

Viewpoint

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Time to embrace lean?

Cost control with a data-driven approach

Cost overruns on construction projects never seem to be out of the news for long. *World Finance Magazine* recently reported that nine out of 10 construction projects routinely overrun on costs – a figure that it claims has been largely constant for 70 years.

High profile overruns are damaging to the reputation of the industry and make collaborative working much more difficult. More importantly, the operational savings that can be achieved by eliminating waste and smoothing the flow of work are substantial.

One large contractor saved £8M on a total scheme cost of £120M by rethinking the processes it adopted to complete the project.

The aim of every design, construction and maintenance process should be to deliver exactly the outputs required with the minimum of waste, variation, time and defects. Lean Sigma, a combination of Lean and Six Sigma methodologies, has proved to be an excellent way of identifying and eliminating inefficiency in the construction environment, yet it remains under-utilised or ignored on most construction and asset maintenance work.

How does Lean Sigma work?

Lean focuses on areas of the process that customers value, in order to identify and eliminate areas of the process that add no value, classified as waste. Customers in this context could be the client, the end user or the person the process is serving. Removing waste reduces process cost and time whilst maintaining the output quality and value.

Six Sigma is a rigorous, data driven approach which is complementary to Lean and has traditionally focused on eliminating process variation

and error. Applying Lean and Six Sigma in combination, known as Lean Sigma, compresses timescales, increases capacity, reduces cost and improves output quality.

Benefits of adopting Lean Sigma

Companies effectively implementing Lean Sigma programmes will typically achieve bottom line savings of between 5% and 20% on construction and maintenance projects.

Other benefits achieved on construction projects include construction timescale on specific activities halved, rework halved, approval process time reduced by 20%, productivity on key activities increased by 80%, plant and labour costs reduced by 60%, defect rates on mechanical processes down by 90% and supply chain lead times halved, which in one case enabled a project to complete three months early.

Lean Sigma programmes are usually a catalyst for a shift in organisational culture from one that is opinion based to one that is informed and empowered by data. Consequently activity becomes customer-centric, team-based and collaborative. Decisions are data driven, targeting areas of waste, variation and inefficiency. The organisation learns how to apply new tools, techniques and ways of working that can be applied to new projects so that improvement is ongoing. In essence more value is derived from less activity.

If you haven't incorporated Lean Sigma programmes into your business perhaps it is time to do so and end 70 years of overruns.

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