Deploying Lean Construction
A major contractors experience



Deploying Lean Construction
A major contractors experience

- Define a strategy
- Set objectives and targets
- It takes time and persistence
- Include everyone
- Look under the rocks – it’s surprising what you can find

Background

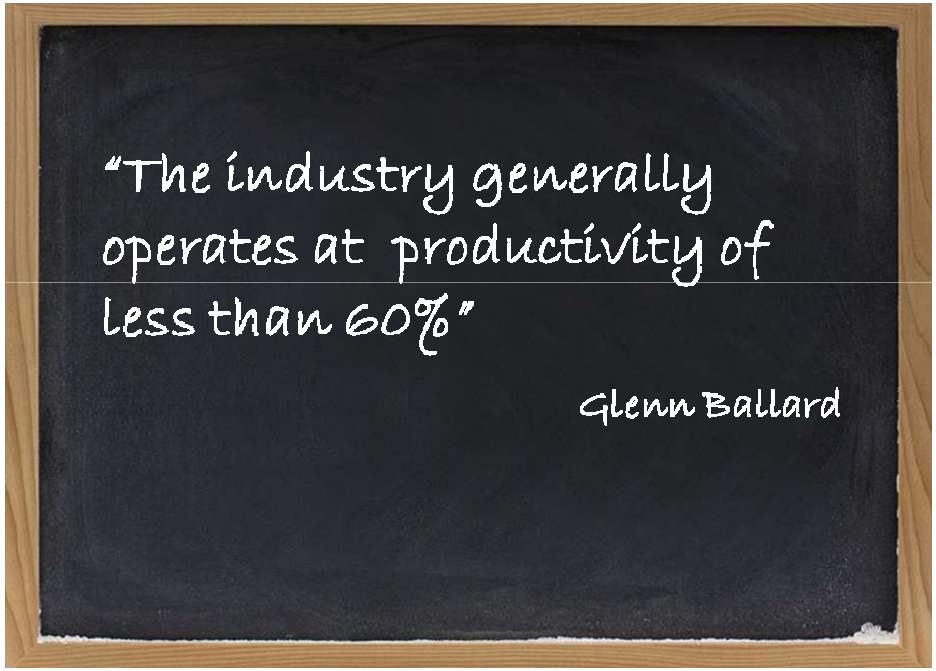
A Lean Timeline

Year	2005	2007	2009	2011	2013	2015
BAM Nuttall	Keen Advocates	Agreeing with the Executive	Convincing our peers	Defining a plan	Implementation	Measuring and Improving
M62 Project		Create a Plan	Take Action	Capture Success	Improve and repeat	
Matt		Take Interest	Gain Knowledge	Get involved	Learn by Doing	Improve and Repeat



Why Use Lean?

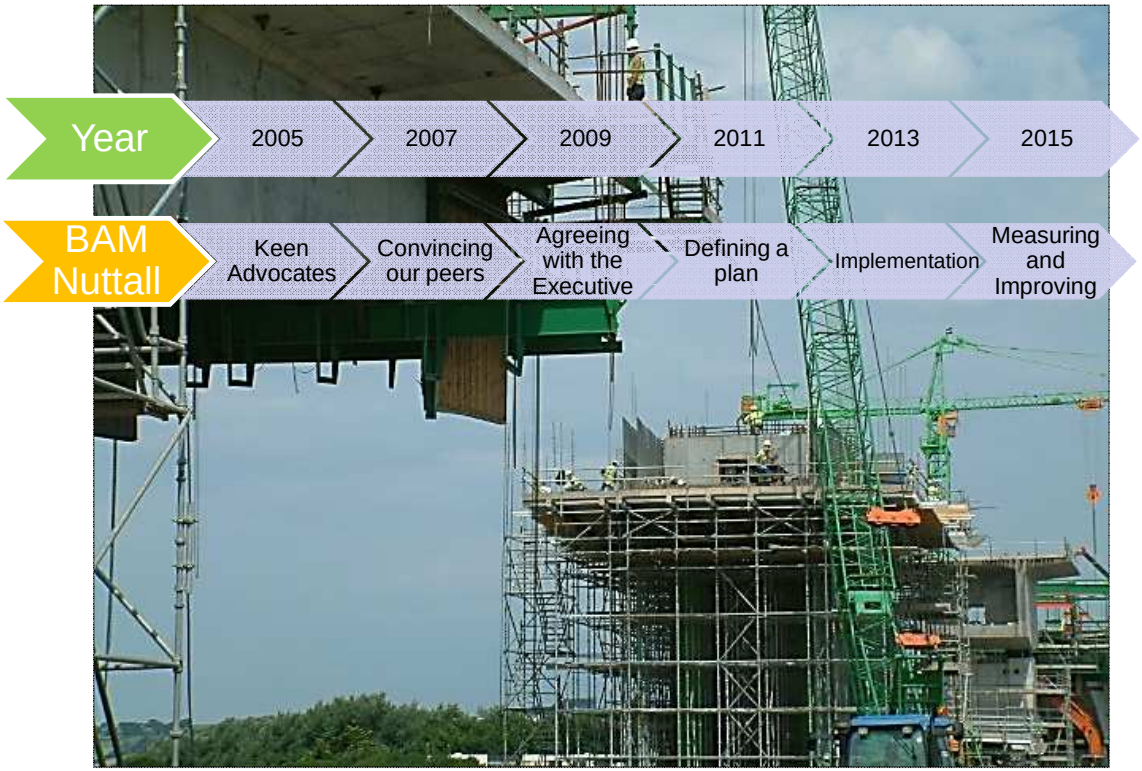
Why Use Lean?


"The industry generally operates at productivity of less than 60%"
Glenn Ballard

The Imperative behind Lean

- BAM Nuttall
  - To be a sustainable business
  - Add value to our customers so we are preferred
- M62 Project
  - To be profitable
  - To collaborate to succeed
  - To win future opportunities
- Matt
  - Its my job to deliver safe and profitable projects
  - There has to be an easier way

BAM Nuttall Lean Timeline



BAM Nuttall Lean Timeline

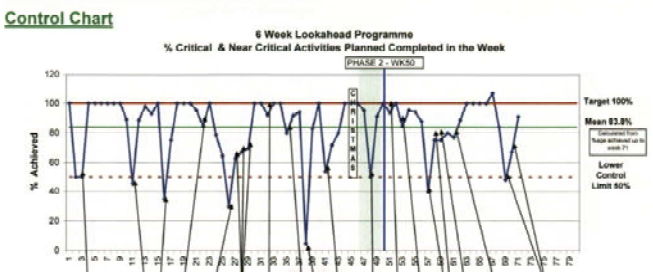
Year	2005	2007
BAM Nuttall	Keen Advocates	Convincing our peers



Surtees Bridge & Six Sigma:

Short term programming

- To deliver increased certainty on outcomes
- Increase quality by Right First Time
- Increase profitability



BAM Nuttall Lean Timeline

Year	2009	2011
BAM Nuttall	Agreeing with the Executive	Defining a plan



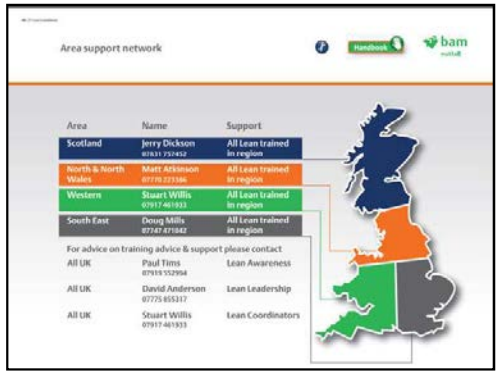
Steve Fox (Chief Executive BAM Nuttall)

"Lean can help save time and money for us, our customers and our supply chain. By thinking ahead, working together through collaborative planning and identifying where we waste time, money and resource we can implement changes to make things better. If you think something can be improved speak up, everyone has a part to play."

"Look at everything we do and do it better"

Lean Deployment

- Secure executive support
- Create a leadership team
- Set Some objectives
- Develop skills
- Support lean activity



BAM Nuttall Lean Timeline

Year	2013	2015
BAM Nuttall	Implementation	Measuring and Improving



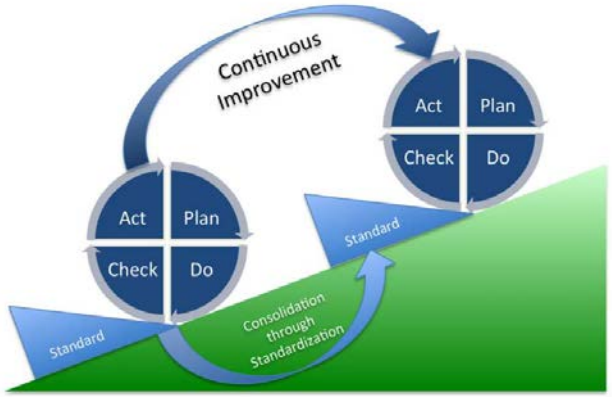
Lean Handbook

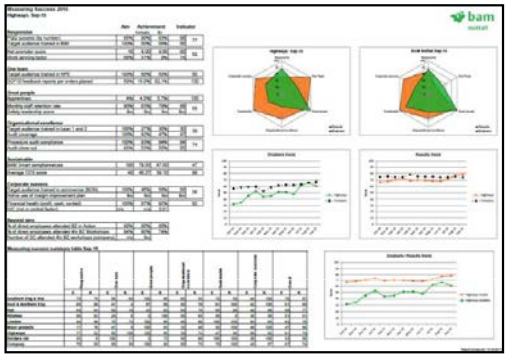
- The systematic removal of wastes
- Lean Leadership, Coordination and awareness
- Linked to wider business activity of safety and quality
- Provides guidance and support



Measuring and Improving

Year	2013	2015
BAM Nuttall	Implementation	Measuring and Improving





Organisational excellence					
Target audience trained in Lean 1 and 2	100%	27%	30%	30	39
Audit coverage	100%	82%	47%	47	
Procedure audit compliance	100%	83%	84%	84	74
Audit close out	85%	53%	55%	65	

Data Capture of Performance

- Lean and Lagging targets
- Identifying weaknesses
- Creating plans to improve

M62 Lean Timeline



M62 Lean Timeline

Year	2009	2011
M62 Project	Create a Plan	Take Action

Collaboration:

- Agreeing a lean strategy
- Providing resources
- Providing training
- Focus on the simple



"Collaboration in Action"



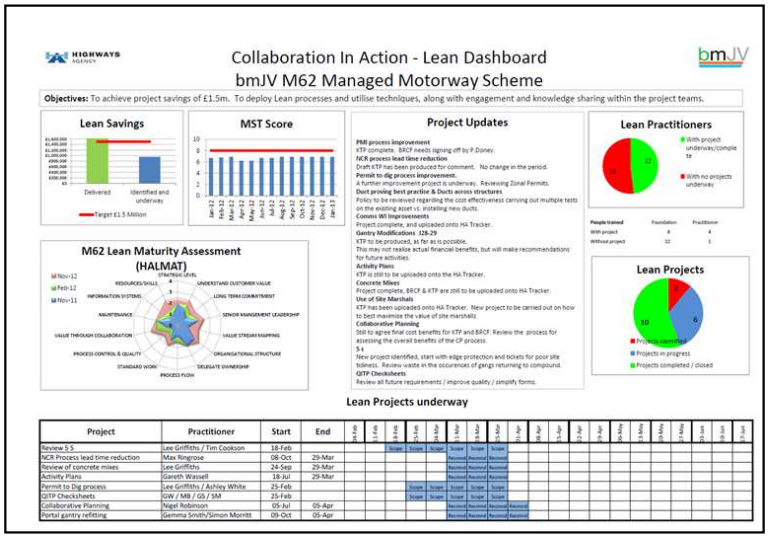
M62 Lean Timeline

Year	2013	2015
M62 Project	Capture Success	Improve and Repeat

A little and often :

- Daily Planning
- Manage programme constraints
- Use visual aids and charts to prompt
- Identify Success



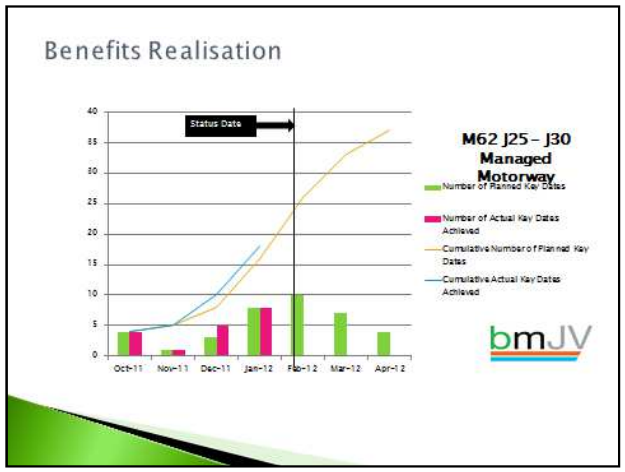


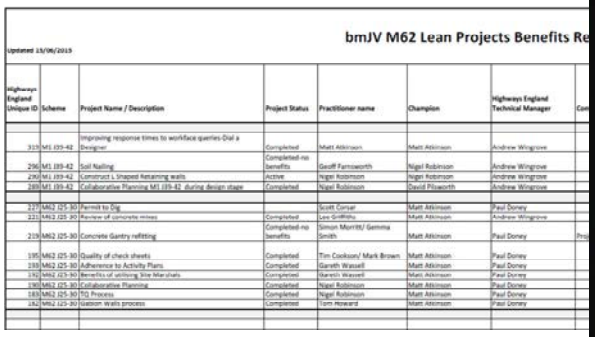
M62 Lean Timeline

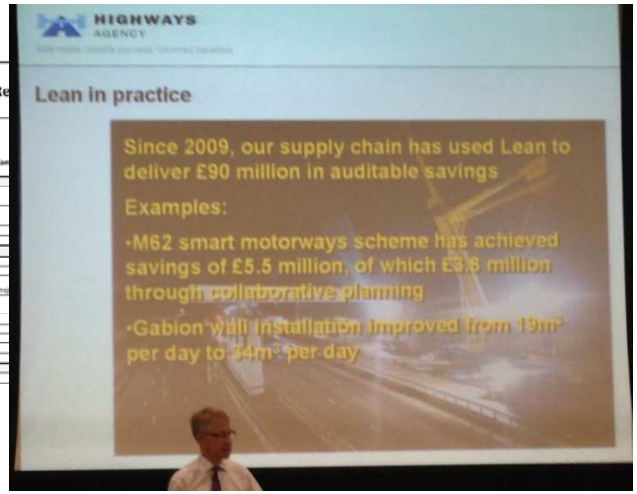
Year	2013	2015
M62 Project	Capture Success	Improve and Repeat

Capture Benefits

- Identify the savings
- Reinforce the culture of collaboration
- Use this to promote more Lean work







A Lean Timeline



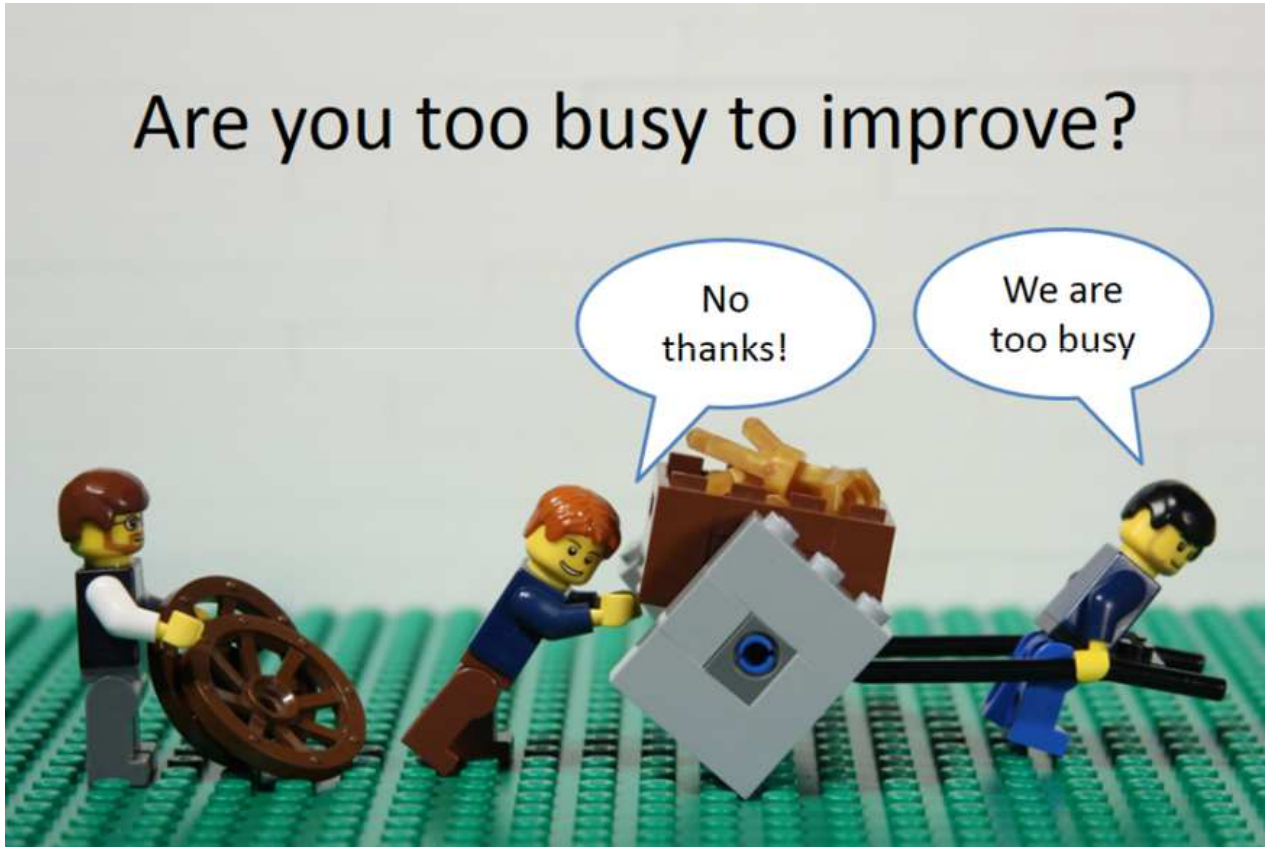


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Matt	Take Interest	Gain Knowledge	Get involved	Learn by Doing	Improve and Repeat	

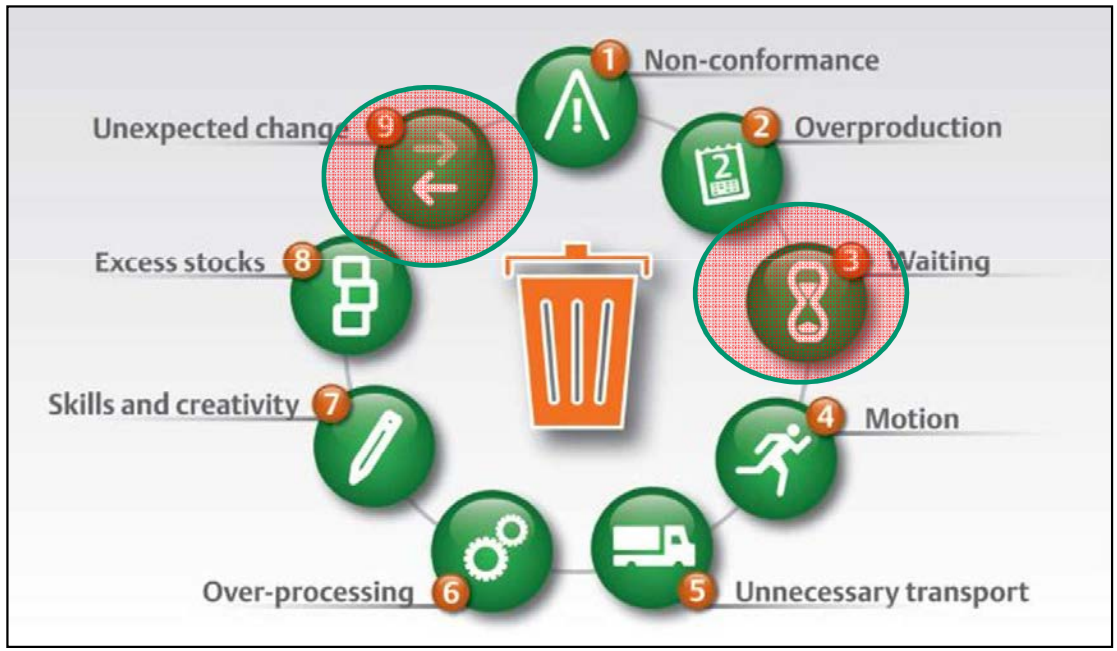




What have we discovered?



What have we discovered?



Where Next?

Year	2015	2017
BAM Nuttall	Implementation	Measuring and Improving
Projects	Create a Specific Plan	Focus on CP
Matt	Teach Others	Keep Going

Building Capability

- Consistent use our CPT
- More use of visual management and A3 reporting
- Support any Lean activity





Victoria Underground - Daily Management




bam
nuttall