



Collaborative Working & Contracting

This is the first in a series of posts discussing the use of **Collaborative Working and Contracting** on engineering construction projects worldwide.

Collaboration is nothing new – for example, the Roman Empire depended on collaboration for effective government, particularly by collaborating with local elites. It is also an innate human condition – most people enjoy working with others to achieve a common goal. History reveals that collaboration between humans is probably greatest when we are faced with adversity.

In engineering construction, collaborative contracting practices were introduced from the late 1990s. In the intervening period there has been little interest shown by main-stream industry – until now, as disillusionment and discontent with adversarial contracting practices becomes more prevalent.

There has been a great deal written over the last ten years or more, regarding failing projects – there is a common theme that 75% of mega projects (those exceeding USD1bn) are delivered considerably over-budget and substantially delayed and that 30% of smaller projects suffer similarly. Projects are delivered by people – project teams comprise mainly experienced and competent people in their respective functions and disciplines. It is rational to ask then: Why it is that, as an industry, we have such consistent levels of “failure” when we have such experience and competence deployed?

Statics suggest that 25% of mega projects are done well – but relatively little about how these were undertaken successfully! What was their “secret”? With regard to “failing projects”: in a context where scope, budget and schedule habitually being poorly defined – and arguably, unreliable as a baseline for measuring actual performance and delivery – it could be that “failing projects” might be, substantially, a myth.

Scope, we can do little about because ultimately it is what has to be delivered to satisfy the investment being made. Budget and schedule are a different matter. There is nothing wrong with, and every reason for, delivering projects in the shortest time practicable and as inexpensively as possible. What is manifestly wrong is attempting to achieve such improved performance (and avoidance of so-called “project failure”) by applying the same approach, execution strategy, procedures, processes and practices as those applied where the budget and schedule allow more money and time. After all, insanity, is said to be, doing the same thing over and over and expecting different results (attributed to Albert Einstein). Given that we ask: What needs to be done differently on projects, by whom, when and how?



Re-thinking project delivery is essential because more and more projects are becoming so complex that well-established project management procedures, processes and practices and the relevant experience alone are no longer sufficient to manage them. Therefore, effective project leadership becomes an essential component for successful delivery.

Productivity levels, or how to improve them, in engineering construction are a perennial subject for discussion. Research suggests that 57% of resources deployed on projects are wasted – that is a terrible indictment. However, the industry is facing-up to this challenge and innovative processes are being developed. The industry is a late-adopter of digitalisation, but it is now becoming universally applied. The use of project management processes such as Advanced Work Packaging (AWP), Design for Manufacture and Assembly (DfMA), Building Information Modelling (BIM), 4-D Modelling, as well as standardisation, factory thinking, modularisation, and so on are becoming more prevalent and which build upon previous initiatives such as Lean Construction and Last Planner.

We therefore have the tools available to eliminate wastage, increase productivity significantly and deliver projects that meet their business objectives. The challenge is how to apply these tools in order to obtain maximum aggregate benefit from them in terms of project delivery that is inexpensive and “on-time”. This is entirely a “people-issue”. How can the expertise and experience residing in the engineering construction industry as an entity be leveraged such that the tools available are utilised to maximum effect?

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We suggest that the key to unlocking the potential available to the engineering construction industry is Collaborative Working and Contracting. If you agree, please join us!

We are a group of like-minded people that is establishing a Global Community of Practice for Collaborative Working and Contracting in which all stakeholders in engineering construction (owners, contractors, vendors, service providers) from the various industry sectors (oil/gas, petrochemicals, chemical, mining & minerals, renewables, power, etc) can join to share experiences, exchange ideas, and learn from each other. We will reveal more about the Community of Practice and how you can join in future posts – so watch this space!