SCHOOL OF BUSINESS AND LAW

Assignment

Semester 2, 2024

ECF6110 BUSINESS FINANCE

DUE: Sunday 22nd September 2024, 11:59 pm

You are required to attempt the case study "XYZ Company" which accounts for 25% of the assessment for this unit. The objective of the assignment is to allow you to apply the theories, principles, and techniques that you have learned in the class to analyse a business situation. It is important to demonstrate your knowledge of financial concepts, tools, and critical thinking in analysing the case.

The assignment is to be completed **in a group of three to four students**. Please ensure that individual names and student ID numbers of your group members are recorded on the first page of the assignment. The following rules will apply to group work:

- *Every member in the group is expected to attend the group meetings and contribute his/her share of the Assignment work in a timely manner. If this is not done, then marks may be deducted accordingly.*
- *Should team conflict issues arise, then they need to be resolved before submission. Only in cases where every effort has been made to resolve any problems should the lecturer be asked to intervene.*

Submission information

An **electronic copy** of the Assignment that **includes** the group member details (student id and full name) is to be submitted online on Canvas **before the due date**.

Late submission will attract a penalty as per University guidelines. A penalty of 5% of the maximum assignment mark is applied for every calendar day that your assignment is late, and a mark of zero for the assignment submitted after 7 calendar days.

Grading:

Your assignment will be graded on the standard of presentation, good understanding and logical arguments in analysing the problems, and accuracy in deriving the solutions. Please read the assignment rubric for a detailed marking guide.

Extensions:

Requests for extensions must be made in writing before the due date. Requests for extensions on the grounds that you have other assignments due at the same time are very unlikely to be granted. Requests for extensions after the due date must be accompanied by a medical certificate.

As per School's policy, to apply for an extension, please click on https://gi4znwy.onk2.com/Runtime/Runtime/Form/ECU.TNL.Extensions/.

Length and Presentation:

There are no specific word limits; however, the report, including the Appendices, should **not be more than 20 pages** with a 1.5 line spacing and 12 Times New Roman font size. Answers are expected to be literate and coherent.

Referencing:

You must include in-text referencing where appropriate, and all assignments should have a bibliography. All referencing should be in accordance with the University Referencing Guide, which is available from the ECU Library homepage.

Academic Misconduct and Plagiarism

Edith Cowan University regards academic misconduct of any form as unacceptable. If some form of academic misconduct has been committed then an appropriate penalty will be applied as outlined in the ECU Handbook.

Please note that **Turnitin** will check your submitted Assignment for improper citation, potential plagiarism, or collusion by comparing against the academic database and other students' work.

XYZ Company

Please read the case of ***XYZ Company*** before starting this assignment.

Your task as a financial analyst is to prepare a project evaluation report to executive committee of XYZ Company indicating whether the firm should accept or reject the new project. Your report should include the answers to the following Questions 1 to 4. It is important to list your assumptions in applying the project evaluation methods and show clearly the workings in deriving your results. Your assignment will be graded on presentation, understanding of the issues, critical analysis, logical explanation, and accuracy of calculations in solving the problems. The mark allocations for individual questions (including 20 marks for presentation, writing and professional communication) will total to 100 marks and will be scaled to produce a mark consistent with 25% weighting in the unit assessment.

QUESTIONS

1. Prepare cash flow tables (which incorporates taxes and includes initial investment, operating, and terminal cash flows) to examine whether the company should produce the new smart phone. Compute net present value (NPV), payback period and internal rate of return to decide whether the company should produce the new smart phone.

   [30 marks]

2. Undertake research to identify the qualitative factors (i.e. factors which are unquantifiable at present) that would affect the accept/reject decision of the project?

   [10 marks]

3. It is necessary to check if the project made financial sense before it is accepted. Therefore,
   i) Conduct a sensitivity analysis of NPVs to change in the unit price of the new smart phone. Assume the unit price of the phone can deviate to $505 and $525 [Hint: Provide the answers to this question even if you decide to reject the project.]

   ii) What is a break-even (quantity)?

   iii) Conduct a sensitivity analysis of NPVs to change in the quantity sold. Assume the quantity sold can deviate by 10%.

   [30 marks]

4. Consider all information given in the case study and the results derived in Questions 1 to 3. Advise the executive committee on whether they should invest in the new project. Discuss the reasons for your recommendation and the issues the XYZ Company needs to consider given this advice.

   [10 marks]

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Case in Finance
XYZ Company

XYZ Limited is a manufacturer of electronic products. One of the major revenues producing items manufactured by XYZ is a smartphone. This is a unique item with variety of features. However, as with any electronic item, technology changes rapidly. The current smartphone has limited features in comparison with newer models. XYZ limited has spent $800,000 developing a prototype for a new smartphone that has all features of the existing one and includes additional new features. The company spent further $200,000 for marketing study to determine the expected sales for the new smartphone.

The production manager has produced estimates of the costs associated with manufacture of the new smartphone. Variable costs are estimated at $210 per unit and fixed costs for the operation are expected to run at $5.3 million per year. The estimated sales volume is 64,000 units in Year 1; 106,000 units in Year 2; 87,000 units in Year 3; 78,000 units in Year 4; and 54,000 units in the final year. The unit price will be $515. The necessary manufacturing equipment can be purchased for $38.5 million and will be depreciated for tax purposes over a seven-year life (straight line to zero). It is believed the value of manufacturing equipment in five years' time will be $5.8 million. The initial working capital required would be 20% of Year 1 sales. This net working capital will be recouped at the end of the project life. The production manager, however, contends that the release of new smartphone would affect the sales of existing smartphone. The reduction in sales of existing smartphone is expected to be equivalent to reduction in sales of new smartphone by 20% every year.

The company's after-tax cost of capital is 12% per annum. Assume that the company is subject to 30% corporate tax and that the tax is paid at end of the same year.

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