Project Management

THE MANAGERIAL PROCESS

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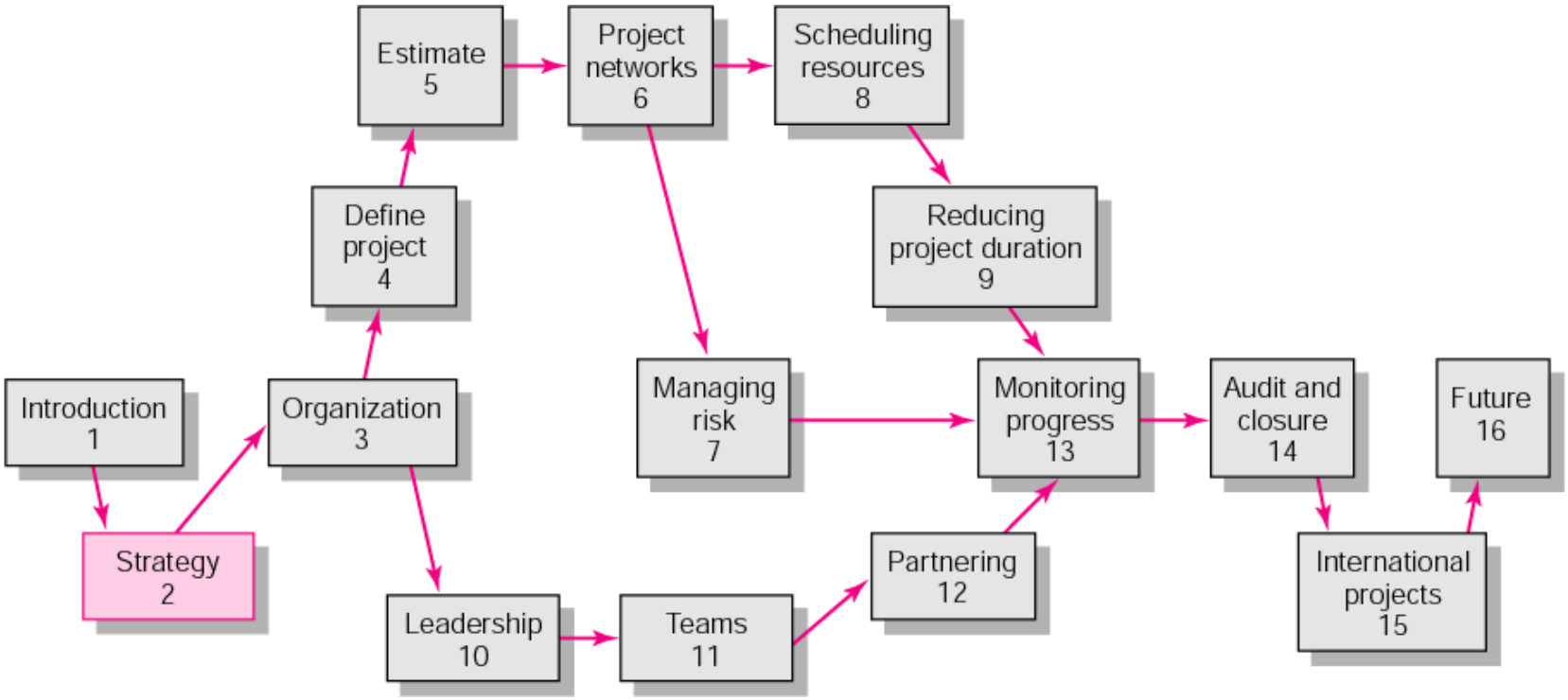
Third Edition

Chapter 2

Organization Strategy and Project Selection

PowerPoint Presentation by Charlie Cook



Why Project Managers Need to Understand the Strategic Management Process

- Changes in the organization's mission and strategy
  - –Project managers must respond to changes with appropriate decisions about future projects and adjustments to current projects.
  - –Project managers who understand their organization's strategy can become effective advocates of projects aligned with the firm's mission.

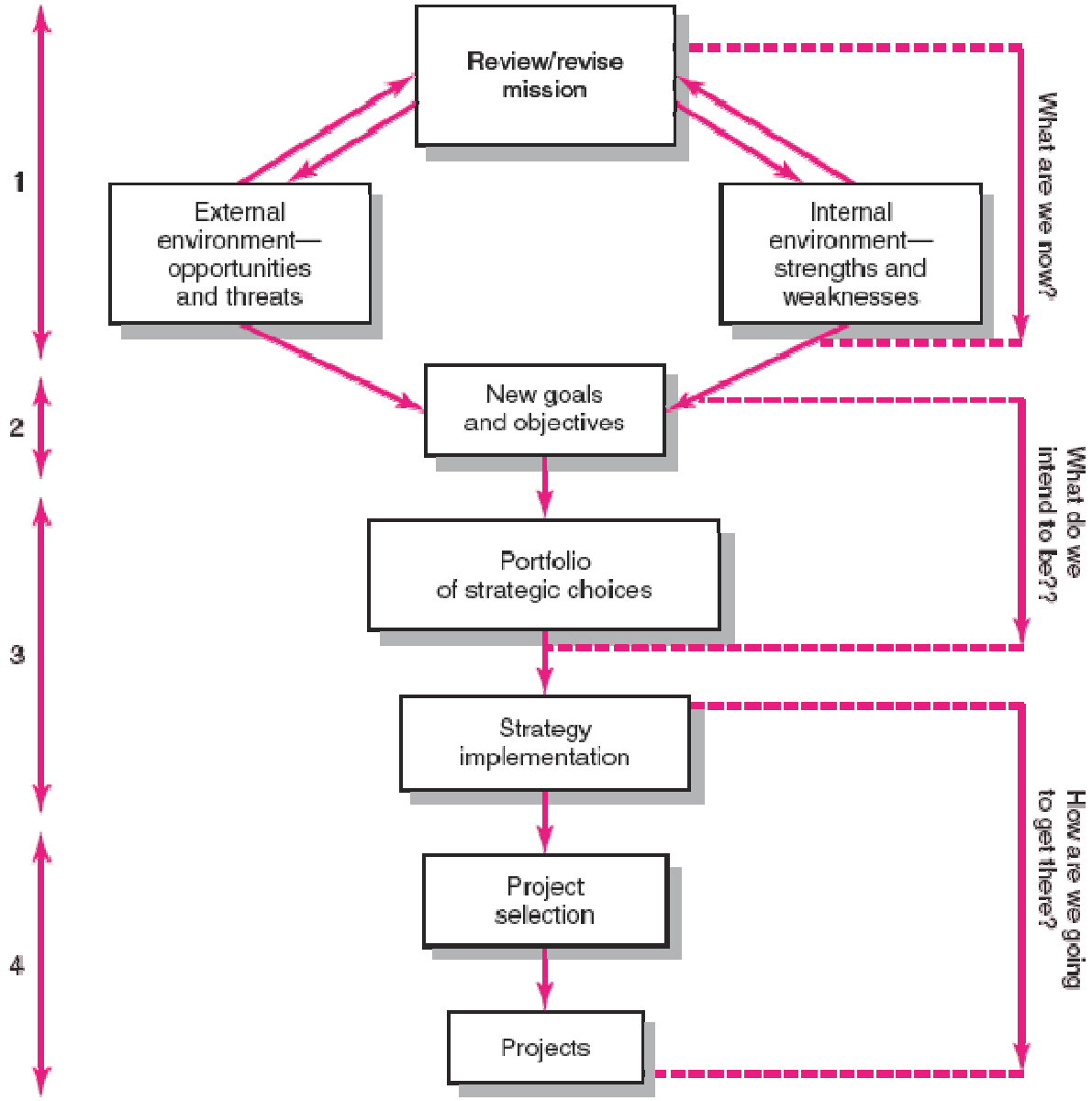
The Strategic Management Process: An Overview

- Strategic Management
  - –Provides the theme and focus of the future direction for the firm.
    - **Responding to changes** in the external environment—environmental scanning
    - **Allocating scarce resources** of the firm to improve its competitive position—internal responses to new action programs
  - –Requires strong links among mission, goals, objectives, strategy, and implementation.

Strategic Management Process (cont'd)

- Four of Activities of the Strategic Management Process

  1. Review and define the organizational mission.
  2. Set long-range goals and objectives.
  3. Analyze and formulate strategies to reach objectives.
  4. Implement strategies through projects



Strategic Management Process

FIGURE 2.1

Characteristics of Objectives

S	**Specific**	Be specific in targeting an objective
M	**Measurable**	Establish a measurable indicator(s) of progress
A	**Assignable**	Make the objective assignable to one person for completion
R	**Realistic**	State what can realistically be done with available resources
T	**Time related**	

EXHIBIT 2.1

Project Portfolio Management Problems

- The Implementation Gap
  - The lack of understanding and consensus on strategy among top management and middle-level (functional) managers who independently implement the strategy.
- Organization Politics
  - Project selection is based on the persuasiveness and power of people advocating the projects.
- Resource Conflicts and Multitasking
  - The multiproject environment creates interdependency relationships of shared resources which results in the starting, stopping, and restarting projects.

Benefits of Project Portfolio Management

- Builds discipline into project selection process.
- Links project selection to strategic metrics.
- Prioritizes project proposals across a common set of criteria, rather than on politics or emotion.
- Allocates resources to projects that align with strategic direction.
- Balances risk across all projects.
- Justifies killing projects that do not support organization strategy.
- Improves communication and supports agreement on project goals.

EXHIBIT 2.2

Portfolio of Projects by Type

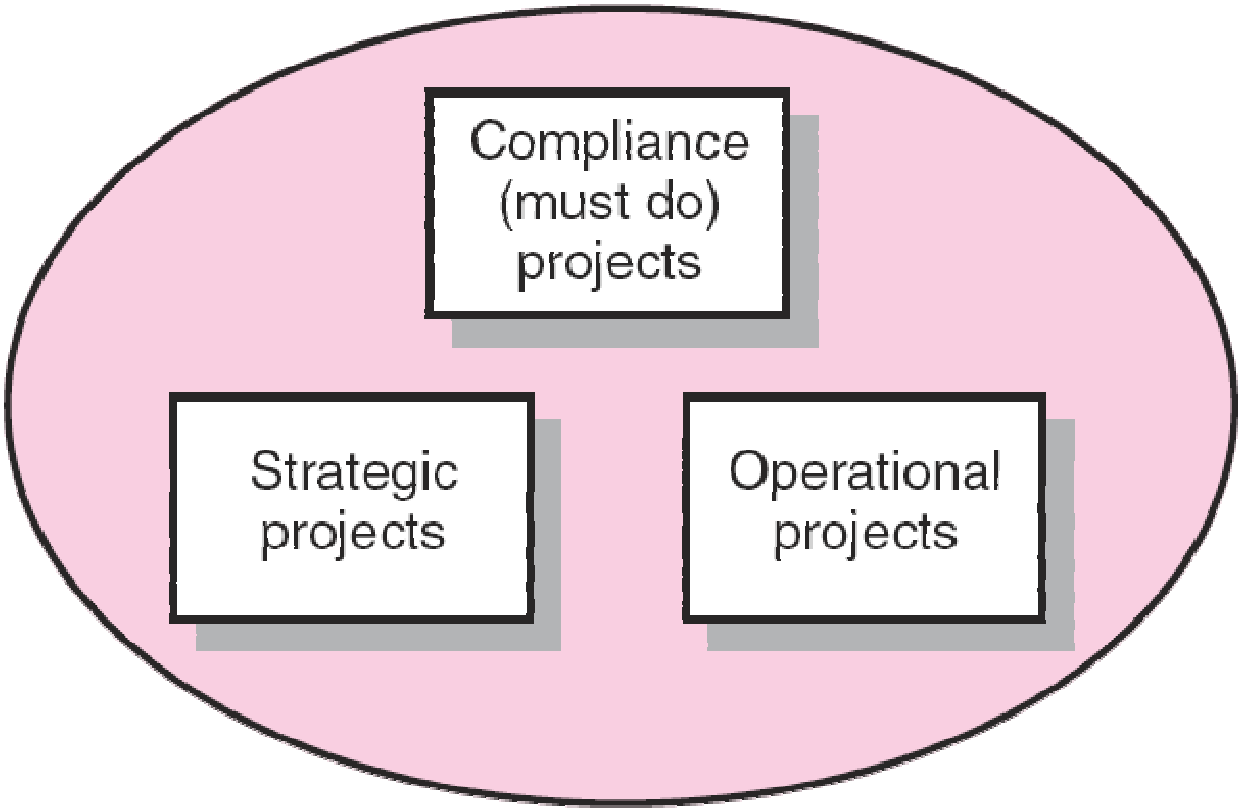


FIGURE 2.2

A Portfolio Management System

- Selection Criteria
  - **Financial:** payback, net present value (NPV), internal rate of return (IRR)
  - **Non-financial:** projects of strategic importance to the firm.
- Multi-Weighted Scoring Models
  - Use several weighted selection criteria to evaluate project proposals.

Financial Models

- The Payback Model
  - Measures the time it will take to recover the project investment.
  - Shorter paybacks are more desirable.
  - Emphasizes cash flows, a key factor in business.
  - Limitations of payback:
    - Ignores the time value of money.
    - Assumes cash inflows for the investment period (and not beyond).
    - Does not consider profitability.
    - Payback period (yrs) = Estimated Project Cost/Annual Saving

Financial Models (cont'd)

- The Net Present Value (NPV) model
  - Uses management's minimum desired rate-of-return (discount rate) to compute the present value of all net cash inflows.
    - Positive NPV: the project meets the minimum desired rate of return and is eligible for further consideration.
    - Negative NPV: project is rejected.

$$\text{Project NPV} = I_0 + \sum_{i=1}^{n} \frac{F_t}{(1+k)^t} \qquad \text{where}$$

I_0 = Initial investment (since it is an outflow, the number will be negative)

F_t = net cash inflow for period t

k = required rate of return

Net Present Value (NPV) and Internal Rate of Return (IRR): Example Comparing Two Projects

Project A		Year 1	Year 2	Year 3	Year 4	Year 5	Total	Formulas
Required Rate of Return	20%							
Outflows		($700,000)					($700,000)	
Inflows		$225,000	$225,000	$225,000	$225,000	$225,000	$1,125,000	Project A: =NPV(B6,C9:G9)
Net Inflows		($475,000)	$225,000	$225,000	$225,000	$225,000	$425,000	
NPV	$89,554							

Project B		Year 1	Year 2	Year 3	Year 4	Year 5	Total	
Required Rate of Return	20%							
Outflows		($400,000)					($400,000)	
Cash Inflows		$110,000	$110,000	$110,000	$110,000	$110,000	$550,000	Project B: =NPV(B14,C17:G17)
Net inflows		($290,000)	$110,000	$110,000	$110,000	$110,000	$150,000	
NPV	−$4,366							

NPV comparison: Accept Project A—NPV is positive
Reject Project B—NPV is negative

	Payback Method		
	Project A	Project B	
Investment	$700,000	$400,000	Project A Payback: =(C32/C33)
Annual Savings	$225,000	$110,000	Project B Payback: =(E32/E33)
Payback Period*	3.1 years	3.6 years	
Rate of Return*	32.1%	27.5%	Project A: =(C33/C32)
			Project B: =(E33/E32)

Project A: Accept, less than 5 years and exceeds 20% desired rate

Project B: Accept, less than 5 years

EXHIBIT 2.3

Project Screening Matrix

Criteria / Weight	Stay within core competencies	Strategic fit	Urgency	25% of sales from new products	Reduce defects to less than 1%	Improve customer loyalty	ROI of 18% plus	Weighted total
	2.0	3.0	2.0	2.5	1.0	1.0	3.0	
Project 1	1	8	2	6	0	6	5	66
Project 2	3	3	2	0	0	5	1	27
Project 3	9	5	2	0	2	2	5	56
Project 4	3	0	10	0	0	6	0	32
Project 5	1	10	5	10	0	8	9	102
Project 6	6	5	0	2	0	2	7	55
⋮								
Project *n*	5	5	7	0	10	10	8	83

FIGURE 2.3

Applying a Selection Model

- Project Classification
  - –Deciding how well a strategic or operations project fits the organization's strategy.
- Selecting a Model
  - –Applying a weighted scoring model to bring projects to closer with the organization's strategic goals.
    - Reduces the number of wasteful projects
    - Helps identify proper goals for projects
    - Helps everyone involved understand how and why a project is selected

Project Proposals

- Sources and Solicitation of Project Proposals
  - –Within the organization
  - –Request for proposal (RFP) from external sources (contractors and vendors)
- Ranking Proposals and Selection of Projects
  - –Prioritizing requires discipline, accountability, responsibility, constraints, reduced flexibility, and loss of power.
- Managing the Portfolio
  - –Senior management input
  - –The priority team (project office) responsibilities

Date _____ Number _____

Project Title _____

Responsible Manager _____ Project Manager _____

☐ _____	☐ General support	☐ Quality	☐ Legal	☐ New product
☐ _____	☐ _____	☐ Cost reduction	☐ Replacement	☐ Capacity
☐ _____	☐ _____	☐ _____	☐ _____	☐ _____

YES ☐ NO ☐ The project will take more than 500 labor hours?
YES ☐ NO ☐ The project is a one-time effort? (will not occur on a regular basis)
YES ☐ NO ☐ The project proposal was reviewed by the product manager?

Problem definition

Describe the problem/opportunity.

Goal definition

Describe the project goal.

Objective definition

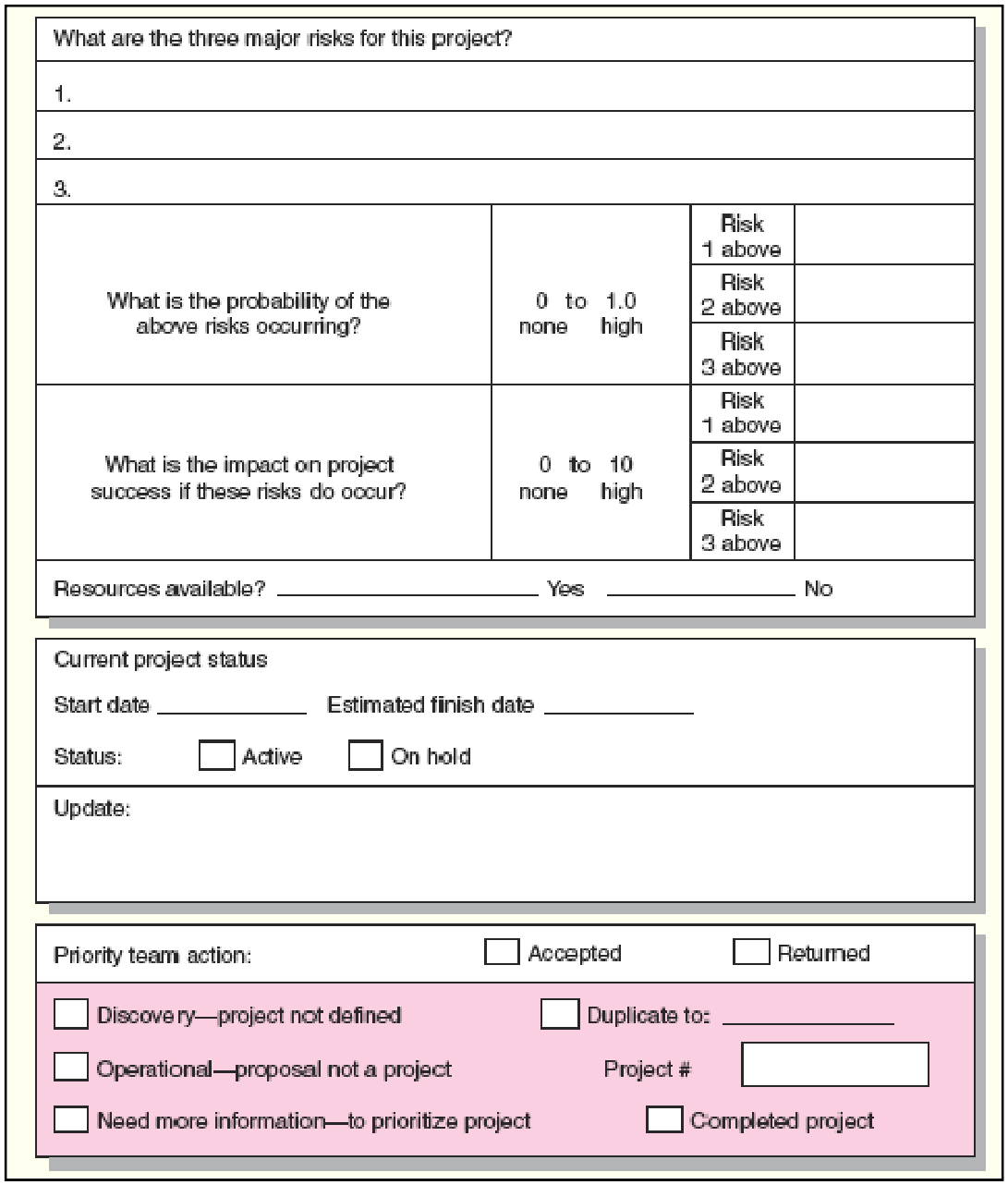
Performance: Quantify the savings/benefits you expect from the project.

Cost: Labor hours, materials, methods, equipment?

Schedule: Overall duration in months.

Major Project Proposal

FIGURE 2.4A



What are the three major risks for this project?

1.

2.

3.

What is the probability of the above risks occurring?	0 to 1.0 none high	Risk 1 above	
		Risk 2 above	
		Risk 3 above	
What is the impact on project success if these risks do occur?	0 to 10 none high	Risk 1 above	
		Risk 2 above	
		Risk 3 above	

Resources available? _____ Yes _____ No

Current project status

Start date _____ Estimated finish date _____

Status: ☐ Active ☐ On hold

Update:

Priority team action: ☐ Accepted ☐ Returned

☐ Discovery—project not defined ☐ Duplicate to: _____

☐ Operational—proposal not a project Project # ☐

☐ Need more information—to prioritize project ☐ Completed project

Risk Analysis

FIGURE 2.4B

Managing the Portfolio

- Senior Management Input
  - Provide guidance in selecting criteria that are aligned with the organization's goals
  - Decide how to balance available resources among current projects
- The Priority Team Responsibilities
  - Publish the priority of every project
  - Ensure that the project selection process is open and free of power politics.
  - Reassess the organization's goals and priorities
  - Evaluate the progress of current projects

Project Screening Process

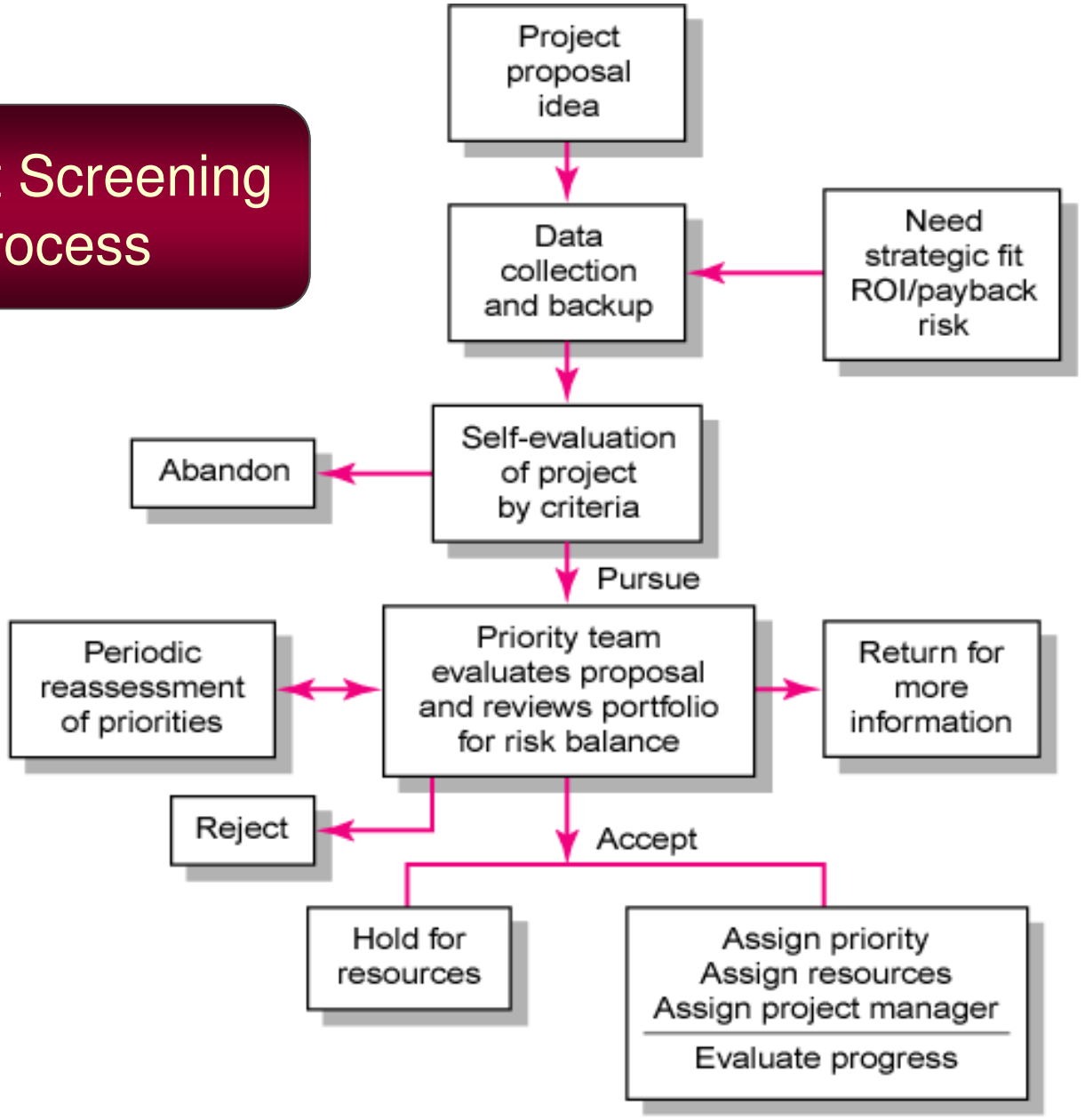


FIGURE 2.5

			Project number			
Must objectives		**Must meet if impacts**	...26	27	28	29
All activities meet current legal, safety, and environmental standards		Yes-Meets objective No-Does not meet obj N/A-No impact	n/a			
All new products will have a complete market analysis		Yes-Meets objective No-Does not meet obj N/A-No impact	yes			
Want objectives	**Relative Importance 1-100**	**Single project impact definitions**	**Weighted score**	**Weighted score**	**Weighted score**	**Weighted score**
Provides immediate response to field problems (30)	99	0 ≤ Does not address (1) = Opportunity to fix 2 ≥ Urgent problem	99			
Create $5 million in new sales by 20xx (15)	88	(0) < $100,000 1 = $100,000–500,000 2 > $500,000	0			
Improve external customer service (18)	83	0 ≤ Minor impact 1 = Significant impact (2) ≥ Major impact	166			
( )						
Total weighted score						
Priority						

Priority Analysis

FIGURE 2.6

Project Portfolio Matrix

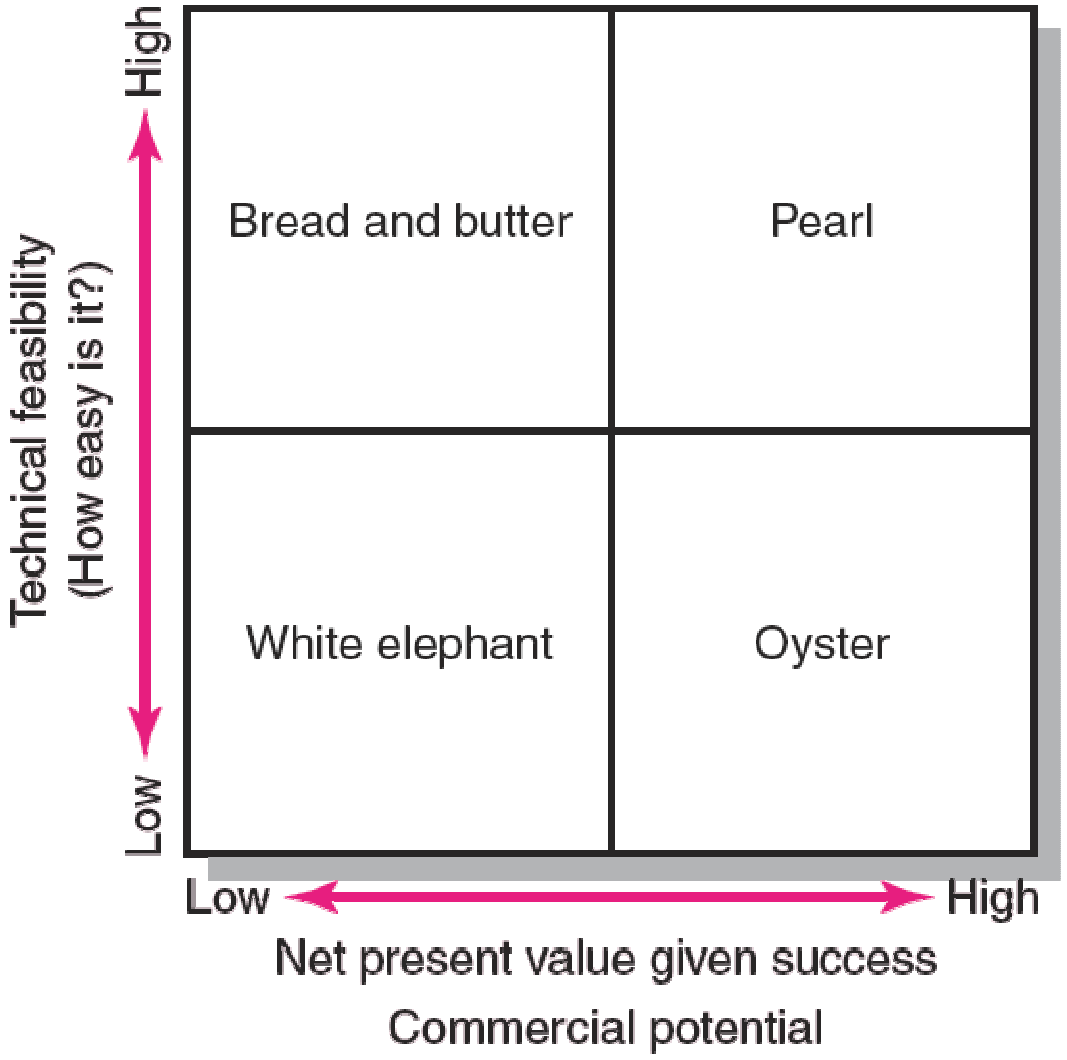


FIGURE 2.7

Project Portfolio Matrix Dimensions

- Bread-and-butter projects
  - Involve evolutionary improvements to current products and services.
- Pearls
  - Represent revolutionary commercial advances using proven technical advances.
- Oysters
  - Involve technological breakthroughs with high commercial payoffs.
- White elephants
  - Projects that at one time showed promise but are no longer viable.

Key Terms

Balanced scorecard

Implementation gap

Net present value

Payback

Organizational politics

Priority system

Priority team

Project portfolio

Project screening matrix

Sacred cow

Strategic management process