

# TOTAL COST MANAGEMENT

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- Total Cost Management Framework
- An Integrated Approach to Portfolio, Program,  
and
- Project Management
- First Edition, Revised
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- TCM is a systematic approach to managing cost throughout the life cycle of any enterprise, program, facility, project, product or service.
- It is a process map that explains each practice area of the cost engineering field in the context of its relationship to the other practice areas including allied professions. It is a process for applying the skills and knowledge of cost engineering (CMAs!!)
- It is industry and asset generic in that it applies to any enterprise, program, facility, project, product or service.

- Companies are continually looking for ways to tie everything they do to their strategic missions and objectives. TCM provides a strategic model that can help an organization design its own processes related to cost management.
- The TCM process takes place within the overarching context of the enterprise. Enterprise management establishes objectives and performance requirements for its assets and processes. TCM is concerned with the deployment of business strategy, not its formulation.
- TCM increases the challenges for individual professionals as employers break down functional silos and increasingly expect staff and leaders to be competent in many different practices, while also being more knowledgeable of business processes. For individuals, the TCM Framework would provide a “map” to help them understand all the practice areas while also helping guide their career planning. (Value Chain...)

- For example, a real estate developer may build, maintain, renovate, and then demolish an office building during its life cycle—at each phase of the building life cycle the developer makes significant investments. To manage these investments, the building developer monitors building operating costs and profitability; evaluates alternative investment opportunities; and initiates, plans, and controls improvement projects. These activities are all within the scope of the TCM process.

- *Costs in TCM include any investment of resources in the enterprise's assets including time, monetary, human, and physical resources. Total refers to TCM's comprehensive approach to managing the total resource investment during the life cycle of the enterprise's strategic assets. The enterprise can be any endeavor, business, government, group, individual, or other entity that owns, controls, or operates strategic assets.*

- *Strategic asset is shorthand for any unique physical or intellectual property that is of long term or ongoing value to the enterprise. For most costing professionals, strategic assets equate to “capital assets”;* However, the term *strategic asset is more inclusive.* Products and services may be considered strategic assets in that before a product can be made or a service performed, many investments must be made through the execution of projects for research, development, design, and so on.

- One way that TCM adds value to the body of costing knowledge is that it integrates areas of cost management that are too often treated by costing professionals as separate entities or fields, the various fields of practice with which they are likely to interact or in which they may be expected to perform.
- TCM covers ‘total costs’ of the enterprises for its focus on:
  - *Product/Service and Capital Assets.....As Cost Objects*
  - *Project/operational work processes.....Impact on Costs*
  - *All Resources’ deployment.....Impact on Costs*



**“It *costs* time”**  
**“It *costs* resources”**  
**“ It *costs* money”**

**EVERYTHING**  
**invested in assets and projects is a**  
**COST**

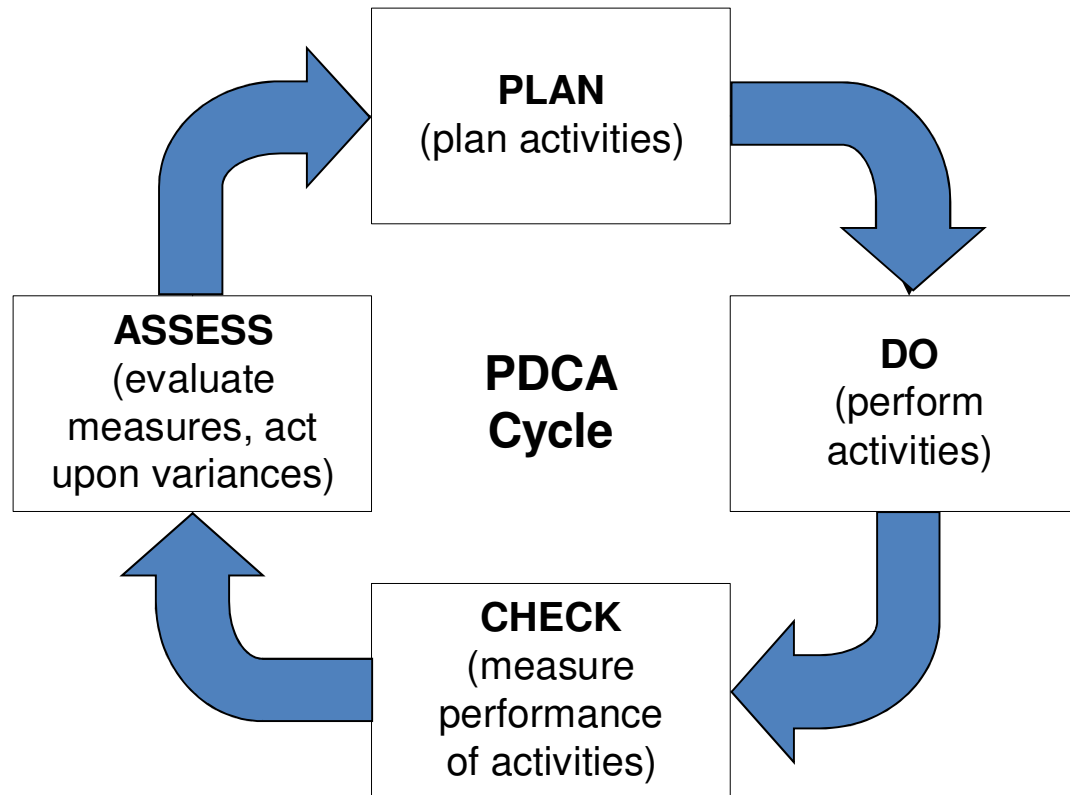
**That is why it is called**  
**TOTAL COST Management**  
**(TCM)**

# TCM Combines Asset and Project Life Cycle cost Management

- ***Return on Assets*** is largely driven by practices used before projects begin
  - With TCM, owners understand and manage the costs of their asset base over the entire asset life cycle
- ***Successful Projects*** are required if the planned return is to be achieved
  - With TCM, owners and contractors control the costs of their projects over the entire project life cycle
- **The ultimate “customer” of TCM is business management, or the owner and operator of the enterprise’s assets.**
- Based on the time-tested Deming or Shewhart cycle. In essence, TCM is a quality management process.....(cycle in next slide)

# TCM Starts With a Simple Concept

## Plan-Do-Check-Assess (PDCA)



- **TCM process map is based on the PDCA quality management/continuous process improvement model (i.e., the Deming or Shewhart model). (kaizen costing expressed).**
- ***Project Control* becomes a Recursive Process Within the *Strategic Asset Management* Process**

## BASIC PROCESS OF TCM

- BASICS, TCM, STRATEGIC ASSET MANAGEMENT, PROJECT CONTROL

## FUNCTIONAL PROCESS FOR STRATEGIC ASSET MANAGEMENT

- PLANNING, IMPLEMENTATION, PERFORMANCE MEASUREMENT, PERFORMANCE ASSESSMENT
- CONTROL PROCESS FOR PLANNING, IMPLEMENTATION, PERFORMANCE MEASUREMENT AND PERFORMANCE ASSESSMENT

## ENABLING PROCESS FOR TCM

- ENTERPRISE IN THE SOCIETY, PEOPLE AND PERFORMANCE, INFORMATION MANAGEMENT, QUALITY MANAGEMENT, VALUE MANAGEMENT
- ENVIRONMENT, HEALTH & SAFETY

- There are various types of business processes including governing, asset creating, value adding, and enabling. *TCM is a “governing” process. Governing processes direct or control other processes.*
- A project is an “asset creating” process in that its output is an asset.
- Value adding processes are those that provide enhanced outputs to the external customer.
- Enabling processes are those that establish or provide capabilities for the other processes.

- There is no one best organizational approach to achieve successful TCM implementation. Organizational approaches will be as varied as the strategic objectives of enterprises. However, all organizations should be focused on customer needs and on the entire life cycle of strategic assets rather than on short term functional considerations.

- People are every enterprise's most important strategic asset. Organizational or human resource development can be viewed as a portfolio of projects undertaken to continually improve the work life and performance of each person in the enterprise. Narrow functional task training alone does not address the needs of TCM.



# Outputs from Total Cost Management

- 1 Managed Asset Portfolio. The end products of the TCM process are new, modified, maintained, or retired assets that achieve the enterprise's strategic performance objectives and requirements.*
- 2 Managed Project Portfolio. For larger enterprises, projects will be in progress at all times. While individual projects have a beginning and end, the enterprise must consistently manage the project process to assure that all projects achieve the enterprise's objectives and requirements.*

1. Strategic Asset Management>Refers to the TCM process as applied at an enterprise wide level to manage costs of the enterprise's entire strategic asset portfolio.
2. Project cost Control> Refers to the TCM process as applied at an individual project level to manage costs of creating, modifying, maintaining, or retiring individual strategic assets.