Dynamic Evolutionary Model of Customer Loyalty Intentions Based on Product Lifecycle

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Abstract: The driving factors of customer loyalty intentions are dynamic. But so far, there are few studies about dynamic evolutionary mechanism of customer loyalty intentions based on the phases of product lifecycle. The authors attempt to discuss this question and try to make some valuable suggestions for managers.

Keywords: customer loyalty intentions, dynamic evolution, product lifecycle

1 The driving factors of customer loyalty intentions

Kotler (1997) pointed out that the customer loyalty is a latent goal of the strategic marketing plan. The customer loyalty has important influence to the enterprise performance, and it is considered to be a crucial source to the formation of competitive advantage in an enterprise. Oliver (1999) thought customer loyalty is the deep pledge that the customers make to the preferred products and services. Aaker (1991) defined brand loyalty a measure of the attachment that a customer has to a specific brand. So the integrative framework of customer loyalty intentions should include main cognitive as well as affective causes and effects. The main driving factors of customer loyalty intentions include:

1.1 Perceived value
Perceived Value is a customer’s overall evaluation of all the perceive benefits received from products and services compared with the perceived costs he or she gives up or pays. Customer value, based on customer perception, is a customer’s overall evaluation of all the perceived benefits received from products and services compared with the perceived costs he or she gives up or pays. Offering perceived value and customer satisfaction is a way to improve customer loyalty intention and customer reservation. Using attitude theory, we argue that perceived value, as an overall evaluation of performance given price or prices paid, has a more direct influence on customers’ intentions early in a life cycle when customers are gathering information, forming opinions about brands and relationships, and trying to reduce risk.

1.2 Affective commitment
Commitment is a significant part of research on social trade theory, which was used as the explanation of the attitudes among people and the motivation behind the convention behavior. In social science research field, no matter in the study of relationships in trade, marriage or associations, commitment is significant. In long-term relationships, commitment is a significant driver of the interdependence lying in both sides of social resources trade relationships. In marketing and sales field, relationship commitment is used to describe the willingness of long-term trade relationship maintenance between a customer and a company. Relationship commitment distinguishes between affective commitment and calculative commitment (Bendapudi and Berry 1997; Hansen, Sandvik, and Selnes.2003; Johnson et al. 2001) Calculative commitment is due to the benefit relationship lying between both sides. Therefore, each side is willing to have relationship maintenance and to invest costs and energy into it. For example, economic-based dependence on product benefits that is due to a lack of choice or switching costs that make it difficult to change suppliers. (Anderson and Weitz 1992; Dwyer, Schurr, and Oh 1987) Affective Commitment is an attitude structural factor, which shows an emotional lead for a company, a coincidence with a company’s values. Apparently, affective commitment is a more emotional factor.
related to the degree to which a customer identifies and is personally involved with a company and the resulting degree of trust and commitment. (Morgan and Hunt. 1994)

On one hand, the economic motivation maintaining relationships with companies results in customers’ calculative commitment. On the other hand, emotional motivation maintaining relationships with companies results in customer affective commitment.

Customer affective commitment is essentially social ties based on the positive attitudes or good emotions lying between a buyer and a seller, that is to say, a customer develops positive emotion to a company through establishing depend on and participate in the relationship with a company. In the continual interactive progress, good emotions generate between the key people of the buyer and seller. This sort of social ties based on emotions or emotion orientation is the major motivation of customer relationship commitment. Thus is generating with continually deepened association level. Different from economical commitment that forces customer to maintain relationship due to customer’s economical requirement, affective commitment is the willing relationship maintenance with the company and the relationship maintenance is based on their similar values and pursuits to the target. Decotis, Summers (1987) values the study on social human mental sense of belonging very much. They regard commitment as an emotional or affective guidance from on side to another. They define commitment as the level to which an individual in a relationship accepts the common aim and values of both side. Therefore, customer commitment is connection between a customer and a company and inner values.

1.3 Brand equity

Brand Equity is defined in terms of a company or a customer. For a company, it mainly studies the brand's value in financial affairs, having an eye on measuring value of brand equity. For a customer, brand equity is defined on the basis of customer perception, trying to reveal the essence of brand equity, serving for brands. Aaker defined brand equity as “the property or debts related to brands, names and marks that can increase or decrease the value from products or services to a company or a customer”. Aaker also describes brand equity includes five-star conceptual model of brand loyalty, brand awareness, brand perceptive quality, brand association and other exclusive assets (such as patents, trademarks, channel relationships). A customer gains more effect from a product with a brand than the other in the same quality but without a brand. Brand equity master Keller defined brand equity as that beyond effect. The essential reason why brands are valuable to companies and dealers is that brands are valuable to customers. When loyalty intentions are explained, this is effect that brands have beyond the rest of the value proposition. Brand Equity includes a series of brand attributes influencing customers’ choices and purchase. Brands can attract new customers’ attentions to purchase products and services of the company, can constantly remind regular client to remember the products and services. They also can help improving the connection between customers and the company. Therefore, brand equity are essentially the customers’ differential responses (resulting from the brand knowledge in costumers’ minds) to brands marketing activities including aspects of brand distinguish, brand meaning, customer response to brand marketing and connection between customers and brands. These responses determine customers’ deeds. Studies of Selnes (1993) demonstrated the points of view above. Research shows that brand equity has a direct effect on intentions and mediates the effects of quality and satisfaction on intentions to various degrees. Oliver (1999) found out that over time, attitudes toward the brand and relationship should come to mediate the effect of value on intentions.

In sum, factors mentioned above determine customer loyalty intention. These relationships are potentially complex and dynamic. That is to say, the drivers of intentions change and evolve over time (Mittal, Kumar, and Tsiros 1999). Some scholars did researches on these changes from the angle of dynamic states. Mittal, Kumar and Tsiros (1999) compare the drivers of perceived performance and subsequent loyalty intentions for new vehicle owners 3 to 4 months after purchase and again 21 months later. They find that service satisfaction has a greater impact on intentions early in the relationship, whereas product satisfaction has a greater impact later in the relationship. Mittal, Katrichis, and Kumar (2001) examine the drivers of customer satisfaction for people who owned a credit card for less than a year versus more than a year. They find that the weight customers place on different performance
attributes shifts on the basis of their tenure with a firm. Michael D. Johnson, Andreas Herrmann, & Frank Huber (2006) think seeable value, affective commitment and brand equity determine customer loyalty intention together. Basing on these variables, they demonstrate the dynamic development of customer loyalty intention. Exactly on the basis above, we are putting forward researches on dynamic evolutionary model of customer loyalty intentions based on product lifecycle.

2 The dynamic evolutionary model of customer loyalty intentions based on product lifecycle

We use the research product of Michael D. Johnson et al, combine theory of product lifecycle and put forward this model. Product lifecycle is defined as the overall time during which a product enters and eventually withdraws from the market, including stage of introduction, growth, maturity and decline. Basing on the achievements of the static and dynamic research on the cause of formation of customer loyalty by many scholars, we think in different periods of product lifecycle, mechanism of customer loyalty intentions are dynamic evolutionary. In period of pioneering of product lifecycle, customer loyalty intentions are function of customer seeable value. Over time, more affective factors and the connections of customers and companies mediate seeable value and loyalty intentions. The process is shown as figure 1.

![Dynamic Evolutionary Model of Customer Loyalty Intentions](image)

**Figure 1: The dynamic evolutionary model of customer loyalty intentions based on product lifecycle**

The model is divided into 3 stages of time: introduction, growth, maturity. Here we don’t consider the stage of decline. Perceived value of each period all directly or in directly have an effect on customer loyalty attention through brand equity and affective commitment. But in different periods functions of
factors mentioned above are quite different. In the stage of introduction, a company to gain customer loyalty is to be tied with customers, mainly through perceived value achieved by product profits gained from product itself or dealers. Berry and Parasuraman’s researches also support this point of view. Due to this early formation period, affective commitment and brand equity play little role. Target customers are mainly the innovation adopters. The main marketing method for the company is to open up an ideal structural perceived value, and consider the connections between total value and total cost, to give top priority to what is the most important and optimize marketing resource allocation. The company should offer more products and services with perceived value for customers and develop deeper connections with buyers by customer value. In the stage of growth, with customers’ growth of purchase experience, customer develops deeper connections with buyers through customer value. Affective commitment and brand equity start to show the effect on customer loyalty, while seeable value comes to decrease the effect on customer loyalty intentions. Heilman, Bowman, and Wright (2000) find out that there’s no brand loyalty at the beginning of consuming and brand preference becomes stronger with customers’ growth of purchase experience. Target customers are mainly early adopters and regular clients are mainly the reserved customers in the period of pioneering.

In the stage of maturity, through the development of personal relationships, social ties and connections with customers, customers’ attitudes to brands and relationships should become stronger, more “top of mind” or accessible, persistent, resistant to change, and likely to guide intentions and subsequent behavior (Fazio, Powell, and Williams 1989; Priester et al. 2004). So, affective commitment and brand equity have more predictive ability to customer loyalty intentions while the functions of seeable value decrease to the lowest. During this period of time, companies need to attract most adopters as new customers and regular customers are the reserved ones from last two periods. In the model above, from seeable value to brands and relationship attitudes to connections between loyalty intentions are systematically varying with market evolutions. One significant factor of this evolution imitation is the impact of striding over periods which were shown as phases of product lifecycle.

Oliver (1980) demonstrated the time dependence of attitudes and behavioral intentions in a satisfaction model. He showed how attitudes in one period are a function of both customer satisfaction in that period and attitudes in the previous period. In turn, behavioral intentions in a given period are a function of attitudes during that period and the prior period intentions. Similarly, Bolton and Drew (1991) find temporal effects for both attitudes and overall quality perceptions. In Mittal, Kumar, and Tsiros’s (1999) consumption-system approach, perceptions, attitudes, and intentions in one period serve as anchors for the same constructs in subsequent periods. Evaluations of perceived value, brand equity, affective commitment, and loyalty intentions are not constructed anew each period. Rather, they are updated versions of prior evaluations.

3 Conclusions and enlightenments

It’s important to understand customer loyalty from dynamic angle. For researchers, it can recognize the most significant decisive factors of performance. For managers, it can provide the basis for designing efficient marketing plan, helping the managers to distinguish timeliness of strategies such as improving customer value, developing brand equity and managing customer relationships, so as to optimize marketing resource allocation. The model above demonstrates from periods of pioneering, expansion to the period of ripeness, managers should firstly improve the customer value then gradually come to develop brand equity and manage customer relationships. Rust, Zeithaml, and Lemon’s (2000) describe three categorically different ways to increase customer equity: value equity, brand equity, and retention equity. This classification is the same with the logical framework of variables in our model. Through analysis above, we can obtain conclusions and enlightenments below:
3.1 In the stage of introduction of product lifecycle, companies should focus on developing value equity, trying to improve customer perceived value.

Value is the top factor which keeps connections between customers and companies. Customer value includes economic value, physic value and psychology value (Xiqiu Wang, 2005). If products and services of the company can’t meet customers’ needs and expectations, even though companies adopt best brand strategies and relationship marketing strategies, they can’t effectively achieve customer loyalty. Therefore, at the early time of entering market, companies should trying to improve quality level of products (including product function, stability, safety etc.) and product functions (product’s practicability and practicability) to improve product’s physical value. Companies should decrease the economical cost, information cost, time cost, mental and physical strength cost of purchasing products for customers, in order to increase economical value. Companies also need brand construction in the period of pioneering and good services to gain customer’s mental value. All in all, customer value is the value perceived by customers and it’s subjective. What different customer perceives from the products or services at different time and places are different, so the evaluation of value equity must aim at evaluation on target customers. This evaluation is supposed to be dynamic, which can really grasp the essence of customer perceived value.

3.2 In the stage of growth and maturity, managers should concentrate on developing brand equity and increasing relationship equity.

Brand equity is defined as attitudes towards brands established in customers’ minds through long-term investment and marketing. It can increase value of products or services the company sold. In the period of expansion and ripeness, companies should highly concentrate on the construction and development of company brand equity. The most significant factor of construction of brand equity is to improving a company’s inner ability. Through conforming methods of marketing and promotion, communicate with customers about brand plans and contents. Several tips of constructions of brand equity should be paid attention: (1) The essence of brand equity lies in loyalty of customers. Essentially they are interactive, so companies should take positive measures to realize customers’ guidance, such as approaching customers, measuring satisfaction, setting up conversion cost and offering fringe cost. (2) Improve customers’ recognition of brands, making brands impressed in customers’ minds. Companies should keep or improve popularity of brands by developing value equity (products and services quality, concerning about cost and focus on image of the company) in the period of pioneering. Popularize themselves through methods such as public relations activities, brand extendibility and marketing communication. (3) Take the key attribute of promoting purchase strategies of customers as the basis of brands association position. Construct customers’ positive attitudes and emotions towards brands and offer a reason for the customers to purchase.

In the new-economics age with more and more acute competitions and more and more smart customers, if companies only rely on brand equity and value equity, may still can’t “binding” customers. So in the period of ripeness especially after ripeness, the most effective strategy is through relationship equity, to construct, to maintain and to develop long-term connections with important customers, to strengthen customer’s sense of trust and sense of belonging, in order to improve customer loyalty. Companies can take measures below to increase relationship equity. (1) Use customer loyalty plans. Loyalty plans is an important managing tool to improve customer loyalty by managing customer relationship. In the plan, customers are awarded due to repeatedly purchasing. It also becomes reinforce encouraging customers to purchase more. Companies can set up scores accumulation rewards, return consuming points and discount to carry the plan. For example, China Mobile draw up “global system for mobile communications” scores accumulation plan, which according to the time length in network and the consuming amount, offer reward of discount on telephone expenses. In many areas such as civil aviation, hotels, telecoms, banks, goods retail, reward plan on loyal customer (or regular customer) is a significant portion of a company. But after all, loyalty plan achieves customer loyalty through construction of convention cost, so it’s far away from customers’ affective dependence on companies. (2) Affective marketing. By conducting a firm connection with customers and affectively investing in relationship maintenance, make customers generate emotions on companies, to increase customer’s
favor to the company. Through customer’s emotion-belief to increase customer’s favor to products or services, then to generate sense of belonging and dependence to the company, which can let customers make mental commitment to the company that he will continue purchase and consume products or services. This actually is the most efficient way to gain customer loyalty. (3) Set up data base of customer relationships. Companies can use database technology to establish detailed customer files including features of customers such as consuming time, frequency and preference. Record association information between customer and company, learn the need of customers and offer them customer products and services base on their preference. Companies can find target customers through database and keep connections with target customers.

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Funding Project: Start scientific research funds of Zhejiang Forestry College( project ID: 2351000970)

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