



Optimising the delivery of the Asset Renewal Program for a major water authority

the challenge

Our client, a large water authority in Australia with a significant capital works program, introduced a new contracting model in early 2012 to deliver its Asset Renewal Program. The program was introduced with the objective of realising improved cost efficiency and value for money, optimising project delivery timeframes, enhancing its position as an informed buyer, and maintaining strong performance in safety and environmental impacts. Some time after the introduction of the new model, a post-implementation review identified a number of areas in which the program was falling short of expectations. These related primarily to:

- Time taken to deliver individual projects
- Throughput of projects
- Realisation of cost savings
- Clear accountability for process and roles, and
- Levels of stakeholder engagement.

Recognising the need to improve the performance of the program, Marchment Hill Consulting (MHC) was engaged to review their current Asset Renewal Process (ARP) and the associated cost, time and duration of delivery in order to develop an optimal future ARP. The scope of the ARP included business need identification through to asset construction, commissioning and asset handover. MHC's work included providing quantitative analysis of the expected cost, effort and duration savings from implementing process improvements.

what Marchment Hill did

MHC adopted a highly consultative approach involving a series of interviews and workshops with key stakeholders across the ARP (including external contractors) to understand the intimate workings of the current ARP and the issues and shortcomings associated with it.

MHC’s analysis of the current state identified a large number of process and non-process improvement opportunities, and the associated cost and time analysis provided quantitative baseline estimates of the cost, effort and duration for each stage of the current ARP. The identified improvement opportunities were prioritised, formulated as ‘To-Be principles’, extensively socialised with stakeholders and then documented in a series of ‘To-Be’ Level 1, Level 2, and Level 3 process maps.

These maps were accompanied by detailed process description tables that described the purpose, responsible parties, inputs and outputs, and timing for individual process steps (refer to example output provided in Figure 1 below).

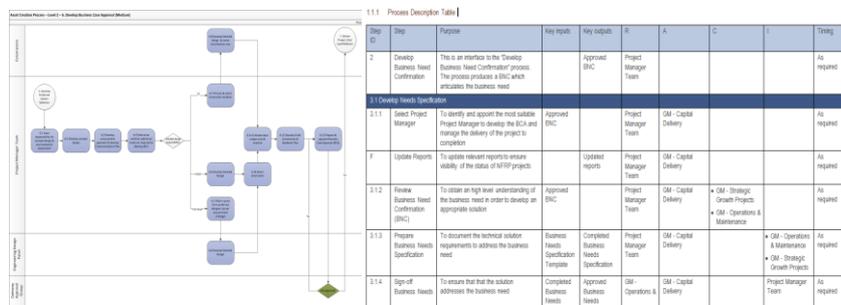


Figure 1: Example Process Map (Level 2) and Process Description Table with RACI analysis (for Level 3 process map)

A key element of the ‘To-Be’ ARP was the replacement of a largely “one size fits all” approach with the tailoring of the process to the risk and complexity profile of each project, thereby significantly streamlining and expediting projects of low and medium risk. Process governance, including accountabilities and approval levels, were also reviewed and simplified, and more clearly documented in the form of RACI (Responsible-Accountable-Consulted-Informed) tables.

The case for implementing the recommended improvements was made more compelling by MHC’s ‘before and after’ analysis of cost, effort and duration, and by the visually powerful representation of ‘As-Is’ versus ‘To-Be’ cost, effort and duration ‘stacks’. This format allowed the contributing reasons or improvement initiatives to be mapped to specific reductions in cost, effort and duration, as shown in the example cost stack output provided in Figure 2 below.

Asset Class: Water Treatment Plants - Cost analysis – Sample Project A

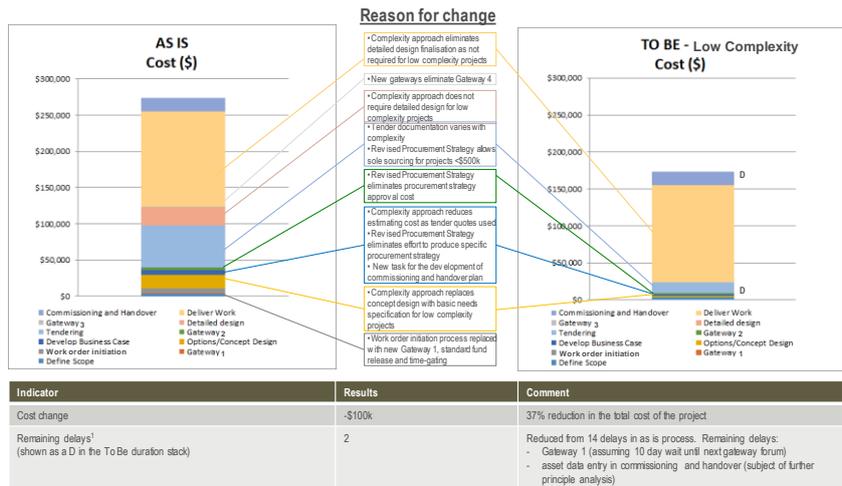


Figure 2: Example Cost Analysis: As-Is and To-Be “cost stacks” for a Sample Project

the benefit

MHC’s client received a ‘To-Be’ ARP that is well-integrated, flexible and adaptable to the changing needs of the business, incorporates contemporary best practice, and addresses the vast majority of the issues that have been impacting its performance to date.

While full implementation will take some time, the streamlining of the ARP is already producing demonstrable cost and time savings for business case development, design and delivery of projects. This will quickly translate into greater throughput of renewals projects, reduced unit costs, and improved customer service for our client, in addition to operational and cost benefits for its contractors.

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