The SALVO Process

The overall SALVO Process is a top-down targeting of the key problems and needs for attention, followed by a bottom-up evaluation, justification and coordination of what is worth doing, when, to address these issues. In particular, it addresses some of the most critical cost-, performance- and risk-based decisions in asset management; decisions such as “When should I replace this asset?”, “How much can I extend the life by a modification or refurbishment?” or “How much condition monitoring or maintenance is worthwhile?”.

These decisions frequently involve very uncertain assumptions about risk, performance impact and life cycle costs. Individual decisions also need to be considered in the context of competing priorities, budget or resource constraints and opportunities to bundle of work with other activities. It is also essential to develop a clear and credible business case in language that financial investors, safety managers, regulators and technical staff can all understand and accept.

Evaluating refurbishment to extend asset life (Extract from chapter 5)

SALVO uses the term ‘refurbishment’ specifically for one-off interventions that improve asset condition and extend asset life. The evaluation of such an intervention is another layer of complexity in the patterns of degradation, recovery and timings. In order to calculate the net effect of different options, such as refurbishment scope and timing, the degree of life extension and subsequent renewal options, a 3-stage analysis is required where the net effect of the current asset lifecycle costs until refurbishment, the refurbishment lifecycle costs and the optimal deferred new asset lifecycle costs are compared with the alternative direct replace at optimal timing lifecycle costs.

![1-off refurbishment delivers how much longer life?](image)

Figure title – The 3-stage analysis of the current asset lifecycle costs until refurbishment, the refurbishment lifecycle costs and the optimal deferred new asset lifecycle costs

All the methods described in the book are field-proven, practical ways to target the right problems in the first place, to identify appropriate interventions and risk control options, and to evaluate the cost/benefits of these options, even when available hard data is limited. Uniquely, SALVO brings together the human factors of motivation, cross-disciplinary collaboration and communication skills, with the technical and financial disciplines necessary to develop a robust business case for optimal asset management strategies.