

Offsite DfMA Landscape

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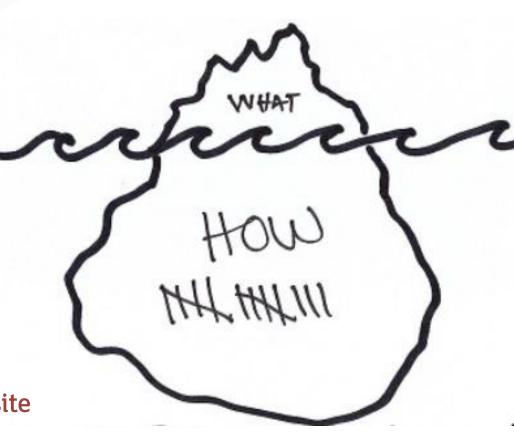
Transforming Construction

- Construction 2025 ambition
- We've articulated the problem
- Set the supporting policy
- Industry leadership

Now we work out how:

- Engaging
- Encouraging
- Enabling

Presumption in Favour of Offsite
Time to Collaborate and Deliver



Construction Leadership Council





Align, transform, or get out of the way.



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The basic principle of Offsite thinking is to:

 Remove activity from an environment where it is difficult to control quality, cost, labour and safety



 To a factory where the process can be stabilised to create repeatable standard operations which are optimised over time





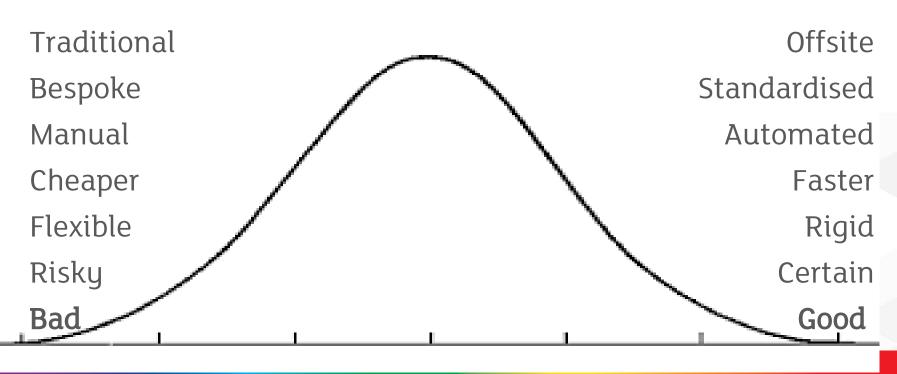
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- It's not all about volumetric modules
- Offsite works well for repeatable elements
- The same thinking applies to infrastructure
- Projects are likely to blend on/offsite solutions
- Offsite does not work as an afterthought





Offsite is Not a Binary Choice



Manufacturing is Not a Binary Choice

Volumetric Components Sub-assemblies Competitive supply Kieretsu (consortia) Vertically Integrated Near site Remote Pop-up Kits **Automated** Mixed-model Disparate chain Single owner Agile network Responsive Dedicated Agile

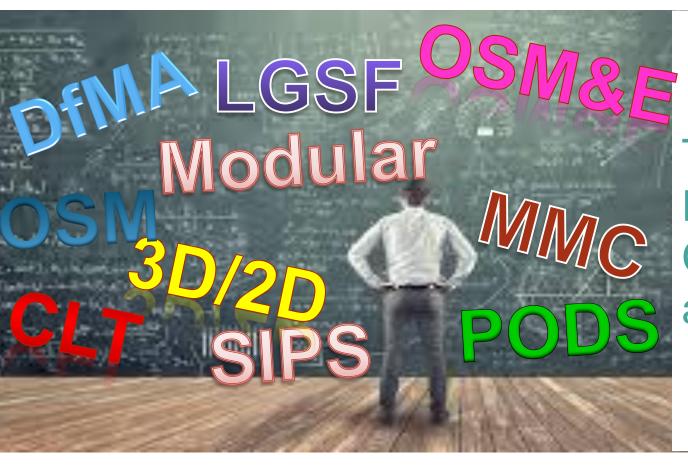
Optimal?

Good

Bad

Perceptions of Offsite





Too Difficult, Confusing and Risky

Investment - another spectrum



- Major Investors Large Scale
- Existing Players Scale-up
- Entrepreneurial Start-up
- Credible Capability is Crucial for Success
- Collaborate:
 - Construction and Manufacturing
 - Design and Delivery
 - Clients and Consultants

SYSTEM DESIGN

Architecture QS / Surveyors Engineers

Offsite Manufacturers

Supply Chain Contractors

Component Suppliers

ASSURANCE

GOVERNMENT

DEVB, Housing, Buildings, Transport, Schools, Health, Infrastructure



LEAN

Manufacturing Systems Design DfMA, Site Process & Logistics

ACADEMIA

Leading Universities

DIGITAL CAPABILITY

Practical implementation Common standards Productivity

Public Sector

Clients

Private Sector

SKILLS

What Next



Everyone with an interest in the Built Environment should look to change

01	Engage & Enlighten Clients
02	Clarify the Desired Outcomes
03	Align Across the Value Chain
04	Challenge the Supply Chain
05	Repeat & Improve







Thank You