

Roadmap to Recovery – Restart, Reset, Reinvent

- Off-site and MMC
- Digital Transformation
- Trusted Relationships
- Capable Supply Chain

Need

Covid-19 caused a rapid and dramatic decline in the construction sector with 47% of companies reporting a massive 80% reduction in activity during April at the start of lockdown.

Now, with the knowledge that the virus is not going to be disappearing as quickly as it arrived, the government is pushing the sector to scale up production and get people back to work as much as possible to support the economy. The pressures on the sector were already very evident with historically low margins for contractors conflicting with increasing expectations from buyers and a greater focus on the environmental impact. Covid has resulted in material costs and delivery times increasing and social distancing restrictions on-site.

The Construction Leaders Council is advocating a three-stage approach: restart, reset, and reinvent to kick start the economy and define the future of the industry. As members of Build UK, we contributed to the CLC Covid working

procedures in keeping our workforce, clients, and supply chain operational with the added safety features in place during the Restart and Reset phase.

Now, as we move into the Reinvent phase, we have re-focused on the key areas which will make a difference to project outcomes for us and for our customers more quickly.

Solution

Capable Supply Chain

A capable supply chain is crucial, and not wanting to lose momentum during the pandemic we moved our supplier workshops online using tools like Zoom, Mentimeter and Jamboard. In this way we continued to strengthen relationships, remove hurdles, and raise performance. As the industry gains more traction with off-site and digital technologies our supply partner relationships will become a differentiator.

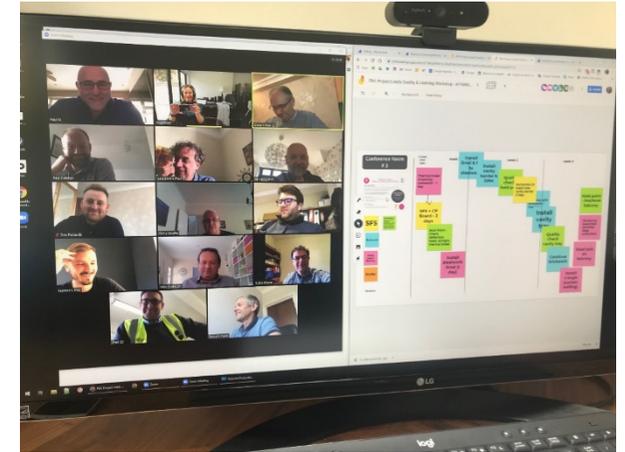


Figure 1 Supplier Workshop May 2020

Trusted Relationships

Another differentiator is developing trusted relationships between architects, designers, and contractors that facilitate early contractor engagement. If we can engage earlier in the design process, at Stage 2, then we can share decisions on proprietary systems, interface details and BIM levels to simplify the build. A double win, as the architectural vision is protected, and the build is less risk.

Osborne Developments recognised this gap and have appointed a construction design lead who will work closely with their architects to simplify future builds.

Off-Site

Off-site and modular components have been evolving to help speed up

assembly, improve quality control and reduce reliance on skilled labour. Osborne has a 15 year relationship with SIP manufacturer Innovaré delivering i-SIPs solutions and this is now being extended to introduce modular bathroom pods, used initially in student accommodation and moving towards kitchen and bedroom pods with their complete Flexihome system. This dramatically reduces the trade interface and standardises maintenance.



Figure 2 - Riverside Way Bathroom Pod

Digital Transformation

BIM is the backbone for implementing emerging digital technology as we drive to increase productivity, innovation and collaboration. Client's often don't fully appreciate the benefits it can bring beyond clash detection and 3D simulations. The real value for property owners and maintainers can be realised through advances in remote asset monitoring, targeted maintenance, and utilising live data for future enhancements.



Figure 3 – AI representation for modular housing scheme

We have found that the advantage of using BIM in construction projects up to £100m can be lost through smaller suppliers not having the digital capacity or using non-standard digital platforms.

Outcome

The UK economy more than ever is

dependent upon the industry recovering fast and effectively to improve both performance for clients and sustainability for themselves.

Adopting the breakthrough technologies and working practices such as BIM, emerging digital technology and maximising the use of off-site solutions will contribute to speeding up the reinvention of the sector, helping it to deliver more with less - less skilled resources, less waste, less cost, and less energy.



Figure 4 - Solum Walthamstow