



## COST-BENEFIT COMPLIANCE COMPONENT

### DEFINITION

<i>Name</i>	Cost-Benefit Analysis
<i>Description</i>	Cost-benefit analysis encompasses the requirements necessary for cost-effective capacity planning and management. Cost-benefit processes include analyzing fixed costs for hardware and software and variable costs for training, supplies and other overhead costs and weighing them against quantifiable benefits.
<i>Rationale</i>	Cost-benefit analysis provides a methodology to assist in decision making and results in cost-effective system configuration and performance.
<i>Benefits</i>	<p>By utilizing cost-benefit techniques as outlined here, stakeholders will achieve:</p> <ul style="list-style-type: none"> <li>• Identification and prioritization of hardware and software costs</li> <li>• Optimal utilization of hardware and system capacity</li> <li>• Improved evaluation of alternatives (what to buy) and acquisition options (how to buy it)</li> <li>• Improved fiscal responsibility</li> <li>• Increased awareness and improved budgeting for system growth</li> <li>• More realistic evaluation of future technologies</li> </ul>

### ASSOCIATED ARCHITECTURE LEVELS

<i>Specify the Domain Name</i>	Systems Management
<i>Specify the Discipline Name</i>	Performance Measurement and Capacity Planning
<i>Specify the Technology Area Name</i>	Capacity Management
<i>Specify the Product Component Name</i>	

### COMPLIANCE COMPONENT TYPE

<i>Document the Compliance Component Type</i>	Guideline
<i>Component Sub-type</i>	

**COMPLIANCE DETAIL**

Capacity management cost-benefit analysis begins by determining system operation costs and comparing them to system operation benefits.

- How much will the system cost?
  1. System Related Costs
    - a. Personnel
    - b. Computer usage (CPU, Memory and Storage Utilization)
    - c. Training
    - d. Supplies and office equipment
    - e. Cost of any new computer equipment and software
  2. System Operating Costs
    - a. Fixed
    - b. Variable

- What benefits will the system provide?
  1. Fewer processing errors
  2. Increased throughput
  3. Elimination of job steps
  4. Reduced expenses
  5. Improved service levels
  6. Better decision-making
  7. Improved response-time from support staff

- Is the proposed system cost-effective?
  1. **Payback Analysis** – if and when an investment will pay for itself  
Present Value of Money is used when doing a payback analysis

$$PV = FV \frac{1}{(1+i)^n}$$

Where:

- FV* = Future Value
- PV* = Present Value
- i* = annual interest rate or annual rate of return
- n* = number of compounding periods

2. **Return-on-Investment Analysis** – compares lifetime profitability of alternative solutions or projects
  - a. Lifetime ROI = (Estimated lifetime benefits – Estimated lifetime costs) / Estimated lifetime costs

*State the Guideline, Standard or Legislation*

*Document Source Reference #*

**Compliance Sources**

<i>Name</i>		<i>Website</i>	
<i>Contact Information</i>			
<i>Name</i>		<i>Website</i>	
<i>Contact Information</i>			

**KEYWORDS***List Keywords***COMPONENT CLASSIFICATION***Provide the Classification* *Emerging*  *Current*  *Twilight*  *Sunset**Sunset Date***COMPONENT SUB-CLASSIFICATION**

Sub-Classification	Date	Additional Sub-Classification Information
<input type="checkbox"/> <i>Technology Watch</i>		
<input type="checkbox"/> <i>Variance</i>		
<input type="checkbox"/> <i>Conditional Use</i>		

**Rationale for Component Classification***Document the Rationale for Component Classification***Migration Strategy***Document the Migration Strategy***Impact Position Statement***Document the Position Statement on Impact***CURRENT STATUS***Provide the Current Status* *In Development*  *Under Review*  *Approved*  *Rejected***AUDIT TRAIL**

<i>Creation Date</i>	5/17/2007	<i>Date Approved / Rejected</i>	10/16/07
<i>Reason for Rejection</i>			
<i>Last Date Reviewed</i>		<i>Last Date Updated</i>	9/11/2007
<i>Reason for Update</i>			