

The advantages and disadvantages during the simulation

Business



The Advantages and Disadvantages during the Simulation

Manufacturing strategy should describe the contribution that manufacturing could achieve lower cost, acceptable quality and provide availabilities.

Moreover, the appropriate strategies must fit among manufacturing, marketing function, and providing high return. Financial Statement represents information exhibiting firms' performance. Balance sheet shows financial position of firm at one point in time while income statement shows profit and loose for the previous year (Curkovic, 2000).

The 21st century car challenge is a simulation that illustrates the various impacts of engineering decisions in an automobile industrial and global environment. Engineering decisions impact the financial performances of each competing company and are assessed by customers. Using a good business strategy is the key to win in this simulation. As I did this simulation as a member of the Red Team, we need to define product by making decisions of engineering and sell it by taking marketing decisions, also manufacture, invest, and decide on quality, human resource and loans in order to optimize profitability and return on capital employed (Mega learning, 2012). This report will be divided to be 4parts: advantages and disadvantages of the strategy we did, alternative options, the optimum strategy, and conclusion.

The Advantage and Disadvantage of Strategies we used

Overall Result

At the first period, the Red Team faced to the problems of the high cost of non-quality, low competitive advantage in the next period, low EBIT, low value of share price comparing with competitors, high rate of stocks, and low

percentages of employee morale. Because we focused on IMAGE cars and Family cars only, so we used the strategy of beyond current expectations by improved their quality through invested much in engineering and marketing and we did not invest in manufacturer facilities and Human Resource and Quality due to limited budget. We decided to solve problems in the next period by using product development and market development strategies with focus of IMAGE cars as the main product. The share price and EBIT grew up as a result but other products still had a lot of inventories. So we tried to develop all of the products but there were not enough budgets. Finally, we used the strategy of internal development by increasing Human Resource and Quality to increase the efficiency of producing so in order to this we borrowed some money to reposition our product and used market penetration strategy. Our decision worked out but it led to a new problem which was the short supply so we invested more in facility in order to produce more to complete the needs of customers.

Low cost

Low cost car started as a star in BCG Matrix; from the product line profiles, low cost customer buys acceptable quality of engineering products with cheap price and high ability to deliver of products. However, we did not focus on this product at first because the price of low cost product is quite cheap, it might not make much profit, so when we entered the market, we positioned it as no frills with really low quality of engineering and marketing and the lowest price in the market setting. After doing this strategy, it worked at the beginning due to the high growth rate of this market. Demand was over supply because we produced a small number of low cost cars.

However, every producer applied the same strategy so demand fell down significantly in the period 7 and we were in the bad situation because our product was the worst in the market. To discharge stocks, we reposition this product by using low cost strategy through invested in engineering and marketing. After that we faced with too high cost of production, we solved this problem by reduced cost of engineering in the parts that did not affect customer's perception but effected much on budget such as design part to gain more profit. Finally, this product became a star in BCG Matrix again but we shorted supply even we invested more on manufacturer facility in order to produce more cars.

Family

Family car was positioned as a star in BCG Matrix at first, too. We produced the best car in term of engineering and marketing with normal pricing so there was high demand surplus. Then, we invested much in facility to gain more production capability. However, this hybrid strategy couldn't do for a long time. Prajogo (2007) showed that product quality was predicted differentiation strategy, but not cost leadership strategy. Thus, product quality would not lead to cost concern strategy. High cost of product and the minus of market growth rate force us to increase the price of family car to survive but the decreasing of demand made the result of high inventory rate. So, we set lower price to sell in the 3 last periods but the price wars occurred and had forced producer to small margins. High production capability from invested too much at the beginning leaded us to produce great cars and set the normal price in order to clear stocks, so the product became a cash cow but did not give us lots of profits.

Eco-Friendly

Eco-friendly used to be our problem child in BCG Matrix. We did not focus in this part until the period 10 because Eco-friendly car's customers have high sensitivity to the quality of engineering which is the most expensive to invest comparing with other parts. However, Curkovic et al. (2000) and Forker et al. (1996) showed that product quality and service quality have direct relationship with PBIT. Using no-frill strategy in this market could not satisfy customers so we did not invest in manufacture facility because we did not want a lot of cars in the stocks but still have a huge inventory as a result of very low demand of our cars. To boost sales volume, we decided to reposition and using the hybrid strategy in order to clear stocks. Then we repositioned again to be low cost strategy to gain more profits after losing for a long time. Finally, this product came to be a star at the end. However, as Hendry and other claimed in 2007 that sustainability is a part of quality expectations and the industry as a whole has to reinvent itself to meet changing demands so starting concern in this part lately made us lose a good opportunity from the Eco-Friendly car.

Image

We invested heavily both in quality of engineering and marketing by keeping low ability to deliver but great after sales services. Moving from differentiation to focused differentiation with market penetration strategy make very high profits to the company. The best quality of car gave us the biggest market share, providing with continual demand growth making Image car position in the star of the BCG Matrix. However, when the economy went down, the oil price and production cost was increased.

Demand of the expensive goods like the Image car dropped significantly and Image car turned to be cash cow with increasing rate of inventory. We need to solve this problem by repositioning to be differentiation to reduce cost in order to get higher sale volume and boost demand of product. Then Image became a star again. This product had a high competition so our strategy was being unpredictable; we misled competitors by investing much at first before repositioning to be only differentiation. However, when we found that we got smaller of market share, we disrupted the market by reduced hugely price to spear market.

Alternative options

Low Cost

1. To produce acceptable quality car with medium price setting to gain big market share, invest in the part that can satisfy customer and invest in the parts which have high fix cost such as robustness and technology to reduce average cost in long run because of high economies of scale. Also company should invest in facility due to low cost of investing and to prevent the lack of cars.
2. To control demand and supply balance and cost in order to maintain market equilibrium. Also it improves engineering and marketing but not too much to save cost. The demand won't reach so high so the company doesn't need to invest in facility but needs to invest in quality and human resource in order to saves cost of the failure products.

Family

1. To produce family cars less because of poor market prospects, high cost of production, and high tax rate. Company can just produce acceptable quality

of engineering and marketing with quite low price setting. Positioning this product in low cost strategy is advisable too.

2. As the potential of market can be a cash cow in the BCG Matrix, the company can choose to produce good quality cars and sell in market price to consolidate market. However, company should not invest in facility much even it costs cheap, because of medium rate of economy of scale and learning curve.

Eco-Friendly

1. Environments get more dynamic and become unpredictable, making the creation of planned strategies more difficult (Priem, 2007). However, this market will be sure of highly growth in the long run, so the company should build infrastructure to accommodate future car orders and should improve the engineering quality, especially the consumption part due to an upward trend of oil prices. Even company doesn't want to invest in this product, production of good quality and sold at market price from the beginning still be a good option.

2. To invest and position this product in order to obtain differentiation at the beginning by getting some loan, as well as using hybrid strategy to penetrate market. After the reaching of the economy of scale, the cost will go down automatically.

Image

1. Although company may not invest much in facility because of a small number of market growth rates, Image cars' quality of engineering and marketing should be invested due to the great potential of making profits through positioning in focus differentiation strategy. The limited number of

cars will not make the producer concern about high cost of inventory.

Provided with very low economy of scale and learning curve, it can't be save for the production of high number of cars.

2. Company can use the strategy of differentiation position; it doesn't cost high in both of engineering and marketing parts. The advantage of using this strategy is that the company doesn't need to invest heavily in the low market growth rate product and can spend more on other products but it may lose the opportunity to gain profits from this part and may lead company to create the price war because poor performance of the company trends to promote aggressive behavior (Ferrier, 2002).

The Optimum Strategy

Low Cost

The tendency of this market will grow and the cost of oil and production will rise steadily. This market is an attractive market, even less money making. Investors should consider quality of product, especially the high fix cost of engineering parts and facility investment that is the cheapest of all products and normally, a competitor with average expertise will provide services represent a great threat because this competitor will have to incur significant set up and learning costs (Adner & Qemsky, 2006). Low Cost car has high economy of scale that will make company get a high profit per car and also can be priced slightly higher due to good quality products.

Family

Customer sensitivity to price, marketing, engineering, and ability to deliver is at the medium for all, so company should offer services that customers need, for example, increasing the extensive dealer network. The family car

market has been in decline period, so company should not invest more but should use protect strategy in order to keep market share by produce average quality of car with medium to low price setting.

Eco-Friendly

Eco-Friendly car supposes to be an investment product because of high economy of scale, good market prospects, and increasing of world oil prices. This product has a high potential to be a star, customer has low sensitivity of price so company should use the strategy of differentiation by invests in this product both in quality of engineering and marketing, also should invest in manufacture capability to produce more cars.

Image

Company should focus on the Image car because it can make profits most in all product lines. Investing in quality of engineering and marketing can send this product to positioning in a star in BCG Matrix by using focus differentiation strategy. However, company should concern about direction of market and adapt policy followed demand by trying to stimulate it all the time, for instance, with price reductions, and hyper strategy for a moment in order to take more market share.

Conclusion

The simulation was overall a great learning experience. It made us learn that how important it is to design strategies according to that of the competitors. Also it is important to analyze the market and economy while making the strategy. We need to keep both micro level and macro level factors in mind. Taking the customers' needs into consideration is also necessary as they are the ones who will use our product. Customers' perception can change over

time so we need to make sure that our strategy is applicable in the long run. One should be able to forecast such changes and make contingency plans according to that. This can be very helpful for the company.

Another important thing learned from this project was the impact of changing circumstances and changing strategies on the pricing of the product. Pricing is also an important element as it helps in determining the profits that company gains.

Lastly, one cannot ignore the importance of quality. Even if you are making low cost product, you can cut the frills and benefits but whatever you give to the customer it should be of good quality. Whether it was the low cost product or the eco-friendly one, quality was something that could not be ignored.

In the end, I will just like to point out that in a BCG matrix we should make our products to be either star or cash cow. If your product is a problem child, you need to make strategy that will either make the product ending up to be either a star or a cash cow.

References

Adner, R, & Zemsky, P. (2006). A demand-based perspective on sustainable competitive advantage. *Strategic Management Journal* 27(3): 215-239.

Curkovic, S., Vickery, S. K., and Droge, C. (2000). An empirical analysis of the competitive dimensions of quality performance in the automotive supply industry. *Journal of Operations and Production Management*, Vol. 20, No. 1, pp. 386-403.

Eisenhardt, K. M., & Zbaracki, M. (1992). Strategic decision making. *Strategic Management Journal*, Winter Special Issue 13: 17-37.

Ferrier, W. J. (2002). The impact of performance distress on aggressive competitive behavior: a reconciliation of competing views. *Managerial & Decision Economics* 23: 301–316.

Forker, L. B., Vickery, S. K., and Droge, C. (1996). The contribution of quality to business performance, *International Journal of Operations and Production Management*, Vol. 16, No. 8, pp. 25-43.

Hendry, J., Sanderson, P., Barker, R. G., & Roberts, J. (2007). Responsible ownership, shareholder value and the new shareholder activism. *Competition and Change*, 11(3): 223–240.

Prajogo, D. (2007). The relationship between competitive strategies and product quality. *Industrial Management and data systems*, 107, 69-3.

Priem, R. L. (2007). A consumer perspective on value creation. *Academy of Management Review* 32(1): 219–235.