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ACCOUNTING CASE STUDY REPORT

McPhee Distillers: Financial Health Evaluation for a Whisky Distillery Business

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1. Executive Summary

This report provides an analysis and evaluation of financial health for a whisky distillery business named McPhee Distillers in Vancouver, Canada based on the prepared financial statements. Methods of analysis include ROE by DuPont Analysis as well as measure such as EBITDA margin. Results of analyzed statements show that the business is losing money due to limited margins between the sale price and the costs despite a meaningful cash flow improvement. Kingsley needs to take into consideration this output to develop a proper strategy for the future.

The report finds the prospects of McPhee Distillers in its current financial situation are not very promising. The management needs to take remedial action to reverse the crisis situation. Discussed recommendations included as following and explained in section 3 for each case:

- Increase the sale price.
- Reduce the costs.
- Increase the production and sales.
- Renegotiate deal with Piercy.

To support the preparation and analysis of the financial statement, the following assumptions have been made in order to fill in the statement:

- Sales of whisky are treated as revenue and paid in cash
- First-in, first out (FIFO) method to calculate the Cost of Goods Sold (COGS)
- No returned sales and no taxes
- All fixed costs fall under Selling, General and Administrative expenses (SG&A)
- No dividends are paid
- Assumed selling price: 10,000 CAD
- Discount to Pierce 25%
- Assumed service life of equipment 10 years

2. Financial Statements

The financial statements were derived from provided accounting case: *McPhee Distillers: Accounting Policy Choices in the Preparation of Financial Statements. Published by Ivey in 2016* [1]. Yearly ledger changes, income statement, balance sheet and cash flow statements over period 2014 - 2016 are presented below as table 1 to 4. The corresponding journals and ledgers for each year are included in the appendix section.

Table 1: Yearly ledger changes over 2014 - 2016.

Yearly Ledger Changes			
Account	**Year 0**	**Year 1**	**Year 2**
Cash	750,000	(727,500)	210,000
Inventory	-	1,187,500	(775,000)
PP&E	-	550,000	-
Accounts Payable	-	700,000	(487,500)
Paid-In Capital	750,000	-	-
Revenue	-	2,437,500	2,312,500
COGS	-	1,687,500	1,950,000
Operating Expenses	-	440,000	440,000
Depreciation Expense	-	50,000	50,000
Accumulated Depreciation	-	(50,000)	(50,000)
Intangible Assets	-	50,000	-

**Currency in Canadian dollars (CAD)*

Table 2: Income statement over 2014 - 2016.

Income Statement			
Account	**Year 0**	**Year 1**	**Year 2**
Revenue	-	2,437,500	2,312,500
COGS	-	1,687,500	1,950,000
Gross Profit	**-**	**750,000**	**362,500**
SG&A	-	440,000	440,000
EBITDA	**-**	**310,000**	**(77,500)**
Depreciation Expense	-	50,000	50,000
EBIT	**-**	**260,000**	**(127,500)**
Net Income	**-**	**260,000**	**(127,500)**

**Currency in Canadian dollars (CAD)*

Table 3: Balance sheet over 2014 - 2016.

Balance Sheet			
Account	**Year 0**	**Year 1**	**Year 2**
Assets			
Cash	750,000	22,500	232,500
Inventory	-	1,187,500	412,500
PP&E	-	500,000	500,000
Intangible Assets	-	50,000	50,000
Accumulated Depreciation	-	(50,000)	(100,000)
Total Assets	**750,000**	**1,710,000**	**1,095,000**
Liabilities & Equity			
Accounts Payable	-	700,000	212,500
Paid-In Capital	750,000	750,000	750,000
Retained Earnings	-	260,000	132,500
Total Liabilities & Equity	**750,000**	**1,710,000**	**1,095,000**

**Currency in Canadian dollars (CAD)*

Table 4: Cash flow statement over 2014 - 2016.

Cash Flow Statement			
Account	**Year 0**	**Year 1**	**Year 2**
Net income		260,000	(127,500)
Depreciation		50,000	50,000
Change in Inventory		(1,187,500)	775,000
Change in Accounts Payable		700,000	(487,500)
Total Operating Cash Flows		**(177,500)**	**210,000**
Purchase of PP&E		(550,000)	-
Total Investing Cash Flows		**(550,000)**	**-**
Increase in Paid-In Capital	750,000	-	-
Total Financing Cash Flows	750,000	**-**	**-**
Total Cash Flows	**750,000**	**(727,500)**	**210,000**
Beginning Cash	-	750,000	22,500
Ending Cash	**750,000**	**22,500**	**232,500**

**Currency in Canadian dollars (CAD)*

3. Evaluation & Conclusion

Analysis of the financial statements of McPhee shows some difficulties between 2015 and 2016. Despite an almost constant revenue, there is a contraction of the profitability of the business as the net income dropped significantly between the two actual years of activity, being also negative in the second one.

Furthermore, looking at ratios like the EBITDA margin (see figure 1) we can clearly see that the "efficiency" of the business is decreasing as costs per dollar earned increased. Likewise, also the total assets of the company have dropped, making the picture even worse. The business is not even attractive to new investors as the ROE in the last year of activity has been negative, meaning that for every dollar invested in the business produced a loss. Besides, ROE coefficient went down from 0.25 to -0.15. Kingsley needs to take into consideration this output to develop a proper strategy for the future.

In summary, the business is losing money due to limited margins between the sale price and the costs despite a meaningful cash flow improvement. The founder needs to reconsider the business model she embraced. For this reason, 4 possible approaches are suggested in the following cases:

CASE 1: Increase the sale price

• Assuming that the market is not sensible to the selling price, since is a restricted niche, the price of the barrels can be increased without a relevant contraction of sales.

CASE 2: Reduce the costs

• Lower the costs, risking to reduce the quality of the whisky, or increase production efficiency.

CASE 3: Increase the production and sales

• Assuming that fixed costs are independent to production, increasing production and sales would lower the share fixed cost per item produced. Of course, this is valid only if also sales are increased which is not probable looking at the trend of sales.

CASE 4: Renegotiate deal with Piercy

• Being Piercy a shareholder of the company, is in its own interest to make the company profitable (unless only interested in the discount from sale price), hence a new deal could be signed to reduce the discount and to increase the number of barrels bought by the company.

4. Bibliography

[1] McPhee Distillers: Accounting Policy Choices in the Preparation of Financial Statements. Richard Ivey School of Business Foundation. *Richard Ivey School of Business Foundation*, 2016.

5. Appendix

Table 6: Journal and ledger for year of 2014

Journal			
Debited Account	Credited Account	Debit	Credit
Cash		250,000	
	Paid-In Capital		250,000
Cash		500,000	
	Paid-In Capital		500,000

**Currency in Canadian dollars (CAD)*

Ledger				
Account	Usual Balance	Total Debits	Total Credits	Change from Previous Year
Cash	Debit	750,000	-	750,000
Inventory	Debit	-	-	-
PP&E	Debit	-	-	-
Accoints Payable	Credit	-	-	-
Paid-In Capital	Credit	-	750,000	750,000
Revenue	Credit	-	-	-
COGS	Debit	-	-	-
Operating Expenses	Debit	-	-	-
Depreciation Expense	Debit	-	-	-
Accumulated Depreciation	Debit	-	-	-
Total		750,000	750,000	

**Currency in Canadian dollars (CAD)*

Table 7: Journal and ledger for year of 2015

Journal

Debited Account	Credited Account	Debit	Credit
PP&E		500,000	
	Cash		500,000
Intangible Assets		50,000	
	Cash		50,000
Inventory		1,200,000	
	Cash		1,200,000
Inventory		975,000	
	Cash		975,000
Inventory		700,000	
	Accounts Payable		700,000
Operating Expenses		440,000	
	Cash		440,000
Depreciation Expense		50,000	
	Accumulated Depreciation		50,000
Cash		2,437,500	
	Revenue		2,437,500
COGS		1,687,500	
	Inventory		1,687,500

**Currency in Canadian dollars (CAD)*

Ledger

Account	Usual Balance	Total Debits	Total Credits	Change from Previous Year
Cash	Debit	2,437,500	3,165,000	(727,500)
Inventory	Debit	2,875,000	1,687,500	1,187,500
PP&E	Debit	500,000	-	500,000
Accounts Payable	Credit	-	700,000	700,000
Paid-In Capital	Credit	-	-	-
Revenue	Credit	-	2,437,500	2,437,500
COGS	Debit	1,687,500	-	1,687,500
Operating Expenses	Debit	440,000	-	440,000
Depreciation Expense	Debit	50,000	-	50,000
Accumulated Depreciation	Debit	-	50,000	(50,000)
Intangible Assets		50,000	-	50,000
Total		8,040,000	8,040,000	

**Currency in Canadian dollars (CAD)*

Table 8: Journal and ledger for year of 2016

Journal			
Debited Account	Credited Account	Debit	Credit
Accounts Payable		700,000	
	Cash		700,000
Depreciation Expense		50,000	
	Accumulated Depreciation		50,000
Operating Expenses		440,000	
	Cash		440,000
Inventory		962,500	
	Cash		962,500
Inventory		212,500	
	Accounts Payable		212,500
Cash		2,312,500	
	Revenue		2,312,500
COGS		1,950,000	
	Inventory		1,950,000

**Currency in Canadian dollars (CAD)*

Ledger				
Account	Usual Balance	Total Debits	Total Credits	Change from Previous Year
Cash	Debit	2,312,500	2,102,500	210,000
Inventory	Debit	1,175,000	1,950,000	(775,000)
PP&E	Debit	-	-	-
Accounts Payable	Credit	700,000	212,500	(487,500)
Paid-In Capital	Credit	-	-	-
Revenue	Credit	-	2,312,500	2,312,500
COGS	Debit	1,950,000	-	1,950,000
Operating Expenses	Debit	440,000	-	440,000
Depreciation Expense	Debit	50,000	-	50,000
Accumulated Depreciation	Debit	-	50,000	(50,000)
Total		6,627,500	6,627,500	

**Currency in Canadian dollars (CAD)*

Figure 1: ROE and EBITDA margin analysis for 2015 - 2016