ITMG 494 PROJECT SELECTION ASSIGNMENT

PROBLEM ONE

Checklist. Suppose that you are trying to choose which of two IT projects to accept. Your company employs three primary selection criteria for evaluating all IT projects: 1) proven technology, 2) ease of transition, and 3) projected cost savings.

One option, Project Demeter, is evaluated as:

Technology	high
Ease of transition	low
Projected cost savings	high

The second option, Project Cairo, is evaluated as:

Technology	medium
Ease of transition	high
Projected cost savings	high

Construct a table identifying the projects, their evaluative criteria, and ratings. Based on your analysis, which project would you argue in favor of adopting? Why?

PROBLEM TWO

Checklist. Consider the following information in choosing among the four project alternatives below (labeled *A, B, C*, and *D*). Each has been assessed according to four criteria:

- Payoff potential
- Lack of risk
- Safety
- Competitive advantage

Project A is rated:

Payoff potential	high	Safety	high
Lack of risk	low	Competitive advantage	medium

Project B is rated:

Payoff potential	low	Safety	medium
Lack of risk	medium	Competitive advantage	medium

Project C is rated:

Payoff potential	medium	Safety	low
Lack of risk	medium	Competitive advantage	low

Project D is rated:

Payoff potential	high		
Lack of risk	high		
		Safety	medium
		Competitive advantage	medium

PROBLEM THREE

Scoring Model. Suppose the information in Problem 2 was supplemented by importance weights for each of the four assessment criteria, where 1 = low importance and 4 = high importance:

Assessment Criteria:	Importance Weights
1. Payoff potential	4
2. Lack of risk	3
3. Safety	1
4. Competitive advantage	3

Assume, too, that evaluations of *high* receive a score of 3, *medium* 2, and *low* 1. Recreate your project scoring model and reassess the four project choices (*A, B, C*, and *D*). Now which project alternative the best? Why?

PROBLEM FOUR

Scoring Model. Now assume that for Problem 3, the importance weights are altered as follows:

Assessment Criteria:	Importance Weights
Payoff potential	1
Lack of risk	1
Safety	4
Competitive advantage	2

How does this new information alter your decision? Which project now looks most attractive? Why?

PROBLEM FIVE

Discounted Payback. Your company is seriously considering investing in a new project opportunity, but cash flow is tight. Top management is concerned about how long it will take for this new project to pay back the initial investment of $50,000. You have determined that the project should generate inflows of $30,000, $30,000, $40,000, $25,000, and $15,000 for the next five years. Your firm's required rate of return is 15%. How long will it take to pay back the initial investment?

3.10 **Net Present Value**. Assume that your firm wants to choose between two project options:

- Project A: $500,000 invested today will yield an expected income stream of $150,000 per year for 5 years, starting in Year 1.
- Project B: an initial investment of $400,000 is expected to produce this revenue stream: Year 1 = 0, Year 2 = $50,000, Year 3 = $200,000, Year 4 = $300,000, and Year 5 = $200,000.

Assume that a required rate of return for your company is 10% and that inflation is expected to remain steady at 3% for the life of the project. Which is the better investment? Why?

PROBLEM SIX

Net Present Value. A company has four project investment alternatives. The required rate of return on projects is 20%, and inflation is projected to remain at 3% into the foreseeable future. The pertinent information about each alternative is listed in the following chart:

Project Carol	Year	Investment	Revenue Streams
	0	$500,000	0
	1		50,000
	2		250,000
	3		350,000

Project George	Year	Investment	Revenue Streams
	0	$250,000	0
	1		75,000
	2		75,000
	3		75,000
	4		50,000

Project Thomas	Year	Investment	Revenue Streams
	0	$1,000,000	0
	1		200,000
	2		200,000
	3		200,000
	4		200,000
	5		200,000
	6		200,000

Project Anna	Year	Investment	Revenue Streams
	0	$75,000	0
	1		15,000
	2		25,000
	3		50,000
	4		50,000
	5		150,000

Which project should be the firm's first priority? Why? If the company could invest in more than one project, indicate the order in which it should prioritize these project alternatives.