The Effect of Long-Term Customer Satisfaction on Customer Purchase Intention

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Abstract - As a result of globalization and the advent of the era meager profit, operating profit becomes the striving goal of enterprises. The automotive industry is as a path to technological and economic developments. When the car manufacturing got matured, marketing and after services are the main sources to increase profits. The selling trend of Taiwanese automotive market is mainly through regional automobile dealers. It plays the roles for both marketing and after-sale maintenance services. This study analyses the profit structure of the automobile regional dealers in Taiwan to explore the system behavior using system dynamics methodology. The research results show: To enhance long-term customer satisfaction is the key factor for regional automobile dealers to acquire profits.

Keywords – Long-term customer satisfaction, automobile regional dealer, system dynamics

I. INTRODUCTION

Globalization makes the integration of the global economy rapidly. In the globalization, multinational companies devise strategies in a global scope. In the worldwide expansion of its production, research and development and sales bases due to political, economic, social, cultural, and rapid advances in information circulation. Among of these, sales is the part which needs to be localized most, which the factor will achieve the objectives of business profits. To the automotive industry as an example, the automobile industry acts as a path to technological and economic developments. It impacts a lot of related industries and gets attention by many countries. When the car manufacturing became more and more matured, marketing and after-sales service is the main resource to increase profits [1].

The distribution channel of Taiwan's domestic automotive market is mainly through regional dealers, most of the regional dealers are the lower reaches of the brand agents which sell automobiles under the halo of brand manufacturers and agents. In order to improve the market share of their own brand, each maker are continuously responses to market changes and updates products and marketing strategies, even the price competition. Regional dealers are facing severe price competitions of high turnovers and low profits. How to search other profit in this complex structured environment became a major topic of automobile regional dealers. Apart from the regional car dealers use advertising to promote brand awareness to increase consumer purchase intentions to buy new cars to achieve profitability, another major source of profit for the new car sales is the after-sales service business, through new car sales monthly to accumulate after-sales service car quantity of the system, in order to maintain accumulate retained car quantity and further, to increase the car maintenance quantity in the future to achieve the purpose of operating profit. But under rapid changing of the overall car market, the accumulate retained car volume also changes, once the market is in the downstream and the accumulative retained car volume declines caused the declines in service revenue, how to still maintain long-term customer satisfaction and profitability will be another automobile regional dealers’ major issue in the complex uncontained environment.

If to look the region operating profit model of automobile dealers as a system, it is composed by many complex factors, such as: brand awareness, the accumulate retained car volume and long-term customer satisfaction, in addition of the overall environment of the automobile market changes factors, which constitute a complex and dynamic system. This study analyzes the profit structure of the automobile regional distributors in Taiwan to explore the system behaviors using system dynamics methodology, attempt to explain the actions of dealers with dynamic simulations.

II. METHODOLOGY

Lai et al. [2] try to explore determinants of joint action in automobile distributor-supplier relationships. The result is as a distributor provides more differentiate services to customers, the joint action will increase; therefore its performance will be better improved. C. T. Hsiao and J. H. Chen [3] use system dynamics methodology to explore the development behavior and structure of the Taiwanese automotive industry and simulated the impacts of some different consumer characteristics to the development process. However, there is still none of researchers to use overall view to discuss related researches in the profit pattern of Taiwan’s automobile dealers.

The system dynamics (SD) methodology believes that the behavior of a system is principally caused by the system’s structure [4] [5]. Uncovering the structure of a complex system requires mastery of concepts such as feedback, stocks and flows, time delays and nonlinearity [6] [7]. Automobile industry development is a complex and dynamic process that some desired policies might result in undesirable behavior. Oliva and Sterman [8] discussed the erosion of service quality and used SD to explore policies to improve performance and provided implications for organizational design in the service
sector. Schmidt and Gary [9] demonstrated an integration of SD and conjoint analysis to assist the strategic decision making for high-tech small and medium-sized enterprises in the automotive industry. Jan and Hsiao [1] especially research in the development of the automotive industry and apply to automotive industry analysis review of the literature by using system dynamics.

In this study, the research subject is a automobile regional dealer in central Taiwan of Mazda brand (hereinafter referred M brand). The dealer in the region has been awarded the second of the best performance in the operating profit. The major reason in selecting this brand is for the past 10 years, the company re-entered Taiwanese market and rapidly became one of the top five automobile selling companies and shows its marketing ability. The observation period was from January 2005 to March 2006, and model simulations was from January 2005 to January 2007, because of the information was shown by monthly which value was more sensitive than yearly or quarterly. This would further highlight the competitive structure of the automotive market.

A. General Characteristics of Automobile regional dealer business model

Actual case study visits by the company's general manager, associate manager and plant manager can be summarized by the following characteristics.

(a) The high barriers of capital to entry

Apart from car sales, in general most of regional dealers are with after-sale repair and maintenance service functions, in addition to the basic display room settings maintenance services area is also required. Since cars are large volume of products, coupled with the overall indoor bright, spacious and services consideration of the factory line demand, the overall size of buildings requires at least 10,800 square feet of space, so it is high cost of land acquisition. Therefore, the automobile regional dealer is a high capital investment industry.

(b) High technical barriers to entry

As the sales of automobile is complex process which involves issues, such as: automotive product knowledge, auto insurance, auto loans, auto parts sales and business supervision and other related businesses, the sales staff in addition to the general customers with the basic sales techniques, also need a lot of expertise. Automobile is a highly sophisticated, security and stability demanding machine. Technical staffs needed more skill in variety of criteria and the requirements of maintenance quality are also high.

(c) Focus on service quality and customer satisfaction

Automotive products are high-priced durable consumer goods; consumers spend lots of expensive costs in the after-sales maintenance services. In calculation of a car returns for maintenance 4 times per year in average, this is the one of the keys for the regional dealer to make profits, thus, to ensure that customers return for regular maintenances, car dealers are all committed to increase regional service quality and customer satisfaction.

B. The emphasized profitable factors of regional automotive dealers in Taiwan

(a) New car sales and brand awareness

Through the in-depth interviews we figured out that: As most automobile dealers are regional brand dealers, in the front line role of the brand visibility and position in the automotive supply chain, it will certainly strongly feel the pressure. Since all major brands are competing in increasing market share and there are lots of homogeneity products in the market, caused major depots and agents to increase car sales bonuses as the bargain chips of price competition for dealers. As the result of the individual car dealer’s discount competition, the profit for regional dealers had become very modest, in addition with the pressure of minimum sales volume requirement from agents toward regional dealers every month, regional dealers even lose money on sales or in the name of staff to purchase large quantities of the so-called new used cars to meet the sales targets set by agents to obtain sales bonuses, and then re-sell these low-priced used cars or used cars to customers later. The overall sales patterns have become a vicious cycle.

(b) The regular maintenance and repair services after sales

As car sales profit is limited to the huge burden of operating costs, dealers profit sources turns to maintenance services of automotive aftermarket and automotive related products. For example: auto insurance and auto parts, automotive after market repair services have became a major profit source of dealers. Most of the general frequency of vehicle maintenance is for every 5,000 km, according to statistics; generally mileage usage is about 20,000 km for one year for ordinary drivers. After the car purchased, at least three times per year the car would return for maintenances, in addition with the collision or general mechanical failure, the car could be return for maintenance as high as four times per year. The more new car sold, there will be more repairs and maintenance, and the profit will increase too. The current business strategy for regional car dealers is for the evolution of the service plant in order to increase the profit from the services.

III. RESULTS

The forces of globalization opened new markets for enterprises but also brought numbers of competitors, for the Taiwan regional car dealers. The key to profit is a complex, dynamic, interlocking ring causal relationship. This study explores the inter-relationship of factors of regional car dealers by using System Dynamics.

A. The causal relationship between brand awareness and new car sales

The factors which affecting new car sales for regional dealers every month are overall automobile sales agents
on the market to set sales targets for regional distributors and whether that consumers are willing to buy cars. The willingness of consumers to purchase consumer brand awareness, the so-called brand recognition.

The sole agent based on yearly forecast sales number and provided a certain proportion of the amount for the advertisement budgets such as TV media, books, newspapers and magazines to increase brand visibility. According to dealers, each month the average advertising budget per car to set aside is about USD35 on the actual sales, as a regional newspaper and radio advertising costs. In addition, consumers will have a direct bearing on the purchase, which is the amount of money spent on purchasing a new car. In the general process of buying a car, the margin of price discount and car loan interest rate concessions also affect the willingness of consumers to purchase. So cars dealers often introduce zero-interest loans to new concessions.

But dealers, in the ecologically of sales, often facing price competitions from other dealers and distributors of same brand or even different brands. Although M brand dealers have fine cross-trafficking mechanism, but competitions between dealers are still unavoidable under the pressure of the sales target and as a result, price competition on the market became a phenomenon.

B. The affection of accumulated retained numbers of cars towards long-term customer satisfaction

The accumulative number of new car sales has become a major source of after-service business. After-service is targeted mainly on new cars sold which returned for maintenances and repairs. Suggested maintenance mileage for cars are per every 5,000 kilometers, therefore, the long-term cumulative number of new car sold will keep increasing; the relative maintenance of the plant gradually increasing number of car services, and the factory service revenue will be increased. The company used partial of annual revenue to upgrade display rooms, plant facilities and education and training expenses. The upgrading of the quality of training will help to improve the quality of the staff. However, facilities and the upgrading of the quality of personnel will increase customer satisfactions and will contribute to further increase in new car sales. The cumulative numbers of customers over time tenure-growth ratio will loss of a few customers which cause maintenance revenue reduction. The loss of customers in the non-regional distributor owned facility maintenance services increased regional distributors to sell parts of the grant opportunities; however, the proportion is very low. Based on the above-mentioned phenomenon, and as figure 3.2, the cumulative number of tenure-regional vehicle dealer service satisfaction of the long-term positive and negative feedback loops causal figure.

From above, Brand recognition, the accumulative number of customers and maintain long-term customer satisfactions which affect profit of regional vehicle dealers. Through the system dynamics method is to construct Taiwan regional vehicle dealer’s profit of qualitative flow chart in Figure 3.3.

In this study, the dynamic methods are used to build Taiwan automobile regional dealers profit mode. Consumers will buy which one of the major factors is from the long-term customer satisfaction. Regional dealer’s regular input funds to educate and train technical and business staff. Hardware upgraded in facility showrooms and service equipment in order to improve the company’s image. Therefore, based on the quality of maintenance services, business sales staff quality; showroom and service equipment in order to improve the company’s image. Therefore, based on the quality of maintenance services, business sales staff quality; showroom and service quality upgrading facilities will make long-term customer satisfaction rises.

M brand agency commissioned a market survey company, in view of regional distributor customers for a service satisfaction survey which covering the quality of personnel, service quality and hardware facilities in the three major parts of each project are required 0-100 points to measure. In this study mainly the most important one, namely, the overall maintenance experience scores as a long-term basis for the analysis of customer satisfaction.
C. Simulation results

Regional vehicle dealers primarily through monthly sales of new cars to maintain cumulative number of customers. By retained the number of customers for after-sales services to increase profits, constantly upgrading showrooms and service facilities factory hardware, to educate and train internal staffs on a regular basis which indirectly upgrading of long-term customer satisfaction.

In this study explains the long-term customer satisfaction results of the dynamic simulation. Long-term customer satisfaction is based on the scores received by a agent’s commissioned market research conducted by telephone. In January 2005, dealer services facility received a serious complaint by a customer due to quality problem which engine suddenly quenched. The cause was later on discovered due to a generator fault and the car had the same problem 5 months ago and had been replaced. The owner was not satisfied and who also happens to be an object of the market research telephone interview, he gave to the dealer a very low score and cause the dealer only get 40 points in January, 2005. As M brand general agency has a system of rewards and penalties to dealership’s customer satisfaction scores, if dealers’ quarter score is lower than the national average score, dealer will be heavy fined. Thus, the regional dealer also conducted an internal review against this incident in order to improve customer satisfactions. The improvement had really stabilized the growth trend.

From the observations and simulation of figure 3.4, it satisfied the requirement of external efficiency of system dynamics, the overall dynamic model is also affirmed by the senior manager in charge of case study.

IV. DISCUSSION

The simulation results show that: The key factor for Taiwan automobile dealers to make profit is the long-term commitment to enhance customer satisfaction. Regional car dealers can upgrade the quality of maintenance services, plant facilities and operation staffs to improve service quality as well as sales staff training in order to achieve the best long-term customer satisfaction to achieve operating profit target. Regional dealers can not control the external factors - new car sales. This study suggests that dealers can add regional business offices to serve customers and promote new car sales and moreover, to increase the cumulative number of consumers rapidly. The brand awareness can be the upgraded through advertising from agents and distributors.
by increasing the brand's visibility in order to attract the buying intentions of consumers in order to increase new car sales. In addition, meager profit as a result of globalization and the advent of the era as well as the prevalence of internet accesses. Foreign automotive industry through virtual channel sales to provide consumers another shopping platform, thus saving substantial cost and increase profit. But Taiwan's consumer mentalities are still regard for the car as fortune pretentious. In the process of purchasing, sales staff's recommendation and entities contact is still very important aspects. Whether virtual channel sales can be accepted by consumers or not will be pending for further study.

This study is only for a single brand of car dealers' regional research. If there are other brands comparative studies, it will be able to explore the structure of the regional distributors operating profit mode better. The research period of this study is from January 2005 to January 2007. It is suggested to extend the study period, and it will be able to clearly see the effect of changes in the automobile market over the years. Academic scholars who are interested can continue to explore in depth study.

V. CONCLUSION

The profit pattern for regional automobile dealers is a complex dynamic structure, because of barriers of high capital and high-tech; there is only a small quantity of dealers in automobile market. The research results shows the key loop factors of making profits by regional automobile dealers are mainly due to brand awareness, the accumulative retained customer's volume and maintain long-term customer satisfactions. These three loop factors and the interaction of variables forms a dynamic structure.

From the established model of this study we can figure out that overall automotive market economy will affect sales of new cars among regional dealers. This is an important key factor which is affecting the profit of automobile regional dealers. This external factor which regional dealers can not control or manipulation, thus the result is limited and not be easy to achieve the increase in new car sales even regional dealers using advertising budgets allocated to increase band awareness. But for long-term customer satisfaction, dealers still can make efforts and room for manipulation. Once dealers facing poor overall market sentiment, dealers should work to enhance long-term customer satisfaction in order to improve consumer purchase intention to buy, and maintain a company's profitability.

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REFERENCES