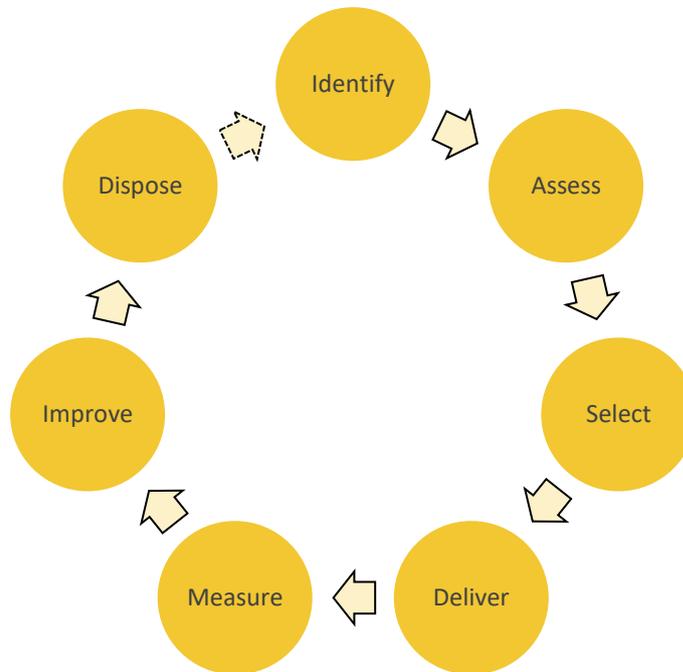


The capital investment lifecycle model



The above diagram represents one way of describing the capital investment lifecycle. There are, of course, many ways of representing it and this is how SER Solutions has approached it, for simplicity and conformity with widely known project management lifecycle phases.

The lifecycle can be further broken into three phases as follows:

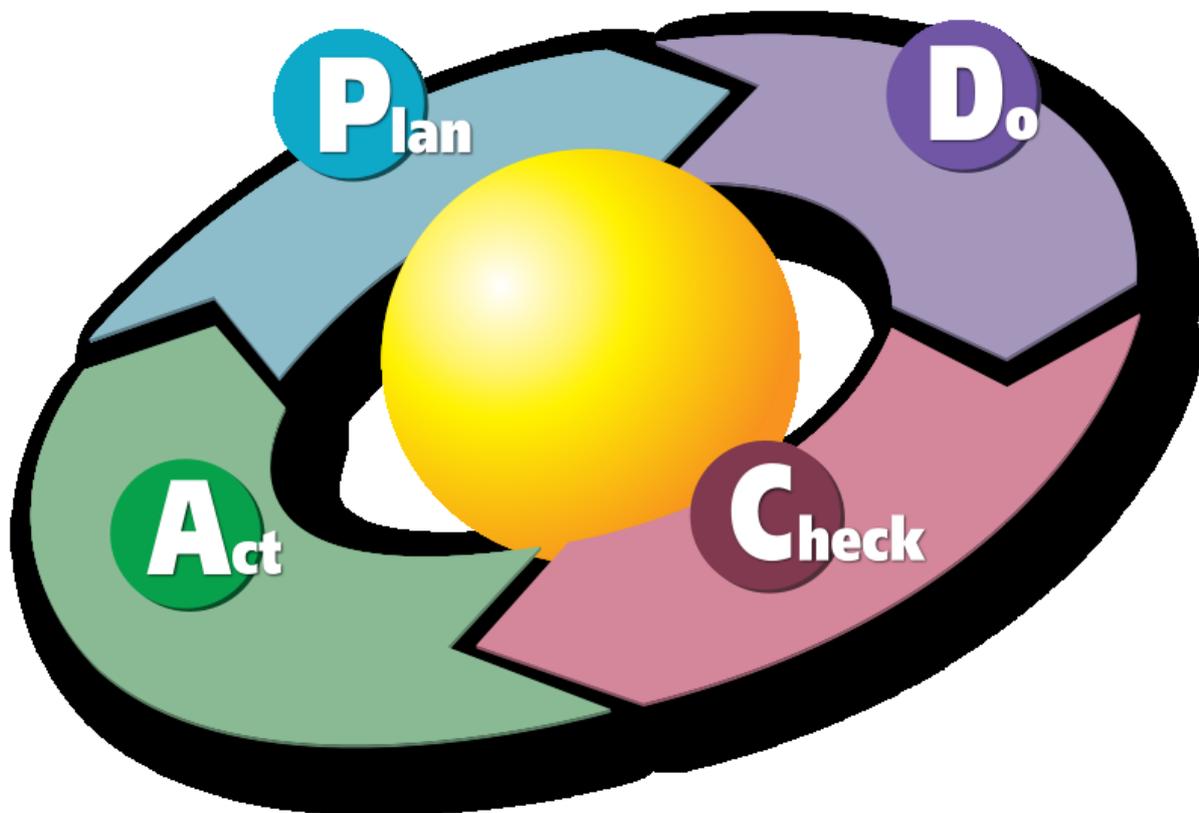
1. Planning
 - a. Identify
 - b. Assess
 - c. Select
 - d. Deliver
2. Operations
 - a. Measure
 - b. Improve
3. End of Life

A capital asset's life, in mining and mineral production businesses can be quite lengthy. A lifecycle may extend from a short 18 months, to a planned length of 30 to 40+ years.

It is essential to realise that the capital asset is not just considered during Planning phase, but also into the Operations and End of Life phases equally.

During the Operations phase, the focus is on the entire production benefit of using the asset, understandably. That focus tends to shadow the essential appreciation that the capital asset is still an investment and as such is an active investment. Its performance needs to be considered in relation to the original planned performance. Any departures need to be measured, assessed and improved in a continuous cycle.

Effectively, during operations, the Shewhart (or Deming) cycle needs to be implemented to ensure the asset is being optimally utilised:



Credit: Karn G. Bulsuk, Taking the first step with the PDCA Cycle, 2 Feb 09

While we have included only those two phases in the Operations Lifecycle, the practical implementation is more realistically described by the above cycle. Most operations and maintenance practitioners are aware of the Shewhart cycle.

Outlined overleaf are the key considerations to be addressed in managing each phase.

Identify

- Idea inception
- Need is communicated
- Initial assessment against business plan
- Prioritise or reject and cease pursuit

Assess

- What is the genuine need?
- What Options are available?
- What are the measures for success?
- What else is affected by this choice?

Select

- Critical comparison of options offered
- Define the benefits and measurement
- Measurement criteria applied
- Rank solutions

Deliver

- Detailed planning, design, and procurement
- Stakeholder management
- Manage delivery team
- Active Sponsor is key to success

Measure

- Post-handover performance verification
- Scheduled reviews
- Measurement accountability delegated
- Control of results communication

Improve

- Cause of departure identified
- Rectification / Improvement options
- Improvement accountability delegated
- Controlled change management process

Dispose

- Sell, demolish or abandon asset
- Divest entire asset
- Align action with closure plan
- Accounting and operational requirements addressed