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.

Existing assets: renewal justification and timing (Extract from chapter 5)

The determination of optimal residual life of a currently-installed asset, is significantly more complex than the simple life cycle cost evaluation for procurement of a new asset. The correct evaluation involves quantifying the various predicted costs, risks and performance patterns into the future for both the existing asset (if not replaced) and the proposed replacement options. The complexity arises in the combined costs and risk exposures to a ‘non-cyclic’ residual life of the existing asset and the procurement and ongoing renewal cycles of the new asset. The more attractive (lower total cost/risk) is the future asset life cycle cost, the sooner we will wish to replace the existing unit. Conversely, we may benefit financially by deferring the capital investment element of the replacement as long as possible, but will suffer from the existing asset’s ongoing degradation and failure risks.

![Results: Current asset replacement timing](image)

Figure Title – The optimal replacement timing of a large pump
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.

Buy the book ‘Asset management decision-making: The SALVO Process’ written by John Woodhouse online at www.twpl.com