SOLUTIONS MANUAL

Chapter 2

Project, Program, and Portfolio Selection

At a Glance

Table of Contents

Lecture Notes

Overview

Chapter 2 provides information and suggestions for selecting projects, programs, and portfolios. It emphasizes the importance of aligning projects to business strategy, and it describes the four-stage planning process for project selection. The chapter explains several approaches for selecting projects (including net present value, return on investment payback analysis, and weighted scoring models); describes methods for forming programs and portfolios; and lists the five levels of project portfolio management.

Chapter Objectives

After reading this chapter, you will be able to:
- Describe the importance of aligning projects with business strategy, the strategic planning process, and using a SWOT analysis
- Explain the four-stage planning process for project selection and provide examples of applying this model to ensure the strategic alignment of projects
- Summarize the various methods for selecting projects and demonstrate how to calculate net present value, return on investment, payback, and the weighted score for a project
- Discuss the program selection process and distinguish the differences between programs and projects
- Describe the project portfolio selection process and the five levels of project portfolio management

Instructor Notes

Aligning Projects with Business Strategy

An organization's overall business strategy should guide the project selection process and management of those projects. The What Went Wrong? passage describes what happens when this is not the case. Students understand that they cannot do everything they'd like to do in their personal lives; they must decide what's most important. The same is true for organizations and the many possible projects they could pursue. Discuss strategic planning and using a SWOT analysis. Perhaps use your college or university or some aspect of it as an example, and have students perform a SWOT analysis for it.

Four-Stage Planning Process for Project Selection

Discuss Figure 2-2, emphasizing the importance of starting at the top with strategic planning, then business area analysis, project planning, and finally resource allocation. Just because people are interested in a certain project does not mean it's the best one to do.

It's is important to find out what an organization's business strategy and needs are, and then you can decide on projects and assign resources to them.

Methods for Selecting Projects

Plan to spend the most time on this section. Students often have a difficult time understanding and calculating NPV, ROI, payback, and weighted scores. Go through the examples in the text in class, and do exercises 1 and 2 or similar exercises in class as well. You can also assign homework or test students on these important topics. Open the business case financials and weighted scoring model template files to demonstrate how much a template helps in performing calculations. Also emphasize how to interpret the results of calculations.

Quick Quiz:

1. What do the letters SWOT stand for?
Answer: strengths, weaknesses, opportunities, and threats

2. Why is any NPV for a project that is greater than zero good?
Answer: It means the project is projected to make money for the organization.

3. What is the main benefit of using a weighted scoring model?
Answer: You can use multiple criteria to help select projects.

Program Selection

Explain the difference between projects and programs again, and discuss several ways to create or select programs. Discuss the example of a housing development as a program and what the benefits are of managing it that way. Discuss other programs you are familiar with, ask students for suggestions, or search online for other examples of programs and discuss how programs help save money, save time, and increase authority. Review the Media Snapshot for a good example of program management when creating a series of movies.

Project Portfolio Selection

This section briefly describes what can be a very advanced topic. Focus on the goal of project portfolio management: to help maximize business value to ensure enterprise success. The What Went Right? passage provides several examples. Also go through the five levels of project portfolio management.

Teaching Tip	Use real-world examples to spark student interest to explain the many concepts in this chapter. For example, lottery winners are often given a choice between a lump sum of money or a stream of money spread out over several years. Net present value analysis would help a lottery winner decide which payment form to select.

Quick Quiz

1. What are three of the main benefits of managing projects as part of a program?
Answer: Saving money, saving time, and increasing authority

2. How is project portfolio management different from managing a group of projects or a group of programs?
Answer: Project portfolio management focuses on maximizing business value. It is broader in scope than program management, which is broader in scope than project management.

3. What is the first level of project portfolio management?
Answer: Put all of your projects in one list.

Discussion Questions

1. Aligning projects with business strategy seems like common sense. Why is it so difficult to implement this approach?

2. Why do many people like to start at the bottom of the pyramid for the project planning process instead of at the top?

3. Provide an example of when it would be appropriate to use each of the methods for selecting projects presented in this chapter.

4. Why do program managers often have more authority than project managers? How does this help them in managing programs?

5. How does putting all of your projects in one list help an organization focus on maximizing business value?

Key Terms

balanced scorecard — A methodology that converts an organization's value drivers to a series of defined metrics.
cash flow — Benefits minus costs, or income minus expenses.
directives — The new requirements imposed by management, government, or some external influence.
discount factor — A multiplier for each year based on the discount rate and year.
discount rate — The rate used in discounting future cash flows.
internal rate of return (IRR) — The discount rate that results in an NPV of zero for a project.
mind mapping — A technique that uses branches radiating out from a core idea to structure thoughts and ideas.
net present value (NPV) analysis — A method of calculating the expected net monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time.
opportunities — Chances to improve the organization.
opportunity cost of capital — The return available by investing the capital elsewhere.
payback period — The amount of time it will take to recoup, in the form of net cash inflows, the total dollars invested in a project.
problems — Undesirable situations that prevent the organization from achieving its goals.
required rate of return — The minimum acceptable rate of return on an investment.
return on investment (ROI) — (Benefits minus costs) divided by costs.
strategic planning — The process of determining long-term objectives by analyzing the strengths and weaknesses of an organization, studying opportunities and threats in the business environment, predicting future trends, and projecting the need for new products and services.
SWOT analysis — Analyzing **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats.
weighted scoring model — A technique that provides a systematic process for basing project selection on numerous criteria.