**UNIVERSITY OF SUNDERLAND**

**ASSESSMENT COVER SHEET / FEEDBACK FORM**

**MBA**

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Learning Outcomes Assessed:

Areas for Improvement:

Assessors Signature:

Overall Mark (subject to ratification by the assessment board)

Moderators Signature:

Students Signature: (you must sign this declaring that it is all your own work and all sources of information have been referenced)

General Comments:

Areas for Commendation:

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Feedback relating learning outcomes assessed and assessment criteria given to students:

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# Part A

## 1: Calculation of Ratios

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation | FINANCIAL YEAR 2020 | Detail calculation | FINANCIAL YEAR 2021 |
| a. Gross Profit Margin | (Revenues - COSTS OF GOODS SOLD)/ Revenues \* 100 | (30 – 8) / 30 \*100  = 22 / 30 \* 100  = 0.73  = 73 % | **73 %** | (40 – 9) / 40 \*100  = 31 / 40 \*100  = 0.78 \* 100  = 78 | **78 %** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation | FINANCIAL YEAR 2020 | Formula | FINANCIAL YEAR 2020 |
| b. Net Profit Margin | Net Income/ Revenues \* 100 | (16 / 30) \* 100  = 0.53 \*100  = 53 % | **53 %** | (18.5 / 40) \*100  = 0.46 \*100  = 46 % | **46 %** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation | FINANCIAL YEAR 2020 | Detail calculation | FINANCIAL YEAR 2021 |
| c. Current Ratio | Current Assets/ Current Liabilities | 30.20 / 16.7  = 1.80 | **1.80** | 41 / 30.80  = 1.33 | **1.33** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation 2020 | FINANCIAL YEAR2020 | Detail calculation 2021 | FINANCIAL YEAR2021 |
| d. Quick Ratio | (Current Asset - Inventory)/ Current Liability | (30.2 – 4.9) / 16.7  = 25.3 / 16.7  = 1.51 | **1.51** | (41 – 13.7) / 30.8  = 27.3 / 30.8  = 0.88 | **0.88** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation 2020 | FINANCIAL YEAR2020 | Detail calculation 2021 | FINANCIAL YEAR2021 |
| e. Receivables Collection Period | (Accounts Receivable/ Revenues)\* 365 | (8.8 / 30) \* 365  = 0.2933 \* 365  = 107.07 | **107.07** | (11.6 / 40) \*365  = 0.29 \* 365  = 105.85 | **105.85** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation 2020 | FINANCIAL YEAR2020 | Detail calculation 2021 | FINANCIAL YEAR2021 |
| f. Earnings Per Share | Net Income / Number of Share Outstanding | 16 / 20  = 0.80 or 80 Pence | **0.80** | 18.50 / 20  = 0.92 or 92 Pence | **0.92** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation 2020 | FINANCIAL YEAR2020 | Detail calculation 2021 | FINANCIAL YEAR2021 |
| g. Price Earnings Ratio | Share price/ Earnings Per Share | 2.5 / 0.8  = 3.12 | **3.12** | 3.3 / 0.92  = 3.57 | **3.57** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ratios | Formula | Detail calculation 2020 | FINANCIAL YEAR2020 | Detail calculation 2021 | FINANCIAL YEAR2021 |
| h. Dividend Yield | Dividend per Share/ Share price | 12 / 2.5  = 4.8 | **4.8** | 18 / 3.3  = 5.45 | **5.45** |

## 2: Analysis of company and 2021 ratio comparison

**a) Profitability Ratio**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gross Profit Margin | | | Net Profit Margin | | |
| 2020 | 2021 | 2021 (Industry Average) | 2020 | 2021 | 2021 (Industry Average) |
| 73 % | 78 % | 65 % | 53 % | 46 % | 55 % |

The gross profit margin ratio of the firm is improved significantly in 2021. The main reason is that the firm revenue has been massively increased in 2021. Moreover, the gross profit margin of the firm is higher than the company average of the year 2021 which is 65%. The net profit margin of the firm has been decreased in 2021 compared to 2020. Moreover, the firm is not been able to surpass the company average in 2021. So, the overall performance regarding the profitability ratio is not good in 2021 (Cleartax, 2021).

**b) Efficiency Ratio**

|  |  |  |
| --- | --- | --- |
| Receivables period | | |
| 2020 | 2021 | 2021 (Industry Average) |
| 107.07 | 105.85 | 68 Days |

The receivable collection periods of the firm are 107 days and 106 days in 2020 and 2021. This ratio has been improved in 2021. However, more improvement is required. The company average of this ratio is 68 days. For this reason, the firm has to undertake a significant strategy that can help the entity to collect the receivable amount quickly from the market (Bragg, 2021).

**c) Liquidity Ratio**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Current Ratio | | | Quick Ratio | | |
| 2020 | 2021 | 2021 (Industry Average) | 2020 | 2021 | 2021 (Industry Average) |
| 1.80 | 1.33117 | 1 | 1.51 | 0.88636 | 1 |

The quick ratio of the firm is 1.33 in 2020 and 0.89 in 2021. This ratio has been sharply decreased in 2021. Moreover, the company average of this ratio is 1 in 2021. The current ratio of the firm is also decreased in 2021. However, the firm is been able to surpass the company average of this ratio is 2021 (Team, 2022).

**d) Investor’s Ratio**

**Calculation**

|  |  |  |
| --- | --- | --- |
| EPS | | |
| 2020 | 2021 | 2021 (Industry Average) |
| 0.80 / 80 pence | 0.92 / 92 pence | 50 pence |

|  |  |  |
| --- | --- | --- |
| Price Per Earning Ratio | | |
| 2020 | 2021 | 2021 (Industry Average) |
| 3.12 | 3.57 | 6.5 |

|  |  |  |
| --- | --- | --- |
| Dividend Yield | | |
| 2020 | 2021 | 2021 (Industry Average) |
| 4.8 | 5.454545455 | 3.2 |

The increase in dividend yield is seen to be gained by the firm in comparison to the company average and comparison to the years. The growth in this ratio is reflecting that the investors are attracted to gain a profitable environment by buying a significant amount of dividends from the firm. This helps to strengthen the investor base appropriately for the firm. The growth in the EPS is seen which is appreciable for the firm. The enhancement in the performance is gained by the firm with the decrease in outstanding shares. The growth in the price per earnings ratio is seen but the firm is unable to meet the needs of the company average. A negative impact is created on the firm and also the deterioration in the demand from the investors is seen (Accountinguide, 2021).

**e) Weakness of Ratios**

The lack of net profit margin, lack of receivable collection period, and the inappropriate decline in the current and quick ratio are leading to the establishment of a negative impact on the firm processes. The firm is seen to be unable to meet the needs appropriately along with the company averages. The decline in these areas is creating a major concern environment for the firm. Therefore, the required steps should be undertaken by the firm to enhance the financial environment appropriately (BYJUS, 2021).

# Part B

# Question A

The investment appraisal techniques used for analysis are payback period and accounting rate of return for further analysis. The two options are fast food and coffee houses. The reasons for selecting the two options are the positive and negative value which is suitable for selecting the investment approach.

# A. Accounting rate of return

|  |  |  |
| --- | --- | --- |
| Time | Fast Food | Coffee House |
| Initial year of investment | -82 | -82 |
| 1st year | 20 | 30 |
| 2nd year | 30 | 30 |
| 3rd year | 40 | 40 |
| 4th year | 40 | 50 |
| 5th year | 50 | 30 |

The residual value of fast food investment scheme and Coffee House investment scheme is 18000 £ and 22000 £ respectively. The expected returns of both the projects are 12 %.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Fast Food investment scheme | | | | |
| Time |  | Residual value | Cash Inflow | Cash flow |
| Initial year of investment | 82 |  |  |  |
| 1st year |  |  | 20 | 20 |
| 2nd year |  |  | 30 | 30 |
| 3rd year |  |  | 40 | 40 |
| 4th year |  |  | 40 | 40 |
| 5th year |  | 18 | 50 | 68 |
| Total cash flow after 5 years | | | | 198 |

ARR = Average annual profit / average investment amount

The average annual profit = Total profit of all the five year / Number of year

116 / 5

23.20

Average investment amount = initial investment + residual value / 2

82 + 18 / 2

50

The ARR = 23.20 / 50

= 46 %.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Coffee House investment scheme | | | | |
| Time | Cash Outflow | Residual value | Cash Inflow | Cash flow |
| Initial year of investment | 82 |  |  |  |
| 1st year |  |  | 30 | 30 |
| 2nd year |  |  | 30 | 30 |
| 3rd year |  |  | 40 | 40 |
| 4th year |  |  | 50 | 50 |
| 5th year |  | 22 | 30 | 52 |
| Total cash flow after 5 years |  | | | 202 |

ARR = Average annual profit / average investment amount

The average annual profit = Total profit of all the five year / Number of year

120 / 5

24

Average investment amount = initial investment + residual value / 2

82 + 22 / 2

52

The ARR = 24 / 52

= 46 %.

The accounting rate of return is calculated based on the average profit and initial capital flows. These two determinants help to complete the calculation procedure of the accounting rate of return.

|  |  |  |
| --- | --- | --- |
|  | Fast Food (£ 000) | Coffee House (£ 000) |
| A R R | 46% | 46% |

# B. Payback period

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Time | Fast Food (£ 000) | Coffee House (£ 000) | | Present value factor calculation |  |
| 0 | -82 | -82 |  | Year one = 1 / (1+12%)^1 = 0.892857143 | 0.892857143 |
| 1 | 20 | 30 |  | Year two = 1 / (1+12%)^2 = 0.797193878 | 0.797193878 |
| 2 | 30 | 30 |  | Year three = 1 / (1+12%)^3 = 0.711780248 | 0.711780248 |
| 3 | 40 | 40 |  | Year four = 1/ (1+12%)^4 = 0.635518078 | 0.635518078 |
| 4 | 40 | 50 |  | Year five = 1/ (1+12%)^5 = 0.567426856 | 0.567426856 |
| 5 | 50 | 30 |  |  |  |
| Residual value | 18 | 22 |  |  |  |
|  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| Fast Food (£ 000) | | | | |  |
| Time | Cash Outflow | Residual value | Cash Inflow | Cash flow |  |
| 0 | 82 |  |  |  |  |
| 1 |  |  | 20 | 20 |  |
| 2 |  |  | 30 | 30 |  |
| 3 |  |  | 40 | 40 |  |
| 4 |  |  | 40 | 40 |  |
| 5 |  | 18 | 50 | 68 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| Time | Cash flow | Net cash flow | PV factor | DCF | Cumulative discounted cash flow |
| 0 | -82 | -82 | 1 | -82 | -82 |
| 1 | 20 | -62 | 0.89286 | 17.85714286 | -64.14285714 |
| 2 | 30 | -32 | 0.79719 | 23.91581634 | -40.2270408 |
| 3 | 40 | 8 | 0.71178 | 28.47120991 | -11.75583089 |
| 4 | 40 | 48 | 0.63552 | 25.42072312 | 13.66489223 |
| 5 | 68 | 116 | 0.56743 | 38.58502621 | 52.24991844 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| T | Previous time period CCF was negative | 3 |  |  |  |
| P | Absolute value CCF at the end of period T | 11.75 |  |  |  |
| Q | importance of DCF in the next period after T | 25.42 |  |  |  |
|  |  |  |  |  |  |
| Payback Period = | T + P/Q |  |  |  |  |
|  | 3.462627852 |  |  |  |  |
|  | 3.46 years. |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Coffee House (£ 000) | | | | |  |
| Time | Cash Outflow | Residual value | Cash Inflow | Cash flow |  |
| 0 | 82 |  |  |  |  |
| 1 |  |  | 30 | 30 |  |
| 2 |  |  | 30 | 30 |  |
| 3 |  |  | 40 | 40 |  |
| 4 |  |  | 50 | 50 |  |
| 5 |  | 22 | 30 | 52 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| Time | Cash flow | Net cash flow | PV factor | DCF (CF X PV) | Cumulative discounted cash flow |
| 0 | -82 | -82 | 1 | -82 | -82 |
| 1 | 30 | -52 | 0.89286 | 26.78571429 | -55.21428571 |
| 2 | 30 | -22 | 0.79719 | 23.91581634 | -31.29846937 |
| 3 | 40 | 18 | 0.71178 | 28.47120991 | -2.827259457 |
| 4 | 50 | 68 | 0.63552 | 31.7759039 | 28.94864444 |
| 5 | 52 | 120 | 0.56743 | 29.50619651 | 58.45484095 |
|  |  |  |  |  |  |
| T | Previous time period CCF was negative | 3 |  |  |  |
| P | Absolute value CCF at the end of period T | -2.83 |  |  |  |
| Q | importance of DCF in the next period after T | 31.78 |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| Payback Period = | T+ P/Q |  |  |  |  |
|  | 3.089049717 |  |  |  |  |
|  | 3.08 |  |  |  |  |

The payback period of the two options shows the total cash flows and their respective cumulative cash flows over the period of five years.

|  |  |  |
| --- | --- | --- |
| Year | Fast Food (£ 000) | Coffee House (£ 000) |
| Payback Period | 3.46 | 3.08 |

# C. Selection of the above investment appraisal techniques

**Accounting rate of return table**

|  |  |  |
| --- | --- | --- |
| Alternative investment Proposal | Investment method | The time period is taken for recovering the initial invested amount |
| Fast Food | Accounting rate of return | 48% |
| Coffee House | Accounting rate of return | 49% |

**Payback selection criterion table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Alternative investment Proposal | Investment method | Margin for selection | Selection process | The time period is taken for recovering the initial invested amount |
| Fast Food | Payback period | High | Rejected | 3.46 |
| Coffee House | Payback period | Low | Selected | 3.08 |

The two options fast food and coffee houses show different payback periods and ARR. The assumption to select the right proposal for future investment growth depends on the value of the payback period which needs to be lower and ARR which needs to be high respectively. The coffee houses fall under the assumption which shows the lower value of the payback period (Cleartax, 2021).

# Part C: Capital Budgeting and Source of Finance

## Question a

### Explanation and critical evaluation on the process of capital budgeting

Capital budgeting helps the company in making the planning expenditures. By using capital budgeting, the company can also generate the benefits that it gets in the future in return on expenditures. It works as a magical instrument for the company as it evaluates all the stages that the company will face in the future after investing in any project. Ultimately, it protects the company from wasting its fund. Along with this, it provides direction to the company for making a profitable investment. The company has to properly read out the process of capital budgeting before using it. It is because the working system of capital budgeting depends on the company's operating system. So, it must be appropriate and flexible that can provide accurate results to the company. Capital budgeting is the type of instrument which makes the accurate prediction of the result that the company gets after one year or more. If the company can invest in any of the projects and cannot use the capital budgeting then the company has to wait for one year for getting a return on investment. The time and value of the company become lapsed if the project fails in fulfilling the target of the company. Hence, it is profitable for the company to use capital budgeting accurately by following the process. The process involved in capital budgeting are evaluated below:

**Process 1**

Firstly, the company has to generate the proposal of investments for the accurate result of capital budgeting. The proposals can provide the reasons for investments to the company. The identification of the proposal is important for fulfilling the objective of the firm. In the simple term, the project cannot work perfectly without getting an investment opportunity (Accountlearning, 2021).

**Process 2**

Capital budgeting can only work accurately if the company fulfills the requirements of the process sequentially. As the company fulfills the identification of the proposal, so it can undertake the proposal for checking its desirability. The proposal work to maximize the market value of the company by matching the objective. Hence, in this step, the company will evaluate the appropriate criteria for checking the proposal's desirability.

**Process 3**

After the completion of the first and second steps of the capital budgeting process, the company will get a profitable project for making investments. However, the different businesses have their requirements. So, the proposals cannot be selected separately. But, the project can be selected according to the proposal. Hence, in the third step, the selection of the project has been done.

**Process 4**

As the selection of the project and implementation of the proposal has been completed, the company can accurately check the performance of the project or the return on investments. If the return will fulfill the expectation of the company then the company will select the project for future investment (Deskera, 2021).

## Question b

### Explanation and critical evaluation on the main sources of finance for the company's working capital

The revolving of the company's cash into supplies and again converted into cash but higher than the company's cash. This continuous circulation of cash in the company can form the working capital. Hence, the working capital is the part of the capital that is generated by using the capital. The cash generated by using the capital is the profit of the company and the part of that profit is the working capital of the company. This working capital is considered as the asset of the company as it works to fulfill the future requirements of the business. It can not only work in fulfilling the requirements of the business as well as it works to protect the company from the effect of risks created in the future. So, the company needs to keep enough cash in the company account for future obligations. It can only be possible for large companies as they earn a large profit. But, for small companies, it is quite possible to create working capital. They cannot have the ability to earn large profits as their business capacity is small. Due to this problem, many of the small companies fail to expand their business. They mostly required funds for expanding the business and to fulfill the requirements of the company. Hence, they have to take the help of sources of finance for the business health. Most of the difficulties faced by an firm are due to the lack of funds. However, money is essential for the businesses for the day-to-day operations (Hindustantimes, 2022). The different sources of finance have been used by the company for fulfilling the financial needs. The main sources of finance that are mainly used by the company are evaluated below:

**Loans from banks**

The most common and simplest way of getting money that comes to everyone's mind is banks. It is a secured and trusty source which mostly used for securing money. Sometimes, it is useful for companies to fulfill their financial requirements. This source also provides money on credit that is said as a loan. The company can get loans from banks by fulfilling the simplest form of security for getting a large amount. The banks can not only provide loans as well as it provides sufficient time to their customers to pay off the cash. It is helpful for both long-term and short-term finance.

**Trade credit**

Trade credit is the source of short-term financing. It is the type of credit that the company gets from its suppliers. This source can provide the company to pay its bills on the time given by the suppliers. This source is widely used by several companies in recent times. This source is only useful for a short period of time which is less than one year.

**Installment credit**

The company can use this source for getting funds for fulfilling business requirements. By using this source, the company can make trust in eyes of the customers and also increase its market value. However, it is commonly used by companies for increasing their working capital. By using this method, the company can escape from giving a discount to its customers and also earn additional income on selling the product. The company may get profit in a long time but it can successfully increase its sales by the installment credit. The company gets the amount of the product along with interest from its customers on monthly basis. The interest rate is the additional income of the company which is saved for the future (BYJUS, 2021).

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