

University of Phoenix Material

Frank Smith Plumbing

Mohammed R. Ahmed, DBA and Betty E. Ahmed, DBA

Read the following case study to complete the Week 4 assignment.

Frank Smith has been a plumber in the college town of Turlock, CA for the last thirty years. All the people who know him call him Frankie because he is friendly, social, and charges a fair price for his services. His business has grown because new customers become repeat customers. He has worked hard to support his family and has raised three children who have attended the local school system. However, in recent years, he has had to work overtime to ensure he has the funds to financially support his daughter in the business program at the local state university. He encourages all his children to pursue a college education because he knows it will be valuable in their futures and, as a rule, Frank has never believed in borrowing money. Every time he has purchased something — such as tools, vehicles, equipment, or even his children's college educations — he has paid in cash.

Frank has been using his plumbing truck for the last 14 years. However, recently it has begun stalling and the mechanic has recommended buying a new fuel-efficient truck rather than repairing his old, gas-guzzling one. Unfortunately, Frank has used all of his money to pay for his living expenses and daughter's college education. He has explored purchasing a new truck and does not have enough cash saved to buy one outright.

Recently, the Smith family got together for dinner, and Frank started explaining that it was time to forego self-employment in favor of working for a plumbing company because he could not afford to buy a new truck. The family reacted in sorrow, lamenting that Frank would be forced to work for a company when he had been running a successful business on his own for so long.

The eldest daughter, Stephanie, a senior studying business administration, listened to her father and after a pause, said, "You do not have to give up your business. You can borrow money from the bank, pay monthly installments on the truck, and still have the independence of owning your own business."

Frank's wife, Elena, joined the conversation and reminded Frank that he has been servicing Hosea Garcia, the manager of the community bank, for the last two decades. Elena told Stephanie to contact Garcia because she was sure he would help Frank get the loan. Stephanie responded that it would not be proper to contact Hosea privately and ask for assistance because, as the manager of the bank, Garcia has to follow strict rules when evaluating the creditworthiness of the borrower before the bank can lend.

Stephanie further explained the importance of ethics in the financial service industry: she reminded her mother that banks, in particular, are very strict when lending money, especially after the 2008 financial crisis. Based on what she learned in her ethics class, Stephanie explained that it was not appropriate to contact the bank manager. Instead, she advised the best approach would be to go through all the financials, prepare cash flow statements for Frank's business, fill out a loan application, provide all the required bank documents and let the bank decide on the loan. Based on the financial information, Stephanie felt that her dad would be approved for the loan.

However, Elena said, "I am not going to take that chance of your dad having to go to work for somebody else. I am going to call Hosea and his wife tomorrow and tell him to help get the loan. You do whatever you need to do, and I will do what I need to do."

This put Stephanie in a difficult position. On one hand, she was aware of the ethical issues involved and on the other hand, she did not want her father to have to give up his business. Unsure of how to handle the situation, Stephanie decided to research and get advice on the ethical issues at school the next day.

In the meantime, Stephanie explained to her father, "Based on what I have learned in business school, entrepreneurship is the key to success, and limited leverage is always good for business. You have been working for over 20 years and based on your income, you should not have any problem borrowing from the bank."

Frank asked his daughter, "Stephanie, how can I make profits and pay this much money for the truck?"

Stephanie replied, "I am going to take all the information, check with the bank, and do a financial analysis to determine whether the investment in the truck is profitable or not. You have paid for my education, and I am going to pay you back by applying my knowledge to help you make a good business decision."

Stephanie gathered the information found in the attached spreadsheet. The information includes the cost of the truck, cost of additional equipment on the truck, cost of capital, tax rate, and the life of the truck. It also includes cash inflows generated from the use of the truck.

Complete the following tasks:

1. Assume you are Stephanie, research whether there is an ethical problem with Elena calling the bank manager and his wife and getting the loan approved. If there is an ethical issue, how should Stephanie convince her mother that it is inappropriate to call the bank manager and his wife for assistance in getting loan approval?
2. Explain why limited leverage is good for business.
3. Based on the given information, tax rate, and depreciation show the profitability of the project so that Stephanie can convince her father to purchase the truck by borrowing money.

Frank Smith Plumbing

Data (Estimated for analysis)								
	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7	Year-8
Project								
Cost of Capital (borrowing)	12.00%							
Cost of Truck	\$200,000							
Cost of additional equipment attached to truck	\$15,000							
Tax rate	35%							
Annual Before Tax & Depreciation Truck Projected Earnings	\$70,000	\$70,000	\$65,000	\$60,000	\$55,000	\$50,000	\$40,000	\$30,000
Depreciation Percentage Rate (MACRS)*	20.0%	32.0%	19.2%	11.5%	11.5%	5.8%	0.0%	0.0%

* The proposed truck has an estimated economic life of seven years but will be treated as a five-year MACRS property for depreciation purposes.

Calculate the following -- light yellow highlighted cells need to be completed

	Year-0	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7	Year-8
Annual Before Tax & Depreciation Truck Projected Earnings									
Depreciation Expense									
Annual Before Tax Truck Projected Earnings →									
Tax									
Annual Projected Truck Earnings →									
Depreciation to add back									
Projected Truck Net Cash Flow									

Decision Criteria:

Years
Years

Pay Back Period
Discounted Pay Back Period (DPB)**
Net Present Value
Internal Rate of Return
Profitability Index

Discounted Cash Flow Needed for DPB Calc.

Recommendations:

Analyze the case study, "Frank Smith Plumbing."

Analyze the "Frank Smith Plumbing's Financial Statement" spreadsheet.

Compare the cost of the truck to the cash flow records

Compile your calculations in a Microsoft® Excel® document.

Develop a 1,050-word analysis and include the following:

- Explain why limited leverage is good for business. Show the profitability of the project so that Stephanie can convince her father to purchase the truck by borrowing money.
- Explain how Stephanie should convince her mother that it is inappropriate to call the bank manager and his wife for assistance in getting the loan approval?
- Analyze whether the investment in the truck is profitable.
- Explain whether it is more beneficial for Frank to close his business.
- Explain what you would do in this same situation.

Format your assignment consistent with APA guidelines.

Click the Assignment Files tab to submit your assignments.