

# Practical Cost-Benefit Analysis How to Make It Work for You

Clifford J. Earl  
Resource Management Systems, Inc.

Today, more than ever, Project Managers are facing increasing pressure to deliver projects that yield a tangible ROI!

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# Practical Cost-Benefit Analysis How to Make It Work for You

Clifford J. Earl  
Resource Management Systems, Inc.

TALLAHASSEE CHAPTER  
Project Management Institute  
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# Practical Cost-Benefit Analysis How to Make It Work for You

## Purpose

```
graph LR; A[Project Professionals] --> B[Project Choices]; B --> C[Stakeholder Expectations]; B --> D[Cost-Benefit Analysis]; B --> E[Return On Investment];
```

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# Practical Cost-Benefit Analysis How to Make It Work for You

## Agenda

- 1 What Is CBA?
- 2 Who Uses It?
- 3 Why Bother?
- 4 What Can I Do?
- 5 Q&A

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# Practical Cost-Benefit Analysis How to Make It Work for You

## Agenda

- 1 What Is CBA?

**What is Cost Benefit Analysis (CBA)?  
What is it NOT?**

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# 1. What Are They?

## Shared Understanding Is Essential

People have different views

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1. What Is CBA?

Shared Understanding Is Essential

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1. What Is CBA?

Shared Understanding Is Essential

Fact-based Project Decisions

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1. What Is CBA?

Shared Understanding Is Essential **Role**

**WHY INVEST?** Fact-based argument proposing an investment - a course of action.

**WHICH IS "BEST"?** Systematic and unbiased analysis of plausible alternatives in order to ID the most advantageous choice.

**WHAT IS IT WORTH?** Measurement of financial and/or non-financial value of an investment.

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

**CBA**  
**Cost-Benefit Analysis**  
 A.K.A.  
 Benefit/Cost Analysis  
 Analysis of Alternatives

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

View has evolved over time... ...Not everyone is up to date!

1928 ..... 1996

**Dictionary**  
 Cost-benefit of, relating to, or being economic analysis that assigns a numerical value to the cost-effectiveness of an operation, procedure, or program

**PMBOK®**  
 Benefit/cost analysis involves estimating tangible and intangible costs (outlays) and benefits (returns) of various project alternatives, & then using financial measures e.g. ROI or payback period to assess relative desirability of the identified alternatives

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

**ROI has become a widely-accepted component of CBA.**

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

**ROI**  
**Return On Investment**

More difficult to pin down.  
 Reason: ROI is a concept!  
 Some widely-accepted.

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

Return On Investment Stakeholder Expectations

Cost Benefit Financial Benefit Non-financial

VALUE or WORTH ?

"Metric"

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

Return On Investment **VALUE or WORTH**

Financial	Non-Financial
So called....	So called....
Tangible	Intangible
Hard	Soft
Quantifiable	Unquantifiable

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

Return On Investment **VALUE or WORTH**

Financial Non-Financial

Cost Reduction Revenue Increase Other

**"INTANGIBLES"**

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

Return On Investment **VALUE or WORTH**

Financial Non-Financial

Cost Reduction Revenue Increase Other

Speed Quality Quantity

**"INTANGIBLES"**

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1. What Is CBA?

Shared Understanding Is Essential **Definition**

Return On Investment **VALUE or WORTH**

Financial

3 Most-widely Used

Payback Period (PP)

Net Present Value (NPV)

Internal Rate of Return (IRR)


**Different...**

Purposes Measurements Calculations

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### 1. What Is CBA?

Shared Understanding Is Essential **Definition**

Return On Investment  **VALUE or WORTH**

**Different...**

Values Stakeholders  
Measurements

Non-Financial

Not Standardized

Problem & project-specific

Determined by context

Require more judgment

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### 1. What Is CBA?

In Use - A Simple Example

**Widget Project**

**SITUATION** → Project team has identified two alternative IT solutions ("A" & "B") for the "Widget Project".

**WHICH IS "BEST"?** → Both alternatives appear to be "good". The question is: "Which is the most advantageous?"

**CBA & ROI** → The team will use CBA to pinpoint the benefits & costs. They will use financial ROI to put a \$ value on the solutions.

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### 1. What Is CBA?

In Use - A Simple Example

**Widget Project**

	Status Quo	Alt. "A"	Alt. "B"
<b>Benefit</b>			
Non-Financial			
Financial			
<b>Cost</b>			
Proj. M&O			
CoO			

For the CBA the Team will:

- Include the "Status Quo" ("do nothing choice")
- Measure both **financial & non-financial** benefits
- Estimate the cost of the Project & 3-Years of M&O post project.
- Calculate the "Cost of Ownership" (i.e., Project + M&O for analysis period).

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### 1. What Is CBA?

In Use - A Simple Example

**Widget Project**

	Status Quo	Alt. "A"	Alt. "B"
<b>Benefit</b>			
Non-Financial			
Financial			
<b>Cost</b>			
Proj. M&O	\$0	\$90	\$100
M&O	\$70	\$60	\$50
CoO	\$70	\$150	\$150

Which is the "best" choice?

Many would say that, at cost of \$70, doing nothing might be best!

Cost must be weighed against the benefit.

Let's see if financial benefit information helps.

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### 1. What Is CBA?

In Use - A Simple Example

**Widget Project**

	Status Quo	Alt. "A"	Alt. "B"
<b>Benefit</b>			
Non-Financial			
Financial	\$0	\$200	\$200
<b>Cost</b>			
Proj. M&O	\$0	\$90	\$100
M&O	\$70	\$60	\$50
CoO	\$70	\$150	\$150

Which is the "best" choice?

Let's see if non-financial benefit information helps.

Less cost. But, no financial benefit at all.

Higher cost. Both deliver financial benefits.

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### 1. What Is CBA?

In Use - A Simple Example

**Widget Project**

	Status Quo	Alt. "A"	Alt. "B"
<b>Benefit</b>			
Non-Financial	0	90% Tgt.	95% Tgt.
Financial	\$0	\$200	\$200
<b>Cost</b>			
Proj. M&O	\$0	\$90	\$100
M&O	\$70	\$60	\$50
CoO	\$70	\$150	\$150

Which is the "best" choice?

Now, suppose one of our "selection criteria" is "must achieve 95% of target"?

3. Both SQ & "A" FAIL to meet the selection criterion.

1. Different Project & M&O costs; same CoO.

2. Same Financial Benefit.

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### 1. What Is CBA?

#### In Use - A Simple Example

		Widget Project		
		Status Quo	Alt. "A"	Alt. "B"
Benefit	Non-Financial	0	90% Tgt.	95% Tgt.
	Financial	\$0	\$200	\$200
Cost	Proj.	\$0	\$90	\$100
	M&O	\$70	\$60	\$50
	CoO	\$70	\$150	\$150
N. Cash Flow		-\$70	+\$50	+\$50

**Which is the "best" choice?**  
 Benefit/cost analysis involves estimating tangible and intangible costs (outlays) and benefits (returns) of various project alternatives.

Let's see what additional insight Financial ROI provides.

First, we must calculate the CF (Cash Flow).

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### 1. What Is CBA?

#### In Use - A Simple Example

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**Which is the "best" choice?**  
 Benefit/cost analysis involves estimating tangible and intangible costs (outlays) and benefits (returns) of various project alternatives.

CF is an intermediate step. But, it does show that the SQ is a really poor choice from a \$ POV!

Example Note: Benefit (F&NF), Cost & CF numbers cover Project + 3-years Post Project.

**Cash Flow =**  
 Financial Benefits  
 - Costs

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### 1. What Is CBA?

#### In Use - A Simple Example

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**Which is the "best" choice?**  
 Benefit/cost analysis involves estimating tangible and intangible costs (outlays) and benefits (returns) of various project alternatives.  
 & then using financial measures e.g. ROI or payback period to assess relative desirability of the identified alternatives

Now we're ready to get the Financial ROI numbers.

We'll illustrate using an Automated ROI calculator.

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### 1. What Is CBA?

#### In Use - A Simple Example

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	M&O	\$70	\$60	\$50	
	CoO	\$70	\$150	\$150	
N. Cash Flow		-\$70	+\$50	+\$50	
ROI		PP	N/A	1.50 Y	1.54 Y
		NPV	N/A	\$74	\$65
		IRR	N/A	50%	44%

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### 1. What Is CBA?

#### In Use - A Simple Example

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N. Cash Flow		-\$70	+\$50	+\$50	
ROI		PP	N/A	1.50 Y	1.54 Y
		NPV	N/A	\$74	\$65
		IRR	N/A	50%	44%

**Which is the "best" choice?**  
 Benefit/cost analysis involves estimating tangible and intangible costs (outlays) and benefits (returns) of various project alternatives.  
 & then using financial measures e.g. ROI or payback period to assess relative desirability of the identified alternatives

Non-Financial POV?

Financial POV?

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#### In Use - A Simple Example

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ROI		PP	N/A	1.50 Y	1.54 Y
		NPV	N/A	\$74	\$65
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**Which is the "best" choice?**  
 Benefit/cost analysis involves estimating tangible and intangible costs (outlays) and benefits (returns) of various project alternatives.  
 & then using financial measures e.g. ROI or payback period to assess relative desirability of the identified alternatives

These are some of the "facts" that CBA (and ROI) provide to interested parties.

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## 1. What Is CBA?

### What CBA Is And Is Not

<p><b>CBA (ROI) is...</b></p> <ul style="list-style-type: none"> <li>▶ Evaluation of more than one alternative plus the SQ</li> <li>▶ Emphasis on development of best feasible estimates</li> <li>▶ Consideration of financial and non-financial impacts of choices</li> <li>▶ Fact-based comparison of alternative choices to ID which is "best"</li> </ul>	<p><b>CBA (ROI) is not...</b></p> <ul style="list-style-type: none"> <li>▶ Intended only for use by finance/economics experts</li> <li>▶ Perfect. (Prediction of the future never is!)</li> <li>▶ "Silver bullet" solution to the complexities of IT decision-making</li> <li>▶ Substitute for management &amp; professional judgment</li> </ul>
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## Practical Cost-Benefit Analysis

### How to Make It Work for You

### Agenda



- 1 What Is CBA?
- 2 Who Uses It?

What does CBA have to do with IT projects?

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## 2. Who Uses It?

### Just About Everyone!

 <b>Government</b>	 <b>Business</b>
<ul style="list-style-type: none"> <li>• US Federal</li> <li>• US State</li> <li>• US Local</li> <li>• International</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Services</li> <li>• Pharmaceuticals</li> <li>• Manufacturing</li> <li>• Telecom</li> </ul>

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## 2. Who Uses It?

### In Government

#### US GOVERNMENT

Performance-based and results-oriented decision-making is now required for all major investments in IT.  
Federal Acquisition Streamlining Act of 1994 (FASA) & Information Technology Management Reform Act of 1996 (Clinger-Cohen)

Agencies shall ... Prepare, and update as necessary throughout the information system life cycle, a benefit-cost analysis for each information system.  
OIG Circular A-130

**WHEN IS A CBA REQUIRED?**  
 A CBA is always required before a decision is made to initiate or continue an IT project; the only issue is the level of detail required for the analysis.  
HHS, National Institutes of Health

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## 2. Who Uses It?

### In Government

#### STATE GOVERNMENTS

Agencies must submit a business case for large IT projects ... business case should include ... a Cost/benefit Analysis  
ND Information Technology Dept.

Any proposed new computer system or system upgrade... must include a cost-benefit analysis  
VT Dept. of Information & Innovation

Estimate of Benefits and Costs must be provided as an attachment to the Project Development Plan  
TX Dept. of Information Resources

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## 2. Who Uses It?

### In Business

- Use of CBA and ROI very similar to government
- Highly variable within & across organizations & industries
- Transition from technology-driven to business value-driven decision-making
- Similar challenges:
  - Establishing workable governance policy & process
  - Developing analytical capabilities
  - Upgrading workforce "business" skills
- Big differences are: public visibility of choices & results; political influence

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## 2. Who Uses It?

Just About Everyone!

Let's Put "USE" Into Proper Perspective

**Few** → Refining (5), Integrating W/ Processes (4)

**Most** → Developing Capabilities (3), Building Foundation (2), Creating Awareness (1)

Learning Build Capability (1-3), Extensive Use (4-5)

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## Practical Cost-Benefit Analysis How to Make It Work for You

### Agenda

- 1 What Is CBA?
- 2 Who Uses It?
- 3 Why Bother?

- If CBA is so helpful, why don't more organizations use it?
- What's in it for the IT project management professional?

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## 3. Why Bother?

There Are Challenges

If CBA is so helpful, why don't more organizations use it?

Time, Data, Technique

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## 3. Why Bother?

There Are Challenges

If CBA is so helpful, why don't more organizations use it?

Time

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## 3. Why Bother?

There Are Challenges

If CBA is so helpful, why don't more organizations use it?

Time

Analysis Time  
Figuring out what to do  
Deciding how to do it  
Data-gathering vs. analysis

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## 3. Why Bother?

There Are Challenges

If CBA is so helpful, why don't more organizations use it?

Data

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### 3. Why Bother?

#### There Are Challenges

If CBA is so helpful, why don't more organizations use it?

Data Availability
<i>Which to use</i>
<i>Where to get it</i>
<i>Search for "perfection"</i>

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### 3. Why Bother?

#### There Are Challenges

If CBA is so helpful, why don't more organizations use it?

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### 3. Why Bother?

#### There Are Challenges

If CBA is so helpful, why don't more organizations use it?

Getting It Done
<i>Lack of practical knowledge</i>
<i>Reinvent the wheel</i>
<i>Little standardization</i>

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### 3. Why Bother?

#### There Are Challenges

Important To Recognize...

- We live in a world of **imperfect and costly information**.
- CBA in the real world unavoidably involves estimates of **hard-to-measure things**.
- IT is inherently **uncertain and risky**.
- Most organizations face a **steep learning curve**; so do the people involved.
- Most people aren't born CBA experts; they need **guidance and time**.
- CBA is a **device for analyzing & reporting facts**; it has **value** only when the facts communicated are **useful and used**.

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### 3. Why Bother?

#### Four Reasons

- ✓ 1. It makes sense!
- ✓ 2. IT project performance is problematic.
- ✓ 3. Decision-makers expect it.
- ✓ 4. Right facts are a powerful tool for the PM.

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### 3. Why Bother?

#### 1. It Makes Sense! Idea is Simple & Compelling

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### 3. Why Bother?

#### Four Reasons



- ✓ 1. It makes sense!
- ✓ 2. IT project performance is problematic.

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### TEST YOURSELF

CIO Magazine recently asked IT professionals to rate their "satisfaction" with enterprise IT projects.

What do you think they said?

	% Responding
1. Satisfied, software worked, project was on time and on budget	1. 12%
2. Satisfied, software worked	2. 15%
3. Unsatisfied, project late and over budget	3. 26%
4. Unsatisfied, software failed	4. 47%

**73%**

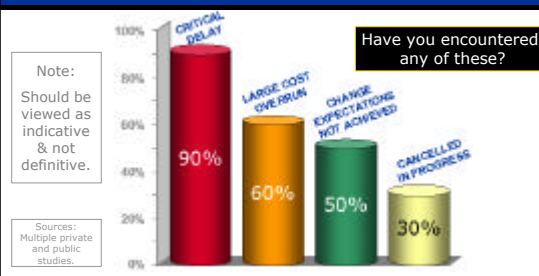
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### 3. Why Bother?

#### 2. IT Project Performance Is Problematic

Note: Should be viewed as indicative & not definitive.

Sources: Multiple private and public studies.



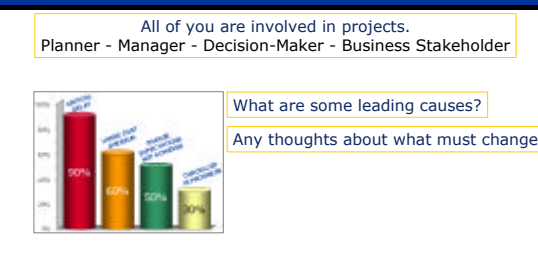
Have you encountered any of these?

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### 3. Why Bother?

#### 2. IT Project Performance Is Problematic

All of you are involved in projects.  
 Planner - Manager - Decision-Maker - Business Stakeholder




What are some leading causes?  
 Any thoughts about what must change?

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### 3. Why Bother?

#### Four Reasons



- ✓ 1. It makes sense!
- ✓ 2. IT project performance is problematic.
- ✓ 3. Decision-makers expect it.

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### TEST YOURSELF

Are organizations more or less interested in the ROI of IT projects? How about the "intangibles"? IT and business executives were asked.

What do you think they said?

	+	-	NC
1. Has pressure to demonstrate ROI increased or decreased in the last 12 months?	60%	3%	37%
2. Do you agree or disagree.... Pressure to place a dollar value on "intangible" or "soft" benefits has increased over the last 12 months.	Agree	Disagree	
	76%	24%	

Source: 2003 ROI Study, CIO Insight & Advantage Business Research.

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### 3. Why Bother?

#### Four Reasons

1. It makes sense!
2. IT project performance is problematic.
3. Decision-makers expect it.
4. Right facts are a powerful tool for the PM.

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

Useful to have quantitative measures (**facts**) to assess the value of choices at different life-cycle stages.

PROSPECTIVE			RETROSPECTIVE
Planning	Selection	Modification	Evaluation
<i>Which IT solutions are plausible?</i>	<i>Why should we invest in this technology?</i>	<i>What is this proposed change worth?</i>	<i>Did we meet expectations?</i>

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

Let's See Some Examples

- Option Selection
- Change Management
- "Intangibles"

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

Let's See Some Examples

#### 1. Option Selection

**Issue:** Better off choosing "A" or "B"? Maybe doing nothing (status quo) is best?

	Ownership Cost	ROI: NPV	Financial Benefit	Non-Financial Benefit
SQ	\$70	N/A	None	None (Stay at 65% of mission target.)
"A"	\$150	\$74	\$200	Achieve 90% of target.
"B"	\$150	\$65	\$200	Achieve 95% of target.

If only selection criterion is "lowest cost" - Status Quo is best.  
 If only selection criterion is "highest ROI" - Alt. "A" is best.  
 If only selection criterion is "highest mission performance" - Alt. "B" is best.

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

Let's See Some Examples

#### 2. Change Management

**Issue:** Solution selected based upon original "facts". Should the change request be approved?

	Ownership Cost	ROI: NPV	Financial Benefit	Non-Financial Benefit
"B" Approved	\$150	\$65	\$200	Achieve 95% of target.
"B" Change	\$225	-\$10	\$125	Achieve 95% of target.

- Cost increases.
- Financial benefit decreases.
- No change in priority non-financial benefit.
- ROI (NPV) turns from positive to negative.

**Decision-makers Can Still Approve**  
 Difference: PM can explain impacts in measurable terms. If approved, cost & benefit expectations are amended.

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

Let's See Some Examples

**3. "Intangibles"**

**Issue:** The Achilles' heal of IT decision-making?

**Source of Difficulties:**

- Undefined Stakeholder Expectations
- Bounding Project Scope
- Assessing Option Value
- Evaluating Impact of Proposed Changes
- Valuing IT Projects and IT Portfolios

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

Let's See Some Examples

**3. "Intangibles"**

**Four Examples: 1 Financial; 3 Non-Financial**

**Similar circumstance:**

- Prior measurement efforts
- Senior management requirement
- No time for exhaustive analysis
- Required to demonstrate the "value" of IT

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### 3. Why Bother?

#### 4. Facts Are A Powerful Tool

Let's See Some Examples

**3. "Intangibles"**

**Problem Solution**

**Similar solution approach:**

- Acquire a "value vision"
- See solutions from customer perspective
- Use a systematic ROI definition methodology

what's important | what's expected | what to measure | how to measure | quantity "as-is" | quantity "to-be" | what's the cost

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### 3. Why Bother?

#### Four Examples

**Application Development Group**  
 Financial Services Firm

**Issue:** Establish the business value of quantitative models developed for trading, hedging & risk management.

**Chief Fiscal Officer**  
 Specialty Products Manufacturer

**Issue:** Are the proposed "virtual desktop" & new "configurator" worth the cost?

**System Support Services**  
 SDSS AQC

**Issue:** Define value of secure, immediate access to government data and resources at any time and from any location.

**IT Communications R&D Group**  
 US Department of Defense

**Issue:** Show Pentagon the worth of R&D program in terms of "warfighter value".

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### 3. Why Bother?

#### Example #1: Value Of Quantitative Models

**Application Development Group**  
 Financial Services Firm

**Issue:** Establish the business value of quantitative models developed for trading, hedging & risk management.

**Result:** Value determined to be an average of \$25 MM per successful model. In financial ROI terms: Payback < 1 mo.; NPV = \$20 MM+; IRR = 900%

Revenue: Successful models will deliver High-\$ payoff

Additional annual revenue per successful model

Count: # models • Revenue \$ • Avg. \$ per model

Count: 4 per year • + \$100 MM • \$25 MM per model

Count: Same as current year

Cost: • \$10 MM • \$2.5 MM per model

what's important | what's expected | what to measure | how to measure | quantity "as-is" | quantity "to-be" | what's the cost

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### 3. Why Bother?

#### Example #2: Value of Remote Access

**System Support Services**  
 SDSS AQC

**Issue:** Define value of secure, immediate access to government data and resources at any time and from any location.

**Result:** (Multiple audit types. Illustration shows only 1 type.) Type C-1 Audit Performance would go from 16% of target to 70% of target. (Not "perfection". Decision makers would decide if amount of performance increase is worth the cost)

Mission Performance: Service Quality

Completed Audits: Provide Quality Assurance. Meet Audit Targets.

Audit Demand: # Completed • Avg. Cycle-time • # Audit Teams

Count by Type: # scheduled/yr • # completed/yr • Avg. days to complete

Count: • 90 • 90 • 125 days

Count: • 14 • 80 • 75 days

Cost: (Aggregated For all audit types)

what's important | what's expected | what to measure | how to measure | quantity "as-is" | quantity "to-be" | what's the cost

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### 3. Why Bother?

#### Example #3: Value Of A "Virtual Desktop"

**Chief Fiscal Officer**  
 Specialty Products Manufacturer

**Issue:** Are the proposed "virtual desktop" & new "configurator" worth the cost?

**You don't know:**

- What a "virtual desktop" is.
- What a new "configurator" will do!!!

**Don't be concerned.** Neither did the CFO. That's why these intangible "benefits" made him so uncomfortable.

Meet Field Sales Force Data Needs | Rapid, Correct Product Price Quotations | Count: response speed, response accuracy

what's important | what's expected | what to measure

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### 3. Why Bother?

#### Example #3: Value Of A "Virtual Desktop"

**Chief Fiscal Officer**  
 Specialty Products Manufacturer

**Issue:** Are the proposed "virtual desktop" & new "configurator" worth the cost?

**Result:** Analysis revealed that the recommended solution would have no impact on the priority business needs. A costly mistake was averted.

**Enlighten:** Key stakeholders, the IT group, and the vendor defined tangible business needs and objectives. A different solution was identified, approved, and implemented. The project was a success.

Meet Field Sales Force Data Needs | Rapid, Correct Product Price Quotations | Count: response speed, response accuracy

what's important | what's expected | what to measure | how to measure | quantity "as-is" | quantity "to-be" | what's the cost

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### 3. Why Bother?

#### Example #4: Value Of Communications R&D

**IT Communications R&D Group**  
 US Department of Defense

**Issue:** Show Pentagon the worth of R&D program in terms of "warfighter value".

**Result:** (Multiple examples. Illustration shows only 1. Numbers not shown.) Reducing equipment footprint freed-up a specific amount of valuable transport space. Value was additional capacity to deliver critical materials to warfighter.

Mission Performance: Combat | Hardware Footprint Reduction | Examples: key footprint reduction successes, deployment use | Count: Equipment size, Transport space, Cargo capacity | Cost: N/A

what's important | what's expected | what to measure | how to measure | quantity "as-is" | quantity "to-be" | what's the cost

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### 3. Why Bother?

#### "Intangible Benefits" - 10 Lessons Learned

1. IT is an investment; to be worthwhile, an investment must deliver measurable value
2. Impact of technology on business performance and results is the real value of IT
3. Impacts (benefits) may be financial, non-financial, or both - these can be quantified
4. A beneficial impact is either quantified or it is not
5. Absence of quantification doesn't make a benefit "intangible" - it is simply not measured

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### 3. Why Bother?

#### "Intangible Benefits" - 10 Lessons Learned

6. Beneficial impacts are usually not measured when:
  - They are difficult to identify and quantify
  - People are not be sure what to measure or how to do it
  - Measurement approach is overly complex (excessively time-consuming and costly)
7. More challenging today than a decade ago
8. Everyone involved (IT professionals to stakeholder managers) must acquire a different IT "value vision"
9. Practical techniques are available
10. So called "intangibles" don't have to be IT's Achilles heal

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### 3. Why Bother?

#### CBA Can Help Project Planners & Managers

- ▶ CBA (and ROI) involve early and tangible definition of expectations:
  - Business Benefits & Returns
  - Costs
  - Schedule (Project and Benefit Realization)
- ▶ Selection: Increased emphasis on fact-based decisions
- ▶ Control: Significant change requests must show value
- ▶ Evaluation: Measurement of actual vs. expected value

**Not a Cure-All! Just Another Tool.**

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## Practical Cost-Benefit Analysis How to Make It Work for You

### |Agenda

1

What Is CBA?

2

Who Uses It?

3

Why Bother?

4

What Can I Do?

What are some practical steps organizations can take to make CBA a useful tool?

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## 4. What Can I Do?

### Steps You Can Take

Organizations and individual professionals can improve the Use of CBA as a tool to improve planning and decision-making.

Top 3 Improvements Cited by IT Professionals

1. Standardized business process
2. Practical techniques and tools
3. Develop skills

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## 4. What Can I Do?

### 1. Standardized Business Process

**Organizations**

1. Top management support
2. Design a practical process tailored to organizational realities
3. Interface with business and financial processes
4. Prototype; demonstrate value
5. Start simple; deploy gradually

**Individuals**

1. Learn existing requirements (if any)
2. Adopt a generic CBA procedure
3. Begin by applying the techniques to one or two small projects
4. Use what works for you
5. Don't overcomplicate

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## 4. What Can I Do?

### 2. Practical Tools

**Organizations**

1. **Guidance** - provide clear and explicit written instructions written for people who aren't finance or economics experts
2. **Forms** - provide standard, easy to understand forms - keep them short and simple
3. **Software** - acquire or develop simple applications

**Individuals**

1. **Guidance** - check for procedures within your own organization first; there are plenty of "off-the-shelf" books (some are helpful!)
2. **Forms** - start with generic forms; adapt once you understand the logic
3. **Software** - except for ROI, seek only after you master the basics

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## 4. What Can I Do?

### 3. Develop Skills

**Organizations**

1. Few people (even some finance specialists) "know" how to do a CBA for IT - some basic analysis training will be needed
2. Plan to develop skills over time
3. Not everyone needs to be an "expert"; however, a "core" group of more highly skilled people should be available

**Individuals**

1. Take a training course offered by your organization (if available)
2. Learn by example - locate sample CBAs appropriate for your situation and expertise
3. Find people in your organization who have the knowledge and seek their assistance

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## 4. What Can I Do?

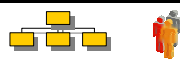
### 8 Tips to Consider

1. **Have a Business Focus.** Ultimately, the only justification for investments in IT are improvements in business performance and results.
2. **Simple.** Keep it basic to start - you can always make it more complicated later.
3. **Useful.** It must serve the information needs of: project professionals, business managers, top-level decision-makers, and others.
4. **Communicate Effectively.** CBA (and ROI) are tools designed to provide key facts for informed decision-making - make analysis results clear and easy to understand.

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### 4. What Can I Do?

8 Tips to Consider



- Do It Smart.** CBA isn't a new invention. The technique has a long history. Don't waste your time reinventing the wheel! Learn what has worked elsewhere and what has not.
- Be Wary of the Mega Software Solution.** Software isn't the cornerstone of quality CBAs - people and technique are.
- Know When to Seek Expert Assistance.** CBAs for most projects can be performed by people who have basic to intermediate-level skills. Some projects really do require higher skill levels.
- Be Prepared for Change.** Well-crafted CBAs impact the way projects are planned, selected, and managed. Everyone will be affected. Not everyone will adapt easily.

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## Practical Cost-Benefit Analysis How to Make It Work for You

### Agenda

- 1 What Is CBA?
- 2 Who Uses It?
- 3 Why Bother?
- 4 What Can I Do?
- 5 Q&A

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### 5. Questions and Answers

Do You Have A Question About...


- ▶ Cost-Benefit Analysis
- ▶ Return On Investment
- ▶ Intangibles
- ▶ Specific Situation Involving CBA or ROI

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### For More Information About CBA

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- Extensive Research Links  
 CBA, ROI, Performance Analysis  
 Budgeting  
 IT Budgeting & Project Mgmt.
- Tutorials and Management Briefs
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Resource Management Systems, Inc.  
 New York, NY USA



Government & Business Services  
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 212-633-2001  
[www.RMS.net](http://www.RMS.net)

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