

Lifecycle Costing Analysis

Making informed financial decisions over the lifespan of assets



The scope

LCC is a method used to determine an asset's total cost of ownership over its lifetime. The method considers all costs associated with the equipment, including acquisition, operation, maintenance and disposal. The objective is to identify the most cost-effective solution, not just the lowest initial cost.

Use LCC to inform and facilitate specific decisions

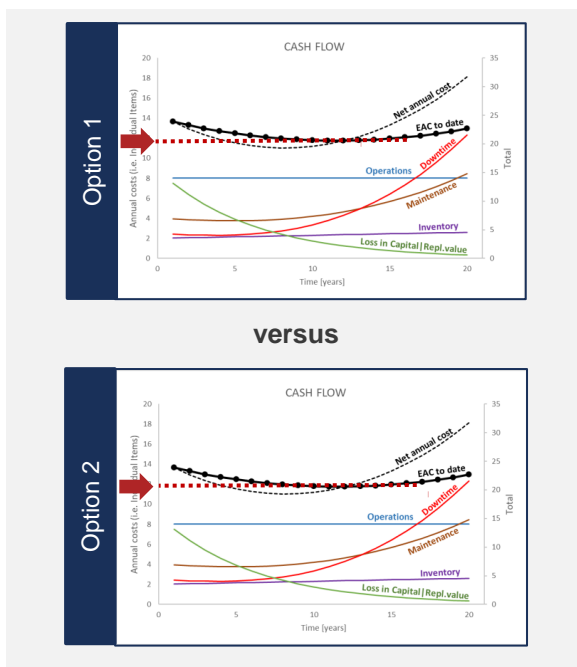
- Compare the costs of two options fulfilling the same function.
- Predict the most opportune replacement period (for budgetary purposes).
- Verify whether the specific equipment should be replaced in line with the replacement norm or expectation.
- Verify whether a piece of equipment should be repaired/refurbished or replaced.
- Find the most economical maintenance strategy.

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LCC can inform the following decisions:

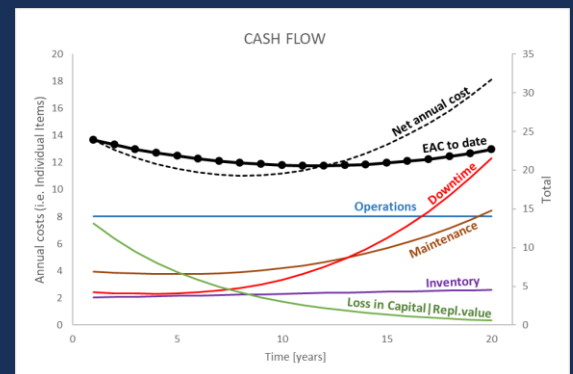
Note: this is not an exhaustive list, but does cover the most pertinent uses.

- 1 Using LCC to compare the costs of two options fulfilling the same function.



The benefits

- Inform asset acquisition decisions by understanding the financials.
- Inform budgeting by indicating the optimum economic life (using the equivalent annual cost [EAC] or similar measure).
- Support decisions mid-life as to whether an item should be refurbished or if broken, repaired or replaced.
- Support decision-making of a specific asset as it reaches the economic end of life for the asset type (but maybe not for this specific asset).
- Support decision-making for replacement considerations when new technology or assets of improved performance are introduced.
- It allows for what-if scenarios where different options need to be considered.

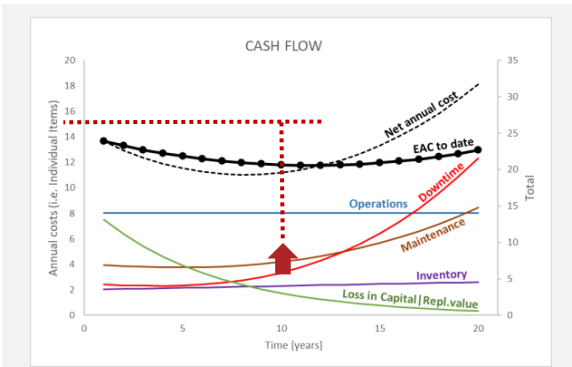


” The key principle behind lifecycle costing analysis is considering an asset's long-term costs and benefits rather than just the initial investment.

By evaluating the entire lifecycle, LCC analysis provides a more comprehensive understanding of the financial implications and helps make cost-effective choices.

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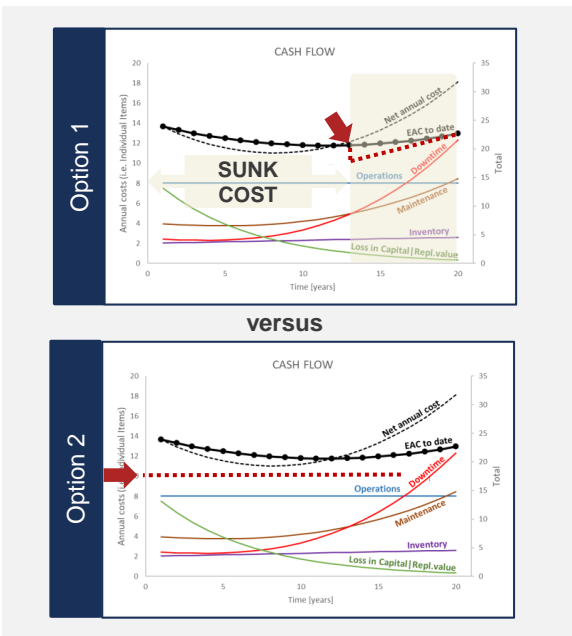
2 Using LCC for budgetary purposes to predict the most opportune replacement period.



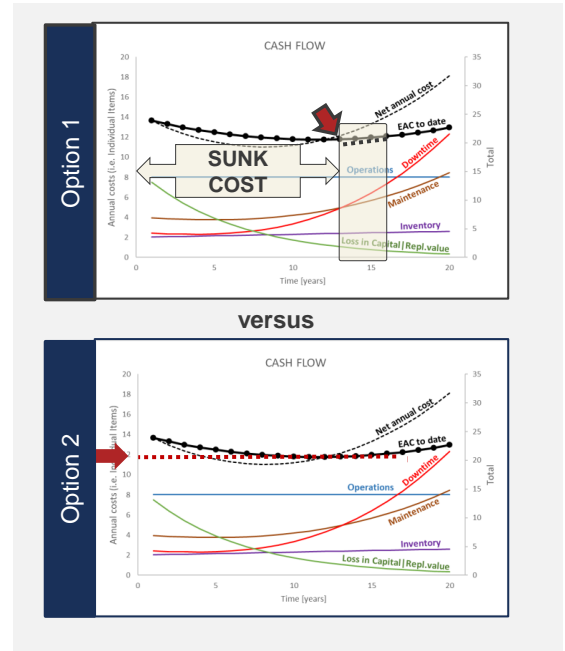
Over and above having the optimum replacement period, it also valuable to understand:

- the true cost, and
- the contributors to this cost and how it changes over time.

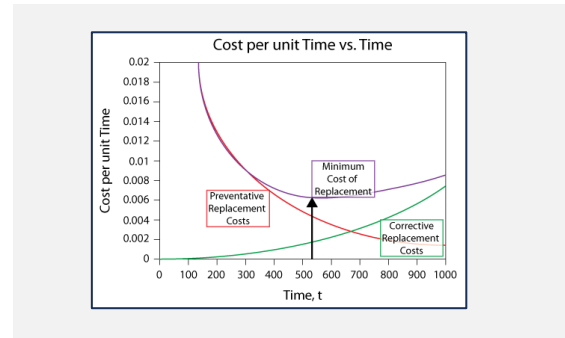
4 Using LCC to verify whether a piece of equipment should be repaired/refurbished or replaced.



3 Using LCC to verify if the specific equipment should be replaced in line with the replacement norm/expectation. (Environments and usage of assets differ; thus, individual equipment's replacement period might vary and should be assessed individually.)



5 Using LCC to find the most economical maintenance strategy.



Life cycle costing (LCC) usage where the replacement is different

When comparing two assets that differ in function or productivity, the simplistic use of equivalent annual cost (EAC) as a measure of comparison won't work. The best measure would be cost per unit, where the unit is produced, mined, or the service type delivered.

