Opreation management assignment flashcard

As mentioned in Figure 2. 2, the decision tree started with three choices which are produce the products by our company, purchase the products from other companies and do nothing. In each choice, there are two situations which are high sales and low sales. We also allocate the respective probabilities for each branch which is 0. 5.

Next, we calculate the revenue, fixed cost and variable cost in order to determine the gain or loss for each branch. After that, we compute the expected monetary values (EMVs) for the two choices which are produce by own and buy from other firms. The EMV for the three choices have been put above the circle of each choice. The EMV for produce the four main series of products by our company is compute and shown below which is -RM50, 000.

This illustrates that if Pure Wellness wants to produce the supplement, Pure Wellness will suffer from a loss -RM50, 000. This loss may cause Pure Wellness cannot survive in the market if the loss remain constant or increase in the coming period. If Pure Wellness wants to produce the supplement, Pure Wellness may increase the selling prices for each package in sequence the sales will increase significantly. On the same time, Pure Wellness tries to reduce the cost of operation especially the variable cost that increases according to the output. Therefore, the loss can be minimized and Pure Wellness can survive in the health care market. Besides, the EMV for purchase the supplement from other companies is shown on the second branch which is RM75, 000.

This revealed that if Pure Wellness purchases the supplement from other companies, Pure Wellness will gain a profit which is RM75, 000. This profit is

increase the likelihood of Pure Wellness survives in the market that tends to serve the similar customers. Although profit did not guarantee Pure Wellness will always survive in the competitive market, the profit at least reduces the risk Pure Wellness has been kicking out from the health care market. The profit increase Pure Wellness's survival rate in the market. Furthermore, the EMV of doing nothing is RM0 since no action is taken to increase the sales. Finally, Pure Wellness decided to purchase from other companies since the second branch has the highest expected monetary value of RM 75, 000.

Pure Wellness is forgone the decision to produce the supplement because Pure Wellness will suffer a loss of -RM50, 000. Therefore, the best decision is Pure Wellness should purchase the four main series of products from other companies in order to gain a profit and survive in the market. Firstly, our companies which name Pure Wellness Sdn. Bhd use the forecast to predict how well the sales conduct by our business. Forecast requires the sort of the mathematical model to the data collected by our companies. Using the data collected, the management team can take the suitable action by refer to the forecast result.

Thus, the forecast play an important role in the decision making of Pure Wellness Sdn. Bhd. Next, the four main series of the products that our companies produce are blood type series, functional series, beauty series and slimming series. Our companies will forecast the sales of these four types of product in order to make suitable arrangements to increase the sales of the company.

Our companies decide to provide these four types of products, so we need to forecast the sales of product properlyFurthermore, the time horizon we choose are medium-range forecast and long-range forecast. Medium- range forecast used by our companies to forecast sales, and then we can make planning to the sales of our companies. Medium-range forecast spans from 3 months to 3 years. Long-range forecast which spans more than 3 years is used in the research and development of the products.

There are five quantitative models. Under time-series models, we have selected the moving averages and exponential smoothing methods to forecast our demands and sales in the coming time. Besides, we also use the linear regression method under the associative model to make our forecast. Before make the forecast, we will gather the data needed to make our forecast. Our focus of market is Malaysia. The data collection methods that we are going to use include survey of consumers and collect the past historical data of the company to make the forecast of demands and sales.

After make the forecast, we will validate and implement the results. We need to make sure that the model, assumptions and data used by us to make the forecast are valid. Although forecast maybe seldom perfect, but it is vital for the company to predict future events and make the important decisions currently.