



Smart Construction Theme Group (Digital and Offsite)

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Agenda



- Introduction
- Offsite Construction Why?
- Observations
- What we need to do?
- Total system approach
- Q&A



Our consulting team have worked with some of the biggest and most complex organisations around the world.

With our roots in Toyota's Japanese, European and UK production facilities though to supporting operational performance, efficiency and capability right across many different sectors, our experience is wide ranging and focused on success.





Offsite Construction – Why?



Potential benefits are well documented and reasons why we should consider 'Offsite Construction'

- Reduced overall project durations
- Total cost is less than traditional build
- Improved Health & Safety
- Higher quality standards
- Environmentally friendly and sustainability
- Plus, plus, plus....

Therefore why wouldn't we consider 'Offsite Construction'???



Offsite Construction – Why???



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- Reduced overall project durations delays mean opportunity is lost
- Total cost is less than traditional build costs are 15-30% greater
- Improved Health & Safety risks and hazards are moved not reduced
- Higher quality standards parts missing, reworking and snagging
- Environmentally friendly and sustainability significant waste is added

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Therefore why wouldn't we consider 'Offsite Construction'???

Because the opportunity is still there!



Observations



- End to end process Each element is working in isolation creating silos & over the wall mentality
- Product design Learnings are lost & not exploited to achieve Continuous improvement
- Factory and supply chain Construction under a roof
- On site A traditional and confused approach
- Quality ownership Issues are not resolved but instead passed on to be sorted
- Information and technology Becomes more sporadic closer you get to site



What we need to do?



End to end process (1 system)

- Need to make it a seamless system from concept design supply chain production site handover
- Look back through the 'value chain' to ensure we are delivering what the customer requires
- Every stage has very clearly defined accountabilities and handovers (passing the batten)
- Project integrator to act as conductor literally from end to end ensuring detailed plans are managed

Product design

- Start with the core design and regularly review where improvements can be made supply chain, production, on site and for the customer
- Make greater advancements with little and often approach rather than waiting to make a big change



What we need to do?



Factory and supply chain

- Determine what the factory will make and buy
- Must be a manufacturing approach rather than construction
- De-skill and standardise all activities to minimise need for trades
- Engage with and develop the supply chain

On site

- Must be considered as a continuation of the manufacturing process
- Precision to ensure a plug and play approach



What we need to do?



Quality ownership

- Design, production and deployment/installation
- Do it right first time every time
- Don't pass it on unless it is right

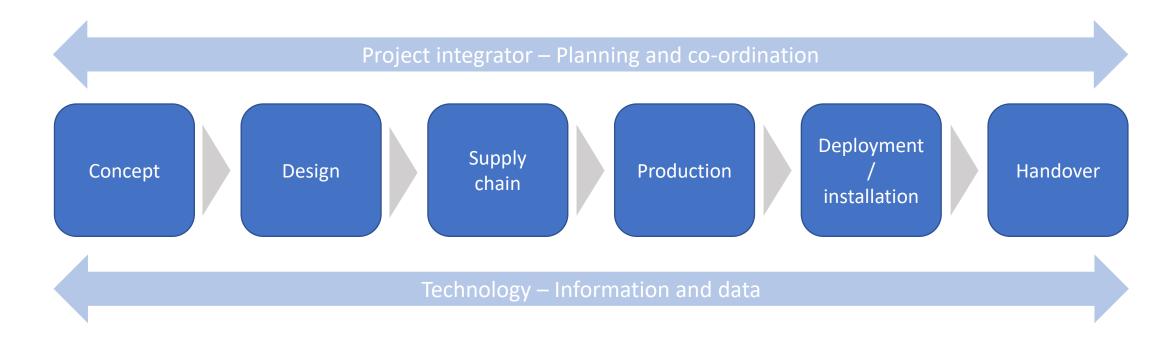
Information and technology

- Information must flow from design through to handover
- Data must be fed back to improve
- Different level of detail and method of presentation at each stage in the process



Total system approach





- Start with the end in mind
- End to end collaboration
- Ownership & accountability at every stage
- Continuous improvement through feedback
- Quality don't pass it on unless it's right



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For More Information



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