Information Technology Project Management – Fifth Edition

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Measurable Organizational Value and the Business Case

Chapter 3

Chapter Objectives

▶ Describe and develop a project's MOV.

▶ Understand the purpose of a business case.

▶ Prepare a business case.

▶ Distinguish between financial and scoring models.

▶ Understand how projects are selected.

Measurable Organizational Value (MOV) and Project Objectives

▶ The MOV is a "Measure of Success"

▶ The MOV must support the organization's vision, mission, and strategy

▶ Also, the MOV must:
  ▶ Be measurable
  ▶ Provide value
  ▶ Be agreed upon
  ▶ Be verifiable

▶ Project Objectives – support the MOV and include:
  ▶ Scope (the project work to be completed
  ▶ Schedule (time)
  ▶ Budget (money)
  ▶ Quality (conformance or fitness for use)

Figure 3.1 – Project Alignment

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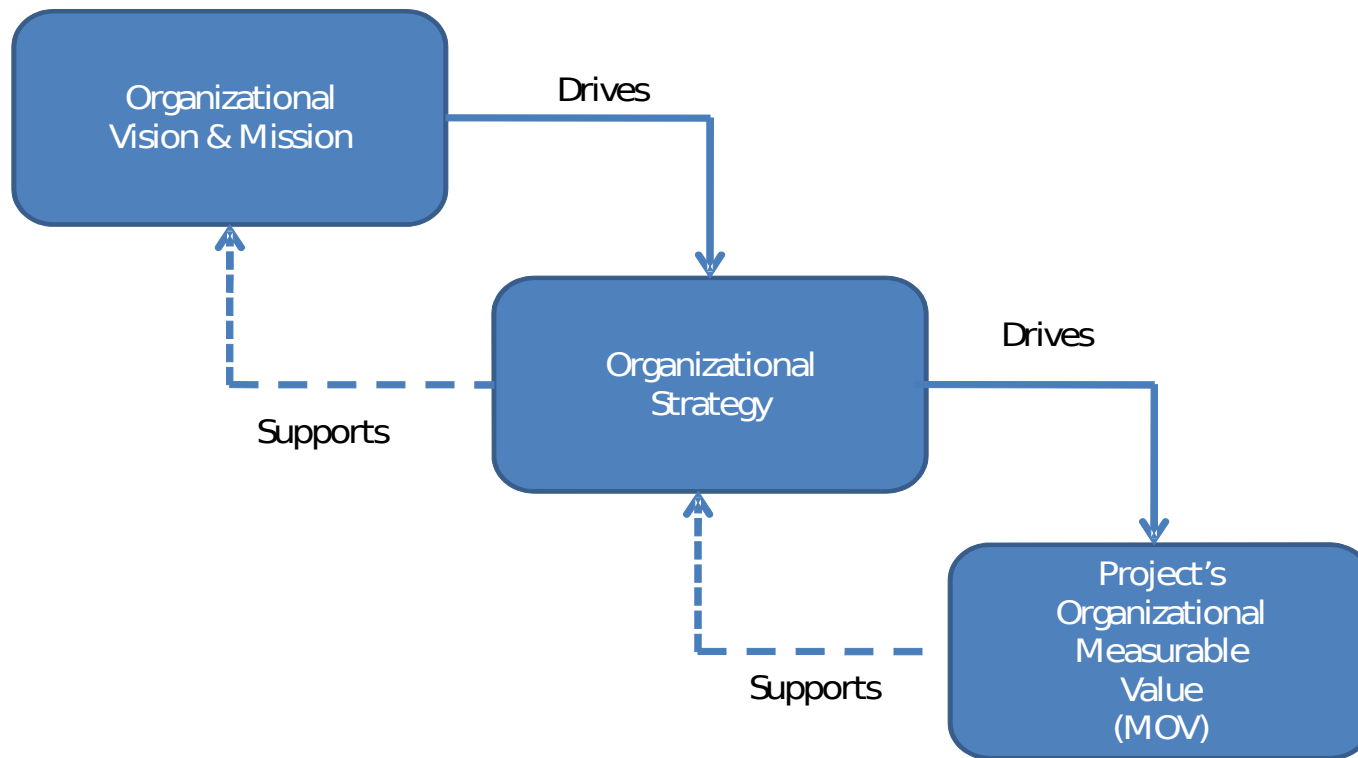
Project Objectives

- Project Objectives – support the MOV and include:
  - Scope (the project work to be completed
  - Schedule (time)
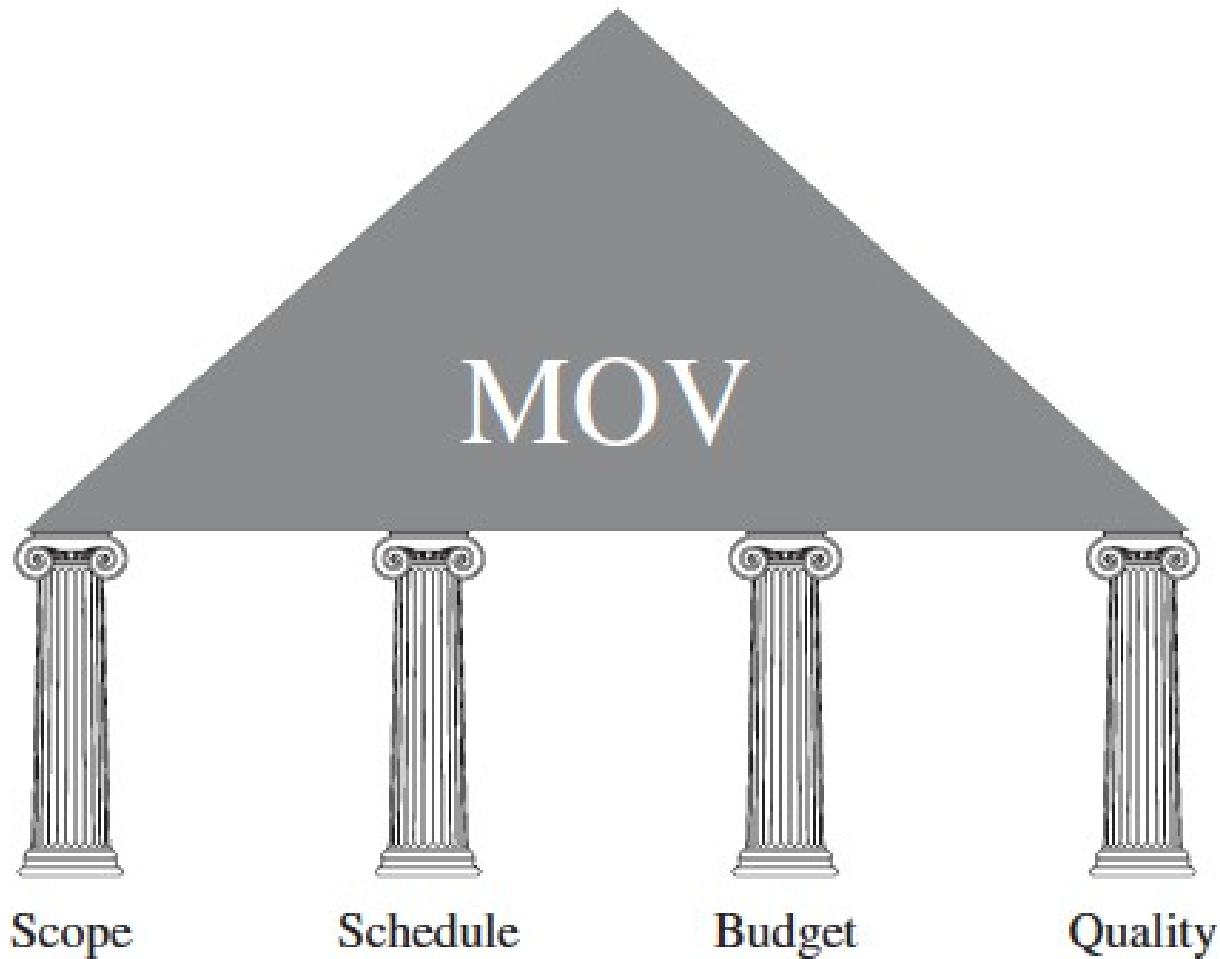 - Budget (money)
  - Quality (conformance or fitness for use)

Figure 3.2 – The MOV and Project Objectives

MOV

Scope Schedule Budget Quality

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An Example of a Good Goal

▶ *I believe that this nation should commit itself to achieving the goal before this decade is out, of landing a man on the moon and returning him safely to Earth.*

John F. Kennedy
35th President of the United States
1961-1963

Developing the MOV

1. Identify the desired area of impact

Potential Areas:
- Customer
- Strategic
- Financial
- Operational
- Social

Figure 3-3 – Potential Areas of Project Impact and Examples

| Customer	Strategic	Financial	Operational	Social
• New products or services • Better quality products or services • Lower priced products or services	• New markets • Increased market share • Changing the terms of competition	• Increased revenue • Lower costs	• More efficient processes • More effective processes	• Dissemination of knowledge • Improved safety • Cleaner environment

Developing the MOV

2. Identify the desired value of the IT project

Organizational Value:
- Better?
- Faster?
- Cheaper?
- Do More? (growth)

Figure 3-4 – Project Value

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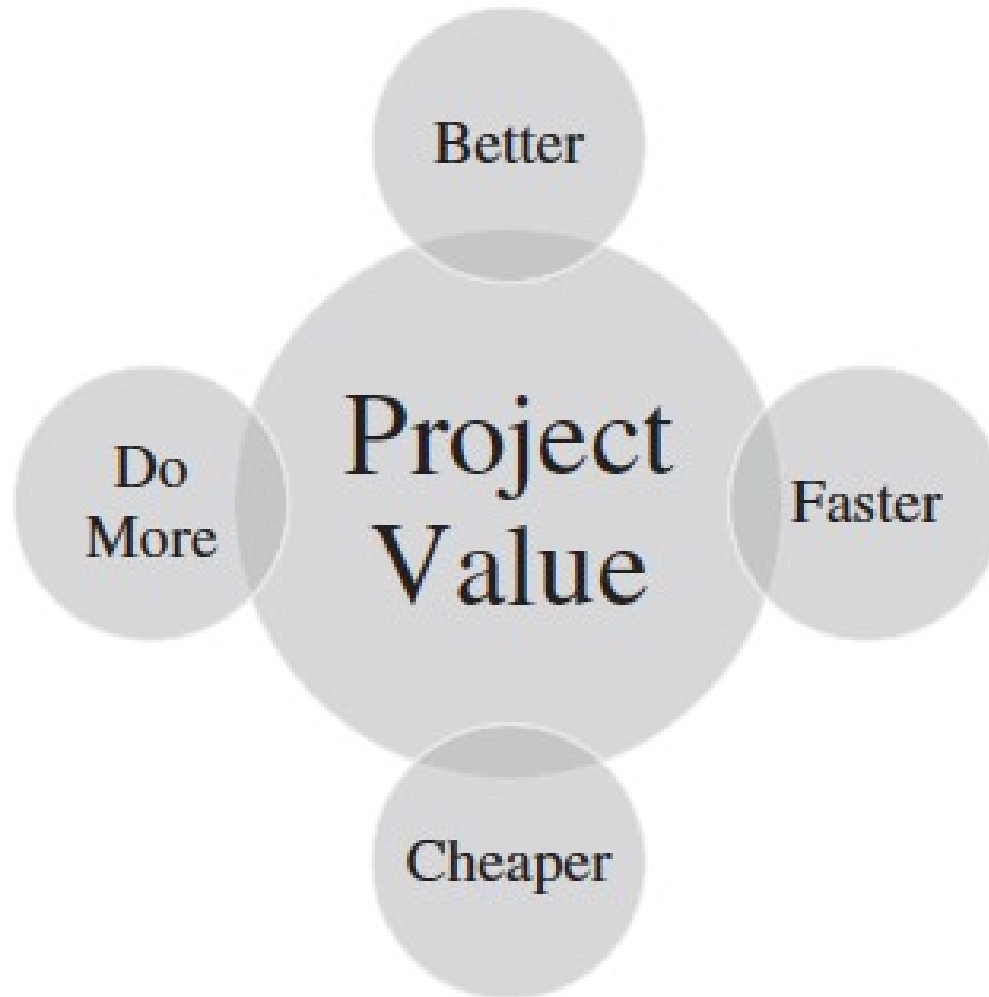
Developing the MOV

3. Develop an Appropriate Metric

▶ Provides the project team with a performance target or directive

▶ Sets expectations among all stakeholders

▶ Affords a means for evaluating whether the project is a success

▶ Metrics are expressed in …

- Money ($, £, ¥ – increase or decrease)
- Percentage (% – increase or decrease)
- Numeric Values (increase or decrease)

Developing the MOV

4. ## Set a time frame for achieving the MOV

   ▸ When will these results (the MOV) be achieved?

5. ## Verify the MOV and get agreement from the project stakeholders

   ▸ Project manager's responsibility is to guide the process, while the project sponsor must identify and specify the metrics and the acceptable values for the metrics

Developing the MOV

6. Summarize the MOV in a clear, concise statement or table

This project will be successful if _____.

MOV: Increase awareness for healthy living by having 250 new subscribers sign up for a weekly newsletter within 6 months.
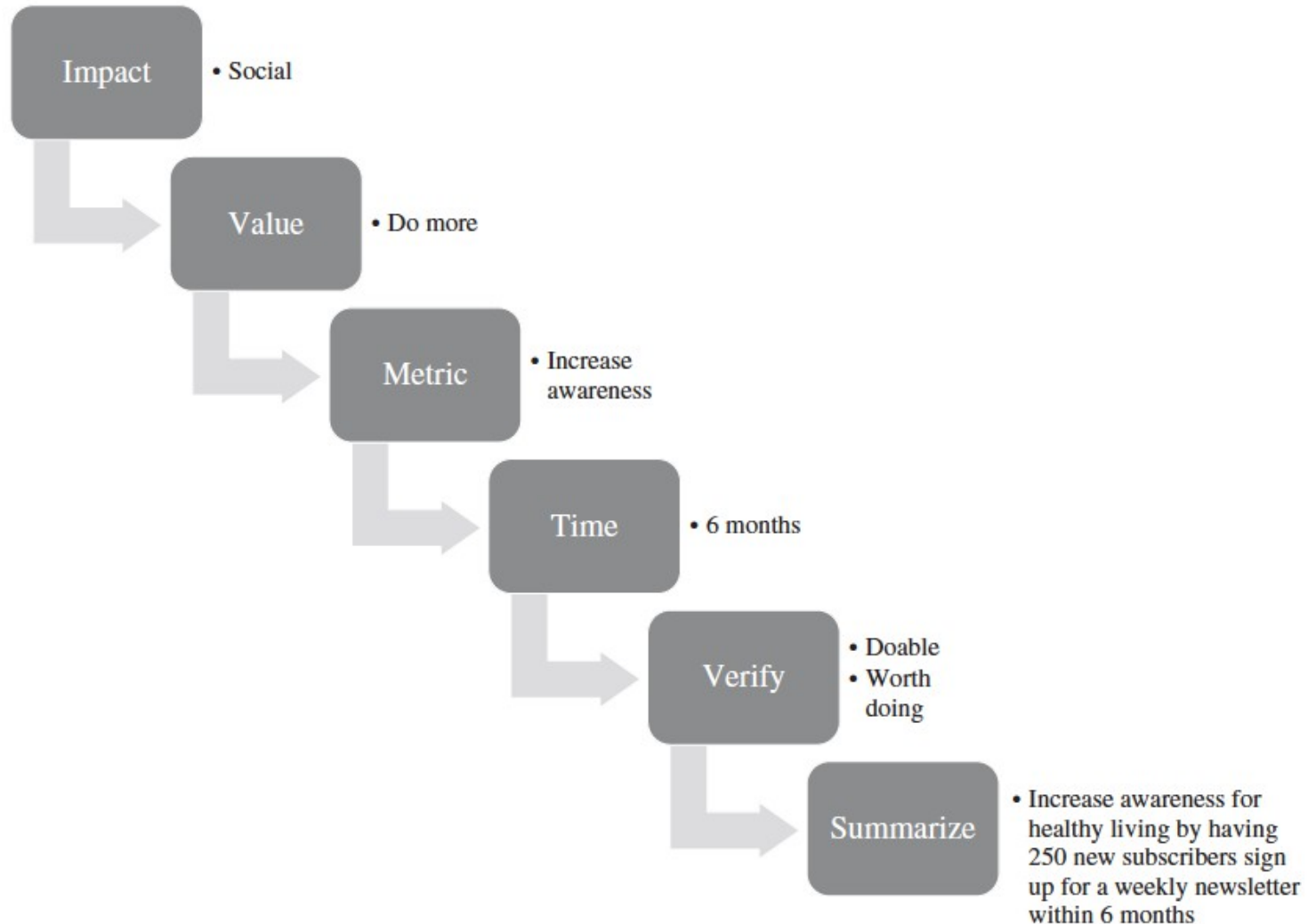
Table 3-1 – Examples of MOV Statements

Area of Impact	The project will be successful if …
Customer	Within 3 months 65 percent of our customers will visit our restaurant at least once a week.
Strategic	We will develop and manufacture a new router that sells for $50 less than our competitor's model by April 1 of next year.
Financial	Sales growth of our smartphone app increases from 3 percent to 6 percent by the end of next quarter.
Operational	Our inventory turnover ratio improves 15 percent by the end of our fiscal year.
Social	The number of accidents in our plant is reduced to zero next year.

Table 3-2 – Examples of MOV Table Format

Time Period	MOV
6 months	250 new healthy living newsletter subscribers
1 year	600 new healthy living newsletter subscribers
2 years	1,000 new healthy living newsletter subscribers

Figure 3-5 – Summary of the Process for Developing MOV to Increase Awareness for Healthy Living

Impact • Social

Value • Do more

Metric • Increase awareness

Time • 6 months

Verify • Doable • Worth doing

Summarize • Increase awareness for healthy living by having 250 new subscribers sign up for a weekly newsletter within 6 months

The Business Case

▶ Definition of Business Case: an analysis of the organizational value, feasibility, costs, benefits, and risks of several proposed alternatives or options.

▶ Attributes of a Good Business Case

  ▶ Thorough in detailing all possible impacts, costs, and benefits

  ▶ Clear and logical in comparing the cost/benefit impact of each alternative

  ▶ Objective through including all pertinent information

  ▶ Systematic in terms of summarizing findings

Developing the Business Case

- Step 1: Define Measurable Organizational Value (MOV)
- Step 2: Form a Cross-Functional Business Case Team
- Advantages:
  - Credibility
  - Alignment with organizational goals
  - Access to the real costs
  - Ownership
  - Agreement
  - Bridge building

Developing the Business Case

- ▶ Step 3: Identify Alternatives
  - ▶ Possible Options
    - ▶ Change existing process without investing in IT
    - ▶ Adopting or adapting an application developed by a different area or department within the organization
    - ▶ Reengineer the existing system
    - ▶ Purchasing an off-the-shelf application package from a software vendor
    - ▶ Custom building a new application using internal resources or outsourcing the development to another company

Developing the Business Case

▶ Step 4: Define Feasibility and Assess Risk

- ▶ Feasibility ("do able and worth doing?")
  - ▶ Economic feasibility
  - ▶ Technical feasibility
  - ▶ Organizational feasibility
  - ▶ Other feasibilities
- ▶ Risk
  - ▶ Identification – What can go wrong? What must go right?
  - ▶ Assessment – What is the impact of each risk?
  - ▶ Response – How can the organization avoid or minimize the risk?

Developing the Business Case

- ▸ Step 5: Define Total Cost of Ownership
  - ▸ Direct or Up-front costs
  - ▸ Ongoing Costs
  - ▸ Indirect Costs

- ▸ Step 6: Define Total Benefits of Ownership
  - ▸ Increasing high-value work
  - ▸ Improving accuracy and efficiency
  - ▸ Improving decision-making
  - ▸ Improving customer service

Developing the Business Case

▶ Step 7: Analyze alternatives

  ▶ Payback

$$\text{Payback Period} = \frac{\text{Initial Investment}}{\text{Net Cash Flow}}$$

$$= \frac{\$100,000}{\$20,000}$$

$$= 5 \text{ years}$$

Developing the Business Case

▶ Breakeven

Materials (putter head, shaft, grip, etc.)	$12.00
Labor (0.5 hours at $9.00/hr)	$ 4.50
Overhead (rent, insurance, utilities, taxes, etc.)	$ 8.50
Total	$25.00

If you sell a golf putter for $30.00 and it costs $25.00 to make, you have a profit margin of $5.00:

Breakeven Point = Initial Investment / Net Profit Margin
= $100,000 / $5.00
= 20,000 units

Developing the Business Case

▶ Return on Investment

Project ROI = $\dfrac{\text{Total Expected Benefits} - \text{Total Expected Costs}}{\text{Total Expected Costs}}$

$$= \dfrac{(\$115{,}000 - \$100{,}000)}{\$100{,}000}$$

$$= 15\%$$

Developing the Business Case

▸ Net Present Value

	Year 0	Year 1	Year 2	Year 3	Year 4
Total Cash Inflows	$0	$150,000	$200,000	$250,000	$300,000
Total Cash Outflows	$200,000	$85,000	$125,000	$150,000	$200,000
Net Cash Flow	($200,000)	$65,000	$75,000	$100,000	$100,000

$$NPV = -I_0 + \Sigma \, (\text{Net Cash Flow} / (1 + r)^t)$$

Where:
I = Total Cost or Investment of the Project
r = discount rate
t = time period

Developing the Business Case

▶ Net Present Value

Time Period	Calculation	Discounted Cash Flow
Year 0	($200,000)	($200,000)
Year 1	$65,000/(1 + .08)^1$	$60,185
Year 2	$75,000/(1 + .08)^2$	$64,300
Year 3	$100,000/(1 + .08)^3$	$79,383
Year 4	$100,000/(1 + .08)^4$	$73,503
Net Present Value (NPV)		**$77,371**

Developing the Business Case

- **Scoring models**
  - provide a method for comparing alternatives or projects based on a weighted score.
  - can combine both qualitative and quantitative criteria
  - weights and scores can be subjective
- **Things to keep in mind about financial and scoring models**
  - Financial models can be biased toward the short run
  - Some criteria are reversed-scored
  - Past experience may help create a more realistic business case.

Table 3.3 – Comparison of Project Alternatives

Criterion		Weight	Alternative A	Alternative B	Alternative C
Financial	ROI	15%	2	4	10
	Payback	10%	3	5	10
	NPV	15%	2	4	10
Strategic	Alignment with strategic objectives	10%	3	5	8
	Increased market share	10%	2	5	8
Organizational	Likelihood of achieving project's MOV	10%	2	6	9
	Availability of skilled team members	5%	5	5	4
Project	Cost	5%	4	6	7
	Time to develop	5%	5	7	6
	Risk	5%	3	5	5
Customer	Customer satisfaction	10%	2	4	9
Total Score		100%	2.65	4.85	8.50

Note: Risk scores have a reverse scale—that is, higher scores for risk imply lower levels of risk.

Developing the Business Case

▶ Step 8: Propose and Support the Recommendation

  ▶ Once the alternatives are identified and analyzed, the last step is to recommend one of the options.

Figure 3.6 – Business Case Template

The following provides a suggested outline for developing and writing a business case:

Cover Page

- Title and subtitle
- Author and address
- Date

Executive Summary

- Brief description of the problem or opportunity
- Brief description of organization's goal and strategy
- Brief description of project's MOV and how it ties to the organizational goal and strategy
- Brief description of each option or alternative analyzed
- Brief explanation of which alternative is being recommended and why

Introduction

- Background
- Current situation
- Description of the problem or opportunity
- Project's measurable organizational value

- How achieving the project's MOV will support the organization's goal and strategy
- Objectives of writing this business case

Alternatives

- Description of alternative 1 (Base Case)
- Description of alternative 2 …
- Description of alternative N

Analysis of Alternatives

- Methodology of how alternatives will be analyzed
    - Data collection methods
    - Metrics used and explanation why they are relevant
- Presentation of results that compares each alternative
    - Metrics
    - Sensitivity analysis
    - Risks
    - Assumptions
- Proposed recommendation

Project Selection and Approval

▶ The IT Project Selection Process

▶ The Project Selection Decision

- The project must align with the organization's values, vision, mission, and strategies.

- The project must provide MOV that can be verified at the completion of the project.