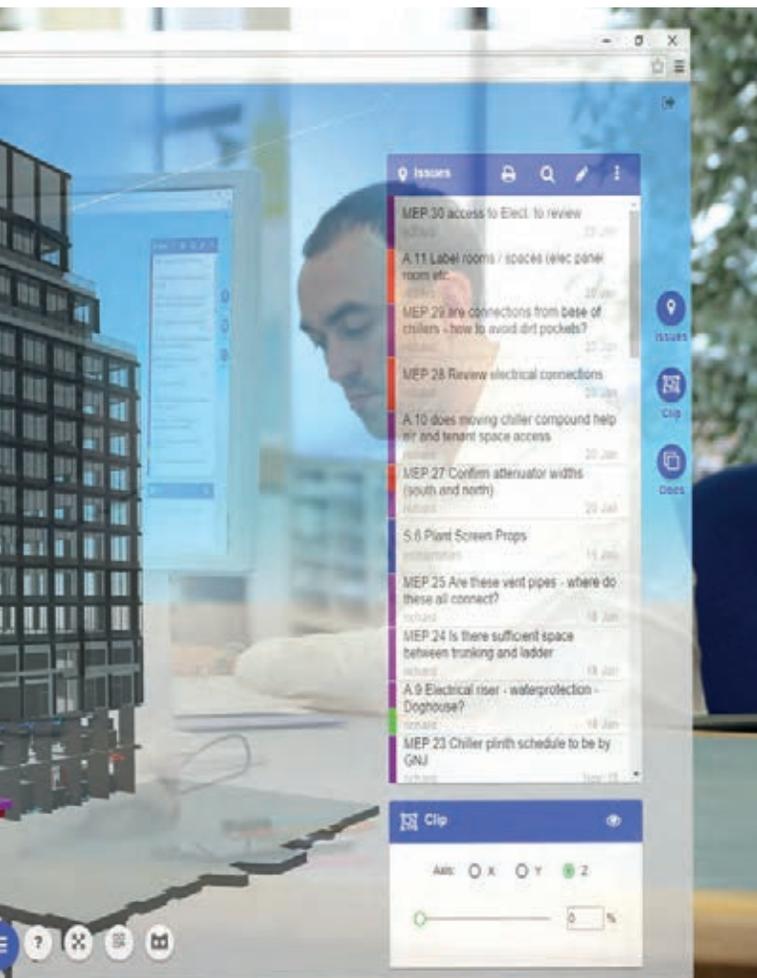
... financial access and support are crucial to speed up the transformation process and mitigate the impact of initial low return on investments. With this in mind, the post-2020 Multiannual Financial Framework must focus on:

Digital skills: to assess and identify skill needs in digital construction, support quality training, up-skilling and re-skilling, empower workers, and support industry initiatives to attract young talent on the one hand and avoid job losses on the other;
R&D: to foster industrial leadership, remove barriers and make it easier for the construction sector to deliver innovation; and

IT infrastructure: to invest in well-designed, intelligent and connected assets that ensure deployment of cost-optimal high-speed internet infrastructure.

Financial support from the EU is also key. (See extract 4 from the manifesto)

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ROAD MAP
 The collaboration continues with a follow-up document, focusing on the technical challenges. This road map will be developed over the coming months, to ensure strong leadership and a coherent, industry-led action plan, aimed at tackling the considerable changes required to manage the transition effectively.
 For further information, please visit: <http://www.fiec.eu/en/library-619/joint-manifesto-on-digitalisation-from-the-construction-industry.aspx> 



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