Assignment 4: Management Accounting Case: Cayuga Cookies, Inc.
Due Week 10, Day 7 (225 points)

The specific course learning outcomes associated with this assignment are:

- Determine how capital budgeting is used in long-term financial decisions.
- Apply management accounting concepts to identify and process relevant financial information for decision-making purposes.
- Use technology and information resources to research issues in financial reporting and analysis.
- Write clearly and concisely about financial reporting and analysis using proper writing mechanics.

Assignment:

Sophie Morgan, President of Cayuga Cookies, Inc. (CCI), was trying to decide whether to expand the company by adding a new product line. The proposal seemed likely to be profitable and adequate funds to finance it could be obtained from outside investors.

CCI had long been regarded as a well-managed company. It had succeeded in keeping its present product lines up to date and had maintained a small but profitable position in a highly competitive industry.

The amount of capital presently employed by the company was approximately $4,000,000, and was expected to remain at this level whether the proposal for the new product line was accepted or rejected. Net income from existing operations amounted to about $400,000 a year, and Morgan's best forecast was that this would continue to be the income from present operations.

Introduction of the new product line would require an immediate investment of $400,000 in equipment and $250,000 in additional working capital. A further $100,000 in working capital would be required a year later.

Sales of the new product line would be relatively low during the first year, but would increase steadily until the sixth year. After that, changing tastes and increased competition would probably begin to reduce annual sales. After eight years, the product line would probably be withdrawn from the market. At that time, the company would dispose of the equipment and liquidate the working capital. The cash value of steps to close the product line at that time would be about $350,000.

The low initial sales volume, combined with heavy promotional outlays, would lead to heavy losses in the first two years, and no net income would be reported until the fourth year. The profit forecasts for the new product line are summarized in Exhibit 1.

Morgan was concerned about the effect this project would have on CCI's overall reported profitability over the next three years. On the other hand, "eyeballing" the figures in Exhibit 1 led Morgan to guess that if the proposal were analyzed using after-tax cash flows discounted at 10 percent, it might well show a positive net present value, and hence could be a worthwhile investment opportunity.

Exhibit 1
Income Forecast for New Product Line

Year	Forecasted Incremental Cash Flow from Operations[1] (1)	Depreciation Expense on New Equipment[2] (2)	Forecasted Incremental Income Before Tax (3) = (1 + 2)	Income Tax[3] at 40% (4)	Forecasted Incremental Net Income After Tax[4] (5) = (3 + 4)
1	(350,000)	(50,000)	(400,000)	160,000	(240,000)
2	(100,000)	(50,000)	(150,000)	60,000	(90,000)
3	0	(50,000)	(50,000)	20,000	(30,000)
4	200,000	(50,000)	150,000	(60,000)	90,000
5	500,000	(50,000)	450,000	(180,000)	270,000
6	1,000,000	(50,000)	950,000	(380,000)	570,000
7	900,000	(50,000)	850,000	(340,000)	510,000
8	650,000	(50,000)	600,000	(240,000)	360,000

Notes:

1. In this column, numbers in parentheses indicate cash outflow.
2. In this column, numbers in parentheses indicate an expense (i.e., something that reduces profits). For the purpose of this analysis, we may use these depreciation figures for the determination of both Net Income and Income Tax that will be paid to the government.
3. When forecasted incremental income before taxes is negative, the firm is entitled to a tax rebate at 40%, either from taxes paid in previous years or from taxes currently due on other company operations. Therefore, in this column, numbers in parentheses indicate taxes paid to the government and numbers not in parentheses indicates tax rebates received from the government.
4. In this column, numbers in parentheses indicate a net loss produced by the new product line and numbers not in parentheses indicate a net profit made by this new product line.

Required:

1. Calculate the nominal and discounted payback periods for this proposed project.

2. Calculate the net present value and internal rate of return of the proposed project.

3. Referring to your analysis in parts (1) and (2), what is your recommendation regarding the proposed project under the following three scenarios (note: comment on any similarities or differences in your recommendations across these three scenarios):

    a. If CCI was a private company, owned entirety by Sophie Morgan?
    b. If CCI was a publicly owned company, with shares owned by a large number of small investors, and Morgan purely a salaried administrator?
    c. If CCI was a wholly owned subsidiary of a much larger company and Morgan expected to be a candidate to succeed one of the parent company's top executives who will retire from the company in about two years from now?

Grading:

Grading for this assignment will be based on answer quality, logic/organization of the paper, and language and writing skills, using the following rubric:

Assignment Points	Percentage	Grade
202 – 225	90% – 100%	A
180 – 201	80% – 89%	B
157 – 179	70% – 79%	C
0 – 156	0% – 69%	F

Points: 225	**Assignment 4: Management Accounting Case: Cayuga Cookies, Inc.**			
Criteria	**Unacceptable** **0-69% F**	**Fair** **70-79% C**	**Proficient** **80-89% B**	**Exemplary** **90-100% A**
1. Calculate the nominal and discounted payback periods for this proposed project. Weight: 10%	Did not submit or incompletely analyzed the nominal and discounted payback periods for this proposed project.	Partially analyzed the nominal and discounted payback periods for this proposed project.	Satisfactorily analyzed the nominal and discounted payback periods for this proposed project.	Thoroughly analyzed the nominal and discounted payback periods for this proposed project.
2. Calculate the net present value and internal rate of return of the proposed project. Weight: 50%	Did not submit or incompletely analyzed the net present value and internal rate of return of the proposed project.	Partially analyzed the net present value and internal rate of return of the proposed project.	Satisfactorily analyzed the net present value and internal rate of return of the proposed project.	Thoroughly analyzed the net present value and internal rate of return of the proposed project.
3. Using the metrics calculated in Parts (1) and (2), offer a detailed recommendation on whether or not CCI should pursue this proposed project under three different organizational scenarios (as described in the requirements). Discuss and explain any similarities or differences between these recommendations. Weight: 30%	Did not submit or incompletely analyzed whether or not the proposed project should be pursued under three organizational scenarios.	Partially analyzed whether or not the proposed project should be pursued under three organizational scenarios.	Satisfactorily analyzed whether or not the proposed project should be pursued under three organizational scenarios.	Thoroughly analyzed whether or not the proposed project should be pursued under three organizational scenarios.
4. Clarity, writing mechanics, and formatting requirements. Weight: 10%	Multiple mechanics errors or much of the text is difficult to understand and fails to follow formatting instructions. The text does not flow.	Several mechanics errors make parts of the text difficult to understand; the text does not flow or the discussion fails to justify conclusions and assertions.	More than a few mechanics errors or text flows but lacks conciseness or clarity; assertions and conclusions are generally justified and explained.	Few mechanics errors; text flows and concisely and clearly expresses the student's position in a manner that rationally and logically develops the topics.