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RESCUE STRATEGY CONCEPT FOR A COMPANY IN A WEAKING MARKET

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Abstract—PT ABC is a company located in Puncak Region West Java. Its main business is providing outdoor training activity, or known as outbound. To support its business, it is also facilitated with accommodation facility. Since the beginning of its business, a proper management principle is not being used properly by this company, therefore there's an indication that this company will go to a bankruptcy. This paper is going to discuss about the alternatives to rescue this company from bankruptcy. Using the Altman's z score prediction model, this paper will try to find out the real condition of this company toward bankruptcy. After that four alternatives of rescue strategy will be analyzed. These strategies are the strategies that hopefully will rescue this company from bankruptcy. The alternatives are refinancing, diversification of business, reorientation of business, or sell the company. Capital budgeting techniques, like NPV, IRR, PBP, etc will be used to analyze it. After that, decision tree will be used to pick the most promising alternative.

Keywords: Bankruptcy, Capital Budgeting, NPV, Decision tree, Altman Z Score

I. INTRODUCTION

PT ABC is a private owned company that was founded in 2007. This company is located in Puncak region, Bogor, West Java, more or less 15 km from Jagorawi exit toll. It is located in a 10 hectare of mountainous place, with a valley and a lake as its attraction.

PT ABC is a company that focusing on providing outdoor activity training, or known as *outbound*. What make this company is different with other outdoor activity provider is that this company is facilitated with accommodation facilities to support its activities. Outdoor activity training has been quite famous recently. Many offices and companies start to use this type of training to improve the quality of their employee. This company provides several type of outdoor activity training, such as team building, leadership, etc. Its unique product is *artbound*, which combine art and outdoor activity as a form of training. To support its activity, this company recruited professional trainer from well known organization, such as wanadri, mahitala, and others.

Since the beginning of its business, this company hasn't managed with a proper business principle, especially in financial term. Due to lack of accounting and financial report, the owner of the company doesn't know the real condition of his business. Moreover, there is a suspicion that the company suffered with a great lost overtime. With this condition, there is a risk of bankruptcy in this company.

This paper will analyze the real business position of the company. This paper will analyze whether this company has a great risk toward bankruptcy or not, using Altman Z score prediction model. After that, it will construct several alternatives of strategies to rescue this company.

II. BUSINESS ISSUE EXPLORATION

In this part, the issue that PT ABC is facing will be explored deeper.

A. Conceptual Framework

From the first part, it is already stated that PT ABC is facing an unknown condition of its business position. Therefore we will firstly construct the real condition of its business using

Altman z score model an financial ratio analysis. This analysis will lead us to a conclusion of this company business condition.

After that several strategies of alternatives will be constructed to be used to rescue the company. Those strategies are refinancing, product diversification, reorientation business, and sell the company. After analyzing each strategy, and find out the value of each strategy, then we will use decision tree analysis to choose the most effective strategy.

B. Method of Data Collection and Analysis

Several data are needed to do the analysis. To understand the real condition of PT ABC Business, its financial statement and balance sheet from 2009-2011 will be analyzed. Using its financial statement and balance sheet its financial ratio will be found out, therefore the real condition of the company will be known, this data also will be used to predict this company toward bankruptcy using Altman Z Score prediction model.

After the real condition of the company is known, the proper strategy to rescue the company will be constructed. To do that several investment data for each strategy will be used. Capital budgeting techniques will be used to analyze the feasibility of the strategy. Selling the company will be the last alternative of strategy as a comparison. To do that, several assumptions will be used. Those assumptions provides in this Table.

Table 1. Assumption Used for Analyzing Strategy

Assumption	Value	Notes
Ri	14%	Bank Jabar Banten Credit rate
Rs	5.25%	Bank Jabar Banten Deposit rate
BI Rate	8.2%	Average of BI rate in last 10 Years
Growth of company after years of projection (g)	9%	Company assumption
Risk Premium Market	12%	IESE Business School, Market Risk Premium Used in 56 Countries in 2011, May 2011
B	1	Private owned company

To calculate the capital budgeting, cost of capital is needed. In this paper, Weighted Average Cost of Capital (WACC) method is used as its cost of capital. Using the assumption above the WACC that is used in this paper is 11.38%.

C. Analysis of Business Situation

To understand the real business situation that PT ABC facing, it will begin with analyzing its financial ratios. Financial ratios that will be used to analyze this company are liquidity ratio, activity ratio, debt ratio, and profitability ratio. The analysis used company's financial statement and balance sheet years 2009 until 2011.

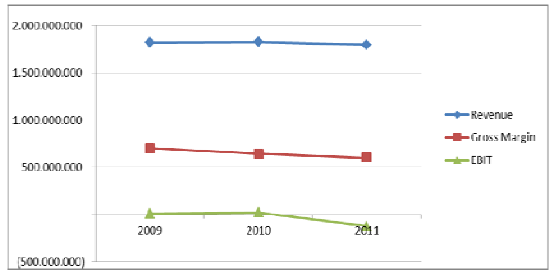

Figure 1. PT ABC Financial Position 2009-2011

From the figure above, it is clear that there is a stagnation condition regarding the company revenue. The down trend of its gross margin and EBIT show that the cost of production and constant cost is constantly growing, therefore the company will suffer a lost if this condition is continue. This condition is happened because the market of outdoor training activity is unstable, and small; therefore the business is not enough to provide enough money to cover its overhead.

To understand the condition deeper, the financial ratios will be analyzed; the result of each ratio is provided in the Table below.

Table 2. Financial Ratios of PT ABC

Financial Ratios	2009	2010	2011
Liquidity Ratio			
Current Ratio	5.14	5.42	2.40
Quick Ratio	4.86	4.86	2.25
Activity Ratio			
Inventory Turnover	73.86	47.07	219.20
Avg Collection period	20.43	21.16	9.28
Total	0.32	0.33	0.34

assets turnover			
Debt Ratio			
Debt Ratio	0.36	0.32	0.33
Times interest earned ratio	8	8	#DIV/0!
Profitability Ratio			
Gross profit margin	38%	35%	34%
Operating Profit margin	1%	1%	-7%
Net Profit Margin	0.5%	1%	-7%
Return on Asset (ROA)	0.2%	0.3%	-2.3%
Return on Equity (ROE)	0%	0%	-2%

From the Table II above, from the liquidity part, it is stated thatPT ABC has a good liquidity ratio from 2009-2011. This ratio indicates that this company has an enough liquidity to cover its current debts. If we look at this ratio alone, it could be concluded that this company is in a good condition, but if we look at it further, there is a risk of inability of this company to cover its current debts. This ratio is tend to go down each years, this condition happens due to its performance that shown in figure 1. The stagnation of revenue and the growing of cost lead to the reducing of current assets of the company, especially cash.

From the Table II above, from the activity ratio part, iy is stated that worst ratio in activity ratios is the total asset turnover. It shows that the number of sales is not good enough comparing to the total assets that has been invested. The assets that owned by the company cannot generate sufficient sales to the company.

From the Table II Above, from the debt ratio part, it is stated that the assets of this company are mostly come from the owner equity. This ratio indicates that this company has a low leverage; this condition will lead to low RoI and RoE. From the times interest earned ratio, we can see that the company has a great risk to pay its long term debts interest. The value outside the range of three to five indicates that risk.

From the Table II above, from the profitability ratio part, we can see that this company has a very low profitability ratio. This ratio is the most indicating ratio of the bad performance of the company.

Low profitability ratio will lead to a low return as well. We can see it from a low return on assets (RoA) and return on equity (RoE). The average value of RoA and RoE in last three year is nearly zero; it indicates that instead of investing his money in this business, it is better for the owner to put his money in the bank.

To analyze the reason why RoE is low, *Du Pont* analysis will be used. *Du Pont* analysis consider three ratios that influence the level of RoE, which describe in this figure below

$$ROE = \frac{Net\ income}{Revenue} x \frac{Revenue}{Assets} x \frac{Assets}{Shareholder\ equity}$$

Figure 2. Du Pont Analysis

Using equation above, the main reason of low RoE level on this company is become clear. The main reason is the low profit margin level. Low profit margin condition raise the risk of bankruptcy. This condition will make the company unable to pay its liabilities from its own activities.

From the financial ratio analysis above, it is clearly stated that this company is in a bad condition. The low level of sales leads to low level of profit margin, and even financial lost. Huge amount of assets cannot generate enough level of sales that leads to low level of return.

From the analysis there is an early indication that this company is heading toward bankruptcy. To have a clear indication of the company risk of bankruptcy, we will use Altman Z Score model to predict the company risk toward bankruptcy. The model used can be seen in figure 2 below
ss Solution

$$Z' = 0.717(X1) + 0.847(X2) + 3.107(X3) + 0.420(X4) + 0.998(X5)$$

Figure 3. Altman Z Score Predicition Model

Where:
X_1 = (Current Assets − Current Liabilities) / Total Assets
X_2 = Retained Earnings / Total Assets
X_3 = Earnings Before Interest and Taxes / Total Assets
X_4 = Book Value of Equity / Total Liabilities
X_5 = Sales/ Total Assets

This model is derivate by Altman in 2000 from his original model that constructed in 1968. The original model is used for open listed company, while this model is for private company.

The conditions that are going to be used as indicator of bankruptcy are:
Z' > 2.9 -"Safe" Zone
1.23 < Z' < 2. 9 -"Grey" Zone
Z' < 1.23 -"Distress" Zone

Using company financial statement and balance sheet, we can get the Altman Z Score for this company. Those values are shown in the Table III below

Table 3. Altman Z Score of PT ABC

	2009	2010	2011
Z Score	1.12	1.19	1.12

It can be seen from the Table III above, this company is in a bad condition. This can be seen from the low Z score that own by this company. Three years in a row this company has Z score below 1.23, which indicates a great risk of bankruptcy.

By analyzing company's financial ratios and using Altman Z Score model, it can be concludes that this company is in a bad condition. This company actually had good level of sales compare to other outdoor activity provider, but because this company owned its own facility that need high maintenance cost, this level of sales is not enough. This company needs improvement in term of sales level. To generate that level of sales, this company needs different strategy from before.

III. BUSINESS SOLUTION

From the previous part, it can be seen that PT ABC is in a bad condition recently. Its level of sales is not enough to cover its level of overhead to maintain its facility. Therefore in this paper, there are several alternative as business strategy solution for this company to be compared.

A. *Alternative of Business Solution*

There are four alternative as business strategy solution for this company to be compared, those strategies are:

1. Refinancing the Company
   This is a strategy that keeps the outdoor activity as main business. The extra investment will be used to improve its outbound facility. Improvement of outbound facility will be used to generate sales from retail customer.
2. Business diversification
   This is a strategy that will use an investment to build an accommodation facility. Therefore the main business of the company will be the accommodation sector, or resort.
3. Business reorientation
   This is a strategy that will totally turn company business orientation. This strategy will make the company as an exclusive resort. This strategy will be achieved by inviting expert investor.
4. Sell the company
   This strategy is analyzed for a comparison. This is a strategy as an exit strategy for the company and to rescue owner investment.

B. *Analysis of Business Solution*

In this section we will analyze each alternative strategy that will used to rescue PT ABC from bankruptcy.

1. Refinancing the company

This strategy is the strategy to invest several amount of money to build extra facility for outbound activity. By doing this, there will be an extra revenue from retail outbound. The investment will also use for working capital to increase the sales from main business activity. The investment needed for this strategy shown in table below.

Table 4. Investment for Refinancing PT ABC

Description	Value
Outbound Facility	Rp 800,000,000
Working Capital	Rp 700,000,000
TOTAL	**Rp 1,500,000,000**

From those total investment the capital structure of the investment is shown on the table below

Table 5. Capital Structure for Refinancing PT ABC

Source	Value	Portion
Equity	Rp 450,000,000	30%
Debt	Rp 1,050,000,000	70%
Total	**Rp 1,500,000,000**	**100%**

This capital structure is used by the assumption of Bank usually will lend money 70% of total investment.

After that, we will use the free cash flow projection for the next 5 years that has been calculated if this strategy of investment is used. This projection is shown in the table below

Table 6. Free Cash Flow Projection Refinance Strategy

Year	FCF
0	Rp (1,500,000,000)
1	Rp (11,343,380)
2	Rp 23,184,397
3	Rp 62,246,506
4	Rp 98,525,226
5	Rp 133,583,593

Using WACC as cost of capital we can calculate the value of its NPV, IRR, PBP, ROE, and ROI of this investment. Those information are shown tn the table below.

Table 7. Investment Conclusion Refinance Strategy

Parameter	Value	Conclusion
Net Present Value	Rp- 1,304,456,817	Not Accepted
Pay Back Periode	>5 years	Not Accepted
ROI	-1%	Not Accepted
ROE	-3.85%	Not Accepted
IRR	-31%	Not Accepted

From the table below we can conclude that this alternative of strategy is not worthy to be done.

2. Business Diversification

This strategy makes the company to have different business, which is accommodation business. With this strategy, the main revenue stream comes from the accommodation business. Due to lack of experience of owner in this sector, we assume that there will be a hard beginning to run this strategy. The investment needed for this strategy is shown in the table below

Table 8. Investment for Diversification Strategy PT ABC

Description	Value
Cottage Construction	Rp 3,750,000,000
Operating Equipment	Rp 1,500,000,000
Development Cost	Rp 2,000,000,000
Preopening Expenses & Working Capital	Rp 500,000,000
TOTAL	**Rp 7,750,000,000**

From those total investment the capital structure of the investment is shown on the table below

Table 9. Capital Structure for Diversification Strategy PT ABC

Source	Value	Portion
Equity	Rp 2,325,000,000	30%
Debt	Rp 5,425,000,000	70%
Total	**Rp 7,750,000,000**	**100%**

As a sensitivity analysis, there will be three scenario regarding this strategy, which is pessimist, most likely, and optimist. Each scenario differs on its occupancy rate. The occupancy rates assumptions is shown on table below.

Table 10. Occupancy rate Assumption for Diversification Strategy PT ABC

Scenario	Occupancy Rate (OR)	Source
Pessimist	70%	Max OR in West Java
Most Likely	50%	Average OR in West Java
Optimist	30%	Min OR in West Java

By using those assumptions, we will have the projection of the investment project as shown below. Due to the amount of the investment this project will be projected as seven year investment. This investment project using the common cost structure used in hotel industry

Table 11. Free Cash Flow Projection Diversification Strategy

Year	FCF		
	Optimist	Most likely	Pessimist
0	Rp (7,750,000,000)	Rp (7,750,000,000)	Rp (7,750,000,000)
1	Rp 1,619,330,137	Rp 1,037,300,264	Rp 456,402,745
2	Rp 2,907,134,625	Rp 2,034,089,816	Rp 1,162,743,538
3	Rp 3,847,257,171	Rp 2,762,128,199	Rp 1,677,763,581

4	Rp 4,121,977,238	Rp 3,036,848,266	Rp 1,952,483,648
5	Rp 4,559,573,023	Rp 3,425,028,839	Rp 2,302,117,956
6	Rp 4,644,966,596	Rp 3,510,422,411	Rp 2,387,511,529
7	Rp 4,941,351,161	Rp 3,750,079,767	Rp 2,571,023,341

Using WACC as cost of capital we can calculate the value of its NPV, IRR, PBP, ROE, and ROI of this investment. That information is shown in the Table below.

Table 12. Investment Conclusion Diversification Strategy

Parameter	Scenario	Value	Conclusion
Net Present Value	Optimist	Rp 8,930,016,520	Accepted
	Most Likely	Rp 4,396,074,326	Accepted
	Pessimist	Rp -115,802,282	Not Accepted
Pay Back Periode	Optimist	3 years	Accepted
	Most Likely	4 years	Accepted
	Pessimist	6 years	Considerable
ROI	Optimist	36%	Accepted
	Most Likely	26%	Accepted
	Pessimist	15%	Considerable
ROE	Optimist	120.19%	Accepted
	Most Likely	85.37%	Accepted
	Pessimist	50.72%	Accepted
IRR	Optimist	36.18%	Accepted
	Most Likely	24,45%	Accepted
	Pessimist	11%	Not Accepted

As we can see from the table above, when the condition is drop into pessimist scenario, the investment project becomes unacceptable. Considering company experience in this industry, there is a bigger possibility for this project to drop into pessimist scenario. Therefore this strategy is considerable, but need an extra caution.

3. Business Reorientation

This strategy will make the company to totally focus on different business. Its location and its contour is very similar with exclusive resort located in other place. To run this strategy, the owner has to share its ownership with other shareholder. This ownership diversification is needed due to lack of experience of the company in this industry. By collaborating with expert investor, it will be easier for the company to grab the market. The investor that will be invited is PT XYZ that has owned several exclusive in Indonesia. The investment needed for this strategy is shown in the table below.

Table 13. Investment for Reorientation Strategy PT ABC

Description	Value (Rp ,000)
Cottage Construction	Rp 21,280,000
Operating Equipment	Rp 2,720,000
Development Cost	Rp 4,171,000
Preopening Expenses & Working Capital	Rp 1,829,000
TOTAL	**Rp 30,000,000**

From those total investment the capital structure of the investment is shown on the table below

Table 14. Capital Structure for Reorientation Strategy PT ABC

Source	Value (Rp ,000)	Portion
Equity	Rp 9,000,000	30%
Debt	Rp 21,000,000	70%
Total	**Rp 30,000,000**	**100%**

As a sensitivity analysis, there will be three scenario regarding this strategy, which is pessimist, most likely, and optimist. Each scenario differs on its occupancy rate. The occupancy rates assumptions is shown on table below.

Table 15. Occupancy rate Assumption for Reorientation Strategy PT ABC

Scenario	Occupancy Rate (OR)	Source
Pessimist	60%	OR benchmark in PT XYZ

Most Likely	50%	Average OR in West Java
Optimist	30%	Min OR in West Java

By using those assumptions, we will have the projection of the investment project as shown below. Due to the amount of the investment this project will be projected as ten years investment. This investment project is using the common cost structure used in hotel industry.

Table 16. Free Cash Flow Projection Reorientation Strategy

Year	FCF		
	Optimist	Most likely	Pessimist
0	Rp (30,000,000)	Rp (30,000,000)	Rp (30,000,000)
1	Rp 944,307	Rp 492,185	Rp (414,763)
2	Rp 20,886,978	Rp 16,464,543	Rp 7,591,734
3	Rp 22,636,071	Rp 17,947,582	Rp 8,540,255
4	Rp 27,271,110	Rp 22,275,649	Rp 15,767,589
5	Rp 30,966,364	Rp 25,655,758	Rp 15,070,943
6	Rp 33,032,767	Rp 27,445,768	Rp 16,223,062
7	Rp 34,954,993	Rp 29,018,371	Rp 17,119,399
8	Rp 37,463,195	Rp 31,169,825	Rp 18,553,628
9	Rp 40,176,363	Rp 33,504,664	Rp 20,127,783
10	Rp 43,070,847	Rp 35,997,926	Rp 21,814,246

Using WACC as cost of capital we can calculate the value of its NPV, IRR, PBP, ROE, and ROI of this investment. That information is shown in the table below.

Table 17. Investment Conclusion Reorientation Strategy

Parameter	Scenario	Value	Conclusion
Net Present Value	Optimist	Rp 119,340,348,000	Accepted
	Most Likely	Rp 92,313,473,000	Accepted
	Pessimist	Rp 40,421,927,000	Accepted
Pay Back Periode	Optimist	4 years	Accepted
	Most Likely	4 years	Accepted
	Pessimist	5 years	Accepted
ROI	Optimist	57%	Accepted
	Most Likely	45%	Accepted
	Pessimist	24%	Accepted
ROE	Optimist	188,72%	Accepted
	Most Likely	151,26%	Accepted
	Pessimist	79,19%	Accepted
IRR	Optimist	55,02%	Accepted
	Most Likely	47.03%	Accepted
	Pessimist	29,57%	Accepted

From the information shown in the table above, we can conclude that this investment project is acceptable, even though the scenario is drop to the pessimist scenario

4. Sell the company

To analyze the value of the company we use the discounted cash flow method. The strategy will be used for analyzing this method is refinancing strategy, because this strategy is the most relevant projection if the company needed to be sold right away. As a comparison for the value of the company, we will also use the book value of the company. By using the assumption provided earlier, the value of the company is shown in the table below.

Table 18. PT ABC Corporate Value using DCF Method

Year	FCF	^P
1	-Rp11,343,379.55	-Rp9,516,258.01
2	Rp23,184,396.85	Rp16,317,111.88
3	Rp62,246,506.14	Rp36,752,443.07
4	Rp98,525,226.19	Rp48,802,539.20
5	Rp133,583,593.15	Rp559,726,628.07
	Corp Value	**Rp652,082,464.20**

The book value of the company is Rp 3,527,966,696

5. Decision tree analysis

To make the decision, decision tree will be used as a method of decision making, by using each expected value (NPV) of each strategy as the basis of the analysis. The decision tree is shown in the figure below. By looking the decision tree it can be concludeed that the best strategy is business reorientation.

Business reorientation with shareholding diversification is can be done if there is a synergy of values and vision between shareholders. If that condition is failed to be done, than this strategy cannot be done. If this strategy is failed, base on the decision tree, the next strategy available is business diversification, but the company has to keep the occupancy rate above 30%

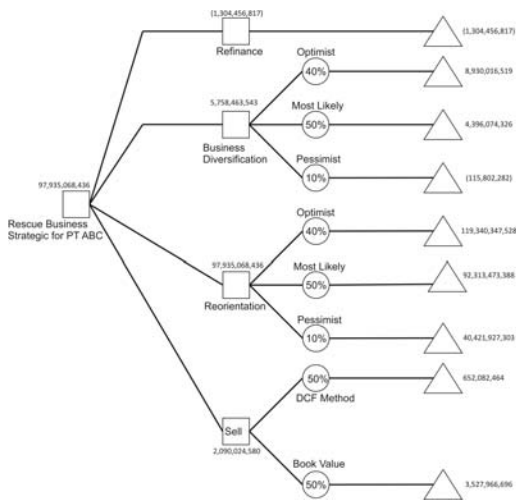

Figure 4. Decision Tree Analysis

IV. CONCLUSION AND IMPLEMENTATION PLAN

From the analysis that has been done above, we can conclude that the best strategy to rescue PT ABC from bankruptcy is by reorientation of business. To do this, the company needs to invite the expert investor.

To implement the strategy there are generally four stages. Those stages are:

1. Preparation

In this stage PT ABC invites the investor and begins to raise the issue and business potential. The PIC of this stage is the owner. This stage will be held for three months

2. Negotiation

In this stage, the investor analyzes the issue and the market deeper. Afterward, the negotiation of share proportion discusses. According to the book value of the company, the number of share that the previous owner will gain after this negotiation is around 30%. But this number could be raised if the previous owner reapprasial his/hers main asset, which is land. If his/hers land is reappraised, the portion of share that he/she will gain will obviously raise. This stage will be held for three months.

3. Development preparation

In this stage, initial work team is developed. All legal aspect is then constructed. The PIC of this stage is the project manager this stage will be held for one year

4. Resort Development

In this stage the resort is begin to develop. Employee recruitment and a fixed organizational structure are then constructed. This stage will be held for one year

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