The Influence of Intangible Benefit Towards Market Share of Manufacturing Company

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The Influence of Intangible Benefit towards Market Share of Manufacturing Company

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Customer satisfaction has an important impact on customer loyalty. Intangible benefit was one of variable that influence customer satisfaction. Satisfied intangible benefit, influenced the customer loyalty, firm's profitability, and enhance market share. This paper presented how intangible benefit influence the market share probability. The case study of this research are mobile phone manufacturers brand A, B, and C. On this research, there are several factors of intangible benefit affecting the customer satisfaction. The weighting process was conducted to rank the most affected factor to the market share. By using simple additive weighting, the most affecting factors is perceived value. Perceived value means the difference between the benefits received and the cost paid for receiving the service or product. Based on the data collected, perceived value affect about 34% of customer switch to other manufacturers. The market share probability was conducted to find the correlation between intangible benefit with market share probability. The method that used is markov chain and chapman-kolmogorov. The result of this study showed that in the first period, the customers of brand A are 41%, but in the tenth period 7.15% of brand A customers switch to other manufacturers. This paper has shown that intangible benefit is very important not only for service company, but also for manufacturing company.

Keywords: Intangible benefit, market share, perceived value.

1. INTRODUCTION

In present decade, the firms level competition is not only on local markets, it has moved to global markets.[1] It is mean that the business competition more aware[2]. Both product and service business need to be more focus on customer satisfaction to be a market winner. Several relationship between firms and customer, such as identifying, establishing, maintaining, enhancing, and when necessary, is needed to satisfy the customer[3]. The benefits are the point of customer satisfaction. The benefits classified into tangible and intangible. Tangible benefits are those that easy to quantify in financial and physical terms whereas tangible benefits are harder to quantify and non-physical[4].

In reality, several companies only compete on tangible benefit without considering the intangible benefit, whereas, intangible benefit devastate their market share. For example, several manufacture companies do not provide a good service to the customer after the product purchased. Disappointment customer will be reflected the negative impact on the product sales. The disappointed customer would switch to other manufacturers and they also will share about their disappointment to others. The intangible benefit is very subjective and tend to employ qualitative measures[5]. Several scientist, such as Zamora et al[6] and Torres-Moraga et al[7] have shown that customer satisfaction is one of factors that enhance the customer loyalty. The market competition success depend on being able to satisfy, attract, and retain customers[8]. Satisfy, attract, retain and other criteria that hard to be quantified is a

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part of intangible benefit. The object of this paper is intangible benefit. The goal of this paper is to analyze the correlation between intangible benefit of mobile phone selling with market share probability. To strengthen this research, the mobile phones that compared in this research are similar in price and specification. In this study, simple additive weighting method proposed to arrange the rank of criteria that have the significant impact to customer loyalty. To forecast the market share probability, markov theory is used.

Intangible benefit, however is not easy to be defined and many researcher have sought to define the intangible benefit[9]. According to Scott[10], intangibles are the capabilities that convey and realize the customer to the firm capacities and as 'enabling' element. Based on the definition, "intangible" is very important to be measured. Generally, the intangible aspect influences the customer loyalty, and customer loyalty, directly influence the economic aspect of firms. Intangible benefit is one of "intangibles" that need to be measured. Intangible benefits related to the service obligation and customer satisfaction of this. Intangible benefit of product including a good relationship between firms and customer. Generally, after purchasing a product, a customer tends to compare the benefit they received form the product with the cost to purchase[2].

Although the exact definition is disputed, it is agreed that intangible benefit is strictly qualitative and it has no standard metric[9]. In, market competition, intangible benefit comes to competitive differentiation. The tangible value of several products can be similar amongst direct competitor, but the intangible benefit that offered can separate itself. For this

reason, in some condition, intangible benefit stand to be more important than tangible benefit. Because intangible benefit has no standard and it is very subjective, there is no specific dimension that have to be measured. Several non physical thing that influence the customer can be considered as intangible benefit.

A loyal customer is extremely important because it is cheaper to maintain than to find a new one and it is easier to maintain a loyal customer[8]. The customer loyalty is a deeply held commitment to re-buy a preferred product/service consistently in future, thereby causing repetitive same brand, despite situational influences and marketing efforts having the potential to cause switching behavior[11]. Several scientists such as Schiffman[12], Dalton[13], Reichheld[14] have different opinions about customer loyalty. But, Sivadas and Baker-Prewitt[15] emphasize that the satisfaction is the essential factor for consumers to become loyal.

According to bahramzadeh and moghareb[16], satisfaction, trust, commitment, perceived value, perceived quality, intuitive image, switching barriers, and empathy are the most important factor that affect customer loyalty. But, in this research, several criteria such as perceived quality need to be clarified. Satisfaction refers to a summary affective response of varying intensity[17]. In intangible benefit scope, the perceived quality means the judgment of service is delivered by service providers[18] such as customer service or seller directly related to buyer. Intuitive image means the customer's intuitions about the firm based on customer's perspective. Information from media and people, private experience, and assumptions can build the customer's perspective.

2. EXPERIMENTAL DETAILS

This study consists of quantitative and qualitative research. The simple additive weighting method was used to arrange the rank of factors that affecting customer loyalty. To collect the possibility data of customers switch to other manufacturers, surveys were distributed to customers of mobile phone brand A, brand B, and other brands. The sample are customers that have been used the brand of mobile phone more than 2 years. To strengthen the result, the samples required to be older than 18 years old.

Market share probability forecasting was based on input data of the customers response. The market data probability forecasting was conducted to forecast the probability of customer in switch to other manufacturers brand in the next period. The forecasting was important to conduct because it is directly related with intangible benefit perceived by customers. Markov chain theory was used to forecast the market share probability. The markov process calculation is show in Eq. 1.

$$P\{X(t_{n+1}) = X_{n+1} \mid X(t_n) = X_n, X(t_{n-1})$$
$$= X_{n-1}, \ldots \ldots, X(t_1) = X_1$$
$$= P\{X(t_{n+1}) = X_{n+1} \mid X(t_n) = X_n\} \qquad (1)$$

Where $t_1 < t_2 < \ldots < t_{n-1} < t_n < t_{n+1}$

In this study, chapman-kolmogorov equation is used to compute the transition probability of market share. The chapman-kolmogorov equation is shown in Eq. 2.

$$P_{ij}^{(n)} = \sum_{k=0}^{M} P_{ik}^{(m)} P_{kj}^{(n-m)} \qquad (2)$$

where I = 0, 1,…, M. j = 0,2,…, M. m = 1, 2, …, n-1. N = m+1, m+2.

3. RESULTS AND DISCUSSION

Based on the customer response and then calculated by using weighting process, it is known that perceived value and trust of customer towards manufacturing company are more important than others criteria. The weighting score of perceived is 0.9 and trust is 0.8525. Based on that result, the probability of

customer switch to other manufacturers, show the perceived value has the highest role to influence the customer. The perceived value affect about 34% of customer decisions switch to other manufacturers. The samples of this case study are 100 people. The pattern of movement is shown in table 1. It's indicate that each manufacturer's gain and loss the customers. Gain customers is based on data collected from the questioner, and the loss customer is affected by unsatisfied perceived value probability. The market share of starting state and second period is shown on table 2.

Based on the market share probability forecasting of the second period, brand A has decreased about 2,97%, brand B has increased the number of market share about 2.25%, and brand C has increased the number of market share about 0.72%. Then, the forecasting of probability transition is calculated by divided number of customer with the starting state number of customer. The probability transitions matrix denoted as P.

$$P = \begin{bmatrix} 0.73 & 0.15 & 0.12 \\ 0.15 & 0.65 & 0.2 \\ 0.12 & 0.32 & 0.56 \end{bmatrix}$$

By using equation Eq. 2, Probability of market share forecasting on the third period denoted as P3 and the tenth period denoted as P10.

$$P3 = [41\% \quad 34\% \quad 25\%] \times \begin{bmatrix} 0.73 & 0.15 & 0.12 \\ 0.15 & 0.65 & 0.2 \\ 0.12 & 0.32 & 0.56 \end{bmatrix} \times$$

$$\begin{bmatrix} 0.73 & 0.15 & 0.12 \\ 0.15 & 0.65 & 0.2 \\ 0.12 & 0.32 & 0.56 \end{bmatrix}$$

$$= [36.29\% \quad 37.49\% \quad 26.22\%]$$

$$P10 = [33.89\% \quad 39.12\% \quad 26.9\%] \times \begin{bmatrix} 0.73 & 0.15 & 0.12 \\ 0.15 & 0.65 & 0.2 \\ 0.12 & 0.32 & 0.56 \end{bmatrix}$$

$$= [33.85\% \quad 39.15\% \quad 27\%]$$

The market share probability forecasting of the tenth period is shown in table 3.

Based on the calculation of market share probability of the tenth period, Brand A loss 7.15% of their customer. Meanwhile, other brands have increased their numbers of market share probability. Brand B has increased the market share probability on the tenth period about 5.15% and brand C has increased the market share probability about 2%. The decrease of market share means the decrease of number of customers and otherwise. This research only considers the affect of perceived quality of each manufacturer, because based on the collected and calculated data, perceived value is the highest criteria that affect the customer loyalty. The unsatisfied customer to the perceived value of a brand will lead the customer to switch to other manufacturer. On the tenth period, the remaining number of customers of brand A are 34 people, brand B are 39 people and brand C are 27 people.

4. CONCLUSION

This study has shown that intangible benefit is important even on manufacturing company. Based on several criteria on this research, perceived value has the highest impact in affecting the customer. The satisfied customer of perceived value will be a loyal customer, but the unsatisfied customer will switch to other manufacturers. Satisfied service especially on perceived value can maintain the number of customer. Several manufacturing companies do not maintain their perceived value, for example on this research is manufacturing company of brand A. Brand A loss 7.15% number of customer. It is about 7 customers loss and switch to other manufacturers because the company can not satisfied their customers. Sample of this study only 100 customers. In reality, brand A has millions customer in the world. If the manufacturer of brand A cannot maintain the satisfaction of their customer, it is very

possible if the manufacturer of brand A loss thousand and even millions customer. Meanwhile, other manufacturers companies strive to increase their service especially on perceived value. On this research has shown that the market share of brand B and brand C is growing up. This research emphasize that intangible benefit especially perceived value is very important not only for service company but also for manufacturing companies.

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Table 1: Pattern of customer movement

Brand	Starting State Number of Customers	Gain Customers of Brand			Loss of Customer of Brand			Second Period Number of customer
		A	B	C	A	B	C	
A	41	0	4	8	0	6	5	38
B	34	2	0	6	5	0	7	36
C	25	1	3	0	3	8	0	26
Total	100							100

Table 2: Market share of starting state and the second period

Brand	Starting State Number of customers	Market Share of Starting State	The Second Period Number of customers	Market Share of The Second Period
A	41	41%	38	38.03%
B	34	34%	36	36.25%
C	25	25%	26	25.72%
Total	100	100%	100	100%

Table 3: Market share of starting state and the tenth period

Brand	Starting State	Market Share of Starting State	The Tenth Period	Market Share of The Tenth Period
	Number of customers		Number of customers	
A	41	41%	34	33.85%
B	34	34%	39	39.15%
C	25	25%	27	27%
Total	100	100%	100	100%