Chapter 3 PMP® Bootcamp: The Project Environment & Selection Guide

Student Name: _____ Date: _____

Introduction: Welcome to the foundational layer of project management! Before we can manage a single task, we must understand the "big picture": Where do projects come from? How are they chosen? What rules and structures do they operate within? This guide will make these complex topics clear and practical.

This document is structured in two parts, following the RMC methodology:

1. **Part 1: The Interactive Worksheet: Engages students with activities, scenarios, and simple questions to build understanding from the ground up.**
2. **Part 2: The Comprehensive Study Guide: A clear, concise reference sheet that defines every required term, perfect for review and exam preparation.**

Part 1: The Interactive Worksheet

Let's build your understanding step-by-step.

Section 1: The Basics - What Are We Working On?

Activity 1: Project vs. Operations
An organization's work is either a project or ongoing operations. Let's distinguish them.

Statement	Project or Operations?
1. The Toyota factory produces 1,000 cars per day.	**_____**
2. Toyota designs a brand-new, self-driving electric vehicle.	**_____**
3. A law firm processes 50 real estate closings a month.	**_____**
4. The same law firm defends a client in a one-of-a-kind major lawsuit.	**_____**

Key Concept: Projects are temporary and create a unique result. Operations. _____

are ongoing and repetitive.

Section 2: The Rules of the Game - Governance & Structure

Governance is the framework of rules, policies, and processes that direct and control an organization. It's the "how we get things done around here."

Activity 2: Who has the Power? (Organizational Structures)
The structure of an organization dictates the project manager's authority. Read the description and identify the structure: Functional, Project-Oriented, or Matrix (Weak, Balanced, or Strong).

Description	Structure
1. The PM is the "king" with full authority. The team reports only to the PM.	**_____**
2. The Functional Manager (e.g., Director of IT) has all the power. The PM is more of a coordinator with very little authority.	**_____**
3. Power is shared. The PM and Functional Manager are equals, which often leads to conflict. The team has two bosses.	**_____**

Section 3: Why THIS Project? - The Selection Process

Projects aren't chosen by accident. They are selected to provide business value. This often involves complex economic measures.

Activity 3: Understanding the Money Metrics
For the PMP exam, you need to know *what these mean* more than how to calculate them. For each metric, circle what is BETTER for the business.

1. **Net Present Value (NPV): The total value of all future cash flows in today's money.**
    - **Higher / Lower is better. (A project with a negative NPV is a "no-go"!) _____**
2. **Payback Period: The time it takes for the project to earn back its initial investment.**
    - **Shorter / Longer is better. _____**
3. **Return on Investment (ROI): The percentage gain on the investment.**
    - **Higher / Lower is better. _____**

Activity 4: Conceptual Costs
Match the concept to the correct definition. It's crucial not to confuse these!

Concept	Letter	Definition
A. Opportunity Cost	**_____**	**Money that has already been spent and cannot be recovered. It should NOT be considered when deciding whether to continue with a project.**
B. Sunk Costs	**_____**	**The value of the project or opportunity that you *did not* choose.**

Scenario: You spent $50,000 on a project that is failing. An executive says, "We can't stop now, we've already spent $50k!" This executive is incorrectly influenced by (Opportunity Cost / Sunk Costs).

Section 4: Your Toolbox & Your Environment

Every project has things that help you and things that constrain you.

Organizational Process Assets (OPAs): Internal "helpers." Think templates, lessons learned, and procedures your company has created to make your life easier.

Enterprise Environmental Factors (EEFs): The "environment" you must work within. Think laws, company culture, market conditions, or the tools you are required to use. You don't control them.

Activity 5: OPA or EEF?
Decide if each item is an OPA (a helper) or an EEF (a constraint/condition).

Item	OPA or EEF?
1. Your company's risk-averse culture.	**_____**
2. A project plan template from your PMO.	**_____**
3. A new government regulation on data privacy.	**_____**
4. Lessons learned from a past project.	**_____**
5. An assumption log from a similar completed project.	**_____**

Part 2: The Comprehensive Study Guide

Use this guide for your review. The "In a Nutshell" column is your quick memory aid.

Concept	In a Nutshell...	Key Details & Definitions
Operations vs. Projects	**Operations = Keep the lights on. Projects = Change the business.**	**Operations: Ongoing and repetitive work to sustain the business. Projects: Temporary endeavors to create a unique product, service, or result.**
Program Management	**Managing related projects together.**	**A group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually.**
Organizational Project Management (OPM)	**The strategy for running ALL projects.**	**A framework that links projects, programs, and portfolios to an organization's strategic goals.**
Organizational Governance	**The rules for the entire company.**	**The overall structure and processes for how the entire enterprise is directed and controlled.**
Project Governance	**The rules for *your project*.**	**The framework for how decisions are made on a specific project, who has authority, and how stakeholders are engaged.**
Functional Org	**Grouped by job function (IT, Mktg).**	**PM has little to no power ("coordinator"). Resources loyal to their department head.**
Project-Oriented Org	**Grouped by projects.**	**PM has high to total power ("king"). Team is co-located and loyal to the project.**
Matrix Org	**A hybrid of Functional and**	**Weak Matrix: PM has low power. Balanced Matrix: PM and Functional Manager share**

	Project-Oriented.	**power. Strong Matrix: PM has moderate to high power.**
PMO	**The Project "Support System."**	**Supportive PMO: Provides templates/training (low control). Controlling PMO: Requires compliance (medium control). Directive PMO: Directly manages projects (high control).**
---ECONOMIC MEASURES---		
Return On Investment (ROI)	**"How much bang for our buck?"**	**(Net Profit / Cost of Investment) x 100. A higher ROI is better.**
Present Value (PV)	**"What is future money worth today?"**	**The value today of a future sum of money. PV = FV / (1 + r)^n.**
Net Present Value (NPV)	**The most important selection metric.**	**The sum of all cash inflows and outflows in today's money. Select projects with the highest positive NPV.**
Internal Rate of Return (IRR)	**The project's interest rate.**	**The discount rate at which the NPV of a project is zero. A higher IRR is better.**
Payback Period	**"How fast do we get our money back?"**	**The time it takes for the project's revenue to equal its cost. A shorter period is better.**
Cost-Benefit Analysis	**Comparing costs to benefits.**	**The result is a Benefit-Cost Ratio (BCR). A BCR > 1 is good. Higher is better.**
Economic Value Added (EVA)	**"Is the project truly profitable?"**	**The project's net profit minus the capital charge (cost of capital). Positive EVA is good.**

Opportunity Cost	**The road not taken.**	**The value of the opportunity or project that was *not* selected.**
Sunk Costs	**Money you can't get back.**	**Expended costs. This money should not be considered when making decisions to continue a project.**
Law of Diminishing Returns	**More is not always better.**	**At a certain point, adding more input (e.g., people, money) will not produce a proportional increase in output.**
Working Capital	**Money to run the business.**	**Current Assets - Current Liabilities. The funds available for day-to-day operations.**
Depreciation	**An asset losing value over time.**	**Can be Straight-Line or Accelerated. An accounting concept.**
---PROJECT ARTIFACTS & ENVIRONMENT---		
Assumption Log	**What we believe to be true.**	**A living document that logs all assumptions and constraints throughout the project lifecycle.**
Constraints	**Things that limit you.**	**Factors that limit the team's options, such as budget, schedule, scope, or resources.**
OPAs	**Internal Helpers**	**Processes & Procedures: Policies, methodologies. Corporate Knowledge Base: Lessons learned, historical data, configuration management databases.**
EEFs	**Internal or External Constraints**	**Internal: Company culture, infrastructure, software tools. External: Market conditions, laws, industry standards, weather.**

Frequently Used Methods	**The way you do the work.**	**Can be Predictive (Waterfall), Adaptive (Agile, e.g., Scrum), or Hybrid.**