

TCO analysis begins when the owner or analyst identifies (a) the specific resource or asset to be acquired, and (b) specifies the ownership life as described in the previous section. The ownership life is given as a number of years with a known starting date and ending date.

TCO analysis continues when the owner or analyst identifies all the cost *categories* that can be expected to have cost impacts from ownership. TCO analysis is successful when the owner includes two major kinds of cost categories that will see cost impacts across ownership life, obvious costs and "hidden" costs.

1. Obvious costs in TCO analysis

Obvious costs in TCO are the costs familiar to everyone involved during planning and vendor selection, such as:

- **Purchase cost:** The actual price paid.
- **Maintenance costs:** warranty costs, maintenance labor, contracted maintenance services or other service contracts.

2. Hidden costs in TCO analysis

The so-called hidden costs are the less obvious cost consequences that are easy to overlook or omit from acquisition decisions. Costs of this kind can be very large and real, nevertheless. All belong in the TCO analysis if they do indeed follow from the decision to own something and they are material (large enough to matter). "Hidden" costs may include:

- **Acquisition costs:** the costs of identifying, selecting, ordering, receiving, inventorying, or paying for something.
- **Upgrade / Enhancement / Refurbishing costs.**
- **Reconfiguration costs.**
- **Set up / Deployment costs:** costs of configuring space, transporting, installing, setting up, integrating with other assets, outside services.
- **Operating costs:** for example, human (operator) labor, or energy/fuel costs.
- **Change management: costs:** for example, costs of user orientation, user training, workflow/process change design and implementation.
- **Infrastructure support costs:** for example, costs brought by the acquisition for heating/cooling, lighting, or IT support.
- **Environmental impact costs:** for example, costs of waste disposal/clean up, or pollution control, or the costs of environmental impact compliance reporting.
- **Insurance costs.**
- **Security costs:**

Physical security, for example, security additions for a building, including new locks, secure entry doors, closed circuit television, and security guard services.

Electronic security, for example, security software applications or systems, offsite data backup, disaster recovery services, etc.

- **Financing costs:** for example, loan interest and loan origination fees.
- **Disposal / Decommission costs.**
- **Depreciation expense tax savings** (a negative cost).

The list of hidden cost categories above could of course be extended for many kinds of acquisitions.