**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.

**Obsolescence and design upgrades** (Extract from chapter 5)

The SALVO evaluation process in such cases is similar to renewal decisions, but with explicit consideration of the changes introduced by the new asset. These can include elements of the procurement and installation that are non-repeating (i.e. not part of the ongoing life cycles), such as the reconfiguring of infrastructure and other one-off modifications needed to accommodate the asset change on the first occasion. The use of scenarios can then rapidly compare different procurement and upgrade options, to identify not just when to replace the current assets but also with what. The DST Lifespan Evaluator™ converts all the options into Total Business Impact, so they are directly comparable in net financial significance.

![Figure title - Optimal upgrade timing for ‘obsolete’ instrumentation, including alignment opportunities with site shutdowns](image)

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](http://www.twpl.com)