ACC00152 Business Finance

Assignment 1: Memo to Management

EYE Ltd., the company for which you work has spent $1.5 million in research and development over the past 6 months developing a range of RFID blocking wallets to protect the users against wireless theft of credit card data. EYE's directors now need to choose between three options for bringing this product to the market. These options are:

Option A: Manufacturing the product "in-house" and selling directly to the market

Option B: Licensing another company to manufacture and sell the product in return for a royalty

Option C: Sell the patent rights outright to the company mentioned in option B

Your Task

Your boss, EYE's CFO John Galt, has asked you to analyse the three different options for bringing this product to the market and draft a memo to the Board of Directors providing recommendations on the alternatives, along with supporting analysis.

John has outlined the following three areas you need to cover in your memo:

1. analyse base case figures for the three options and using NPV as the decision rule;
2. provide recommendations based on the base-case analyses;
3. provide recommendations on further analyses and factors that should be considered prior to making a final decision on the three options (Note. You do NOT have to undertake any further analyses).

Further details for the various options are as follows:

Option A

Two months ago, EYE paid an external consultant $300,000 for a production plan and demand analysis. The consultant recommended producing and selling the product for five years only as technological change will likely render the product obsolete after that time. Sales of the product are estimated as follows:

Year	Estimated sales volume (millions of units)
1	4
2	9
3	10
4	8
5	2

In the first year, it is estimated that the product will be sold for $19 per unit. However, the price will drop in the following three years to $15 per unit and fall again to $10 per unit in the final year of the project, reflecting the effects of anticipated competition and improving technology in the market. Variable production costs are estimated to be $8 per unit for the entire life of the project. Fixed production costs (excluding depreciation) are predicted to be $1 million per year and marketing costs will be $2 million per year.

Production will take place in factory space the company owns and currently rents to another business for $600,000 per year. Equipment costing $30 million will have to be purchased. This equipment will be depreciated for tax purposes using the prime cost method at a rate of 20% per annum. At the end of the project, the company expects to be able to sell the equipment for $3 million.

Investment in net working capital will also be required. It is estimated that accounts receivable will be 5% of sales, while inventory and accounts payable will each be 10% of variable and fixed production costs (excluding depreciation). This investment is required from the beginning of the project because credit sales, inventory stocks and purchases on trade credit will begin building up immediately. All accounts receivable will be collected, suppliers paid and inventories sold by the end of the project, thus the investment in net working capital will be returned at that point.

Option B

OMNI Global Ltd., a multinational corporation, has expressed an interest in manufacturing and marketing the product under license for 5 years. For each unit sold, OMNI will pay a $3 royalty to EYE as part of its licensing agreement. Due to OMNI's international reach and strong distribution networks, it is estimated that they can sell 10% more units each year than EYE.

Option C

As an alternative to a licensing arrangement, OMNI Ltd has offered to buy the patent rights to the product design from EYE for $66 million. This amount would be paid in three equal annual instalments, with the first payable immediately.

General Information Relevant to the Analysis

EYE's cost of capital is 18% and the company is subject to a 30% tax rate. Assume that royalties and patent right payments are treated as assessable income for tax purposes and that tax is paid at the end of the year in which the income is received. The company is not eligible for any research and development tax deductions. During the project analysis period(s), EYE is expected to have other sources of taxable income.

Marking Criteria

Your boss has asked that you structure your memo to begin with a (maximum) one page summary of your method, key findings and recommendations, supported by no more than three additional pages showing input assumptions, estimated cash flows and supplementary analysis detail and discussion.

Table format for presenting numerical analyses is preferable. Ensure that readers will be able to easily follow what you have done. You may wish to use footnotes under tables that clarify calculations, details and/or assumptions where this is not clear from the table itself.

This assignment has a 20% weighting in your overall mark for this unit. It will be marked out of 20. Marks will be allocated as follows:

- Accurate analysis of base case figures (12 marks)
- Sound recommendations on the alternatives founded on base case analyses (1 mark)
- Insightful recommendations for further considerations prior to final decision (5 marks)
- Memo format and professionalism of communication (2 marks).