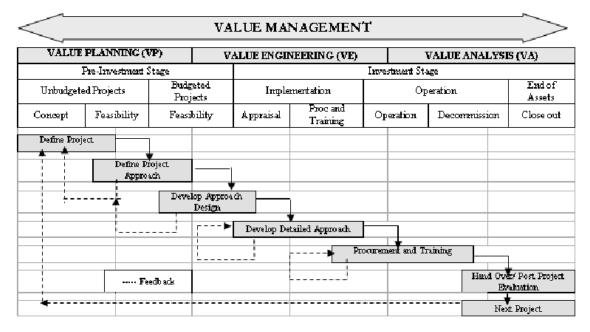
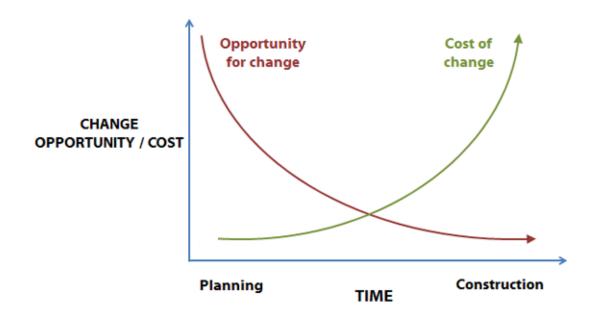
# VALUE MANAGEMENT (VM) & VALUE ENGINNERING (VE)



Value can be thought of as a very simple idea – the ratio between the benefit derived from a course of action and the cost or effort required to achieve it. This idea is universal, but it can be seen very clearly in terms of design and construction decisions both large and small.

Both VM and VE encourage the project team to reconsider the assumptions that are made during design and construction in search of more cost-effective ways of achieving the desired outcomes.

VM and VE should be on the agenda at regular project meeting, providing value as a key objective of all design and construction professionals.



## **Benefits**

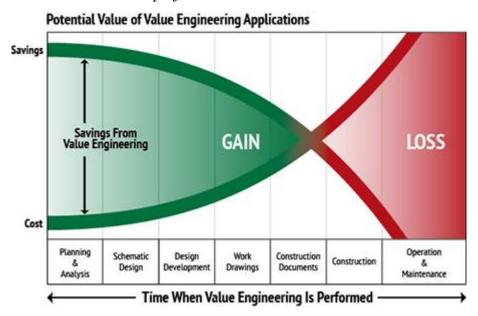
One benefit is to reduce project cost by focusing specifically on the **functional** requirements of the project and then considering what alternative approaches can be adopted. This targets unnecessary costs that may have been built into the project specification as a result of unchallenged assumptions.

The second key benefit is that **earlier consideration of design**, **buildability and maintainability** can encourage the different project team members to discuss ideas in a structured way and seek more efficient or effective ways of achieving the required project outcomes, improving the subsequent asset management.

# **Output**

The output from a VM study is a report outlining different approaches to the relationship between project objectives and business needs, or to strategic, project-related problems such as which site to select for a new development or which procurement route to use.

The output from a VE study on the other hand is a summary of different approaches to achieving the required functionality for a particular material, component or system, the comparative costs of each of the approaches assessed, and a recommended approach that provides the best value for the project.



It is also important to remember that VM and VE are all about optimizing overall value, within the constraints of their respective scopes, rather than reducing the project specification or omitting work without considering the wider consequences.

VM and VE are also similar in that the recommendations made may be overtaken by future events, such as advances in technology or product innovation. However, this should not deter project teams from using VM and VE to maximize value to the best of their ability at the time.

## **Results and Report**

The report needs to explain the project scenario or problem that has been subject to VM or VE. The introduction should also describe any constraints placed on the study, and

explain any potential technical solutions that have already been excluded from consideration by the client or project team.

The introduction should describe the general nature of the team members engaged in the study as well, including any facilitator(s), and the timetable for any workshops or meetings held. Detailed supporting information would usually be placed in an appendix.

#### Conclusions and recommendations

The last main section of the report should document the conclusions of the study and the final recommendations. This will typically be a description of the one, two or three preferred alternative solutions, along with the principal reasons for their recommendation.

It may also be the case that a VM or VE study has not been as conclusive as was originally hoped. In this case, the conclusion may be that further work is warranted, and if so then this should be outlined.

Dedicated VM resource: The complexity of multi-project programs, or of carrying out multiple projects for a serial client, lends itself to a more formalized support structure from which to oversee and co-ordinate VM activities. This could include a permanent facilitation resource available to support multiple project teams, which would have the inherent advantage of separating oversight of the VM process from the technical identification and assessment of different solutions.