

A Dynamic Model of Customer Retention in Mass Customization Services

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Abstract: The customization in the MC is driven by the customer, so customer retention to a large extent influent the effective implementation of mass customization. Combining the dynamic customer relationship management and the three stages of customer consumption emotional and customer loyalty, the anthors build three-dimensional structure model. The paper studies the dynamic model of customer retention under the mass customization services, meanwhile, the paper analyzes the different characteristics and influence factor of customer loyalty and customer consumption emotion at various stages of CRM.

Key words: Mass customization; CRM; Customer retention; Customer loyalty

1 Introduction

Stanley Davis (1987) initially use "Mass Customization(MC)" in the "Future Perfect", he thought the mass customization is a new mode of production that can meet customer individual requirements, without sacrificing enterprise efficiency[1] B. Joseph Pine II (1993) believed that mass customization is based on the large-scale to product and market the customized products and services, and it is a new paradigm in manufacturing and services, a new perspective method for enterprise competition, it will identify and achieve personalized customer needs as its focus, while not giving up the efficiency, effectiveness and cost-effective^[2].

MC services based on a combination of the nature features of service customization and efficiency advantages provided by the large-scale manufacturing industries. In the service product delivery process, through the realization of standardized elements of service products, and customers or service providers' generation of the product combination during service providing, the MC Service can maximize customer value, reduce internal costs, and enhance competitive advantage of service enterprises^[3]. General services has several features, such as high degree of customer participation, a high quality sensitivity, high reliability of information, when introduce the concept of mass customization, there is no strict distinction between manufacturing and service industries, but the subsequent research has focused on manufacturing industry field.

Customer retention is the process of supplier maintaining an established customer relationship, making customers to repeat purchase products or services^[4].Customer retention is the result of both customer loyalty and switching costs, which determines the company's future profitability. There are also some scholars to define customer retention from the perspective of customer relationship life-cycle theory. In general, customer retention refers to the enterprises trying their best to maintain the established customer relationships in order to make customers repeatedly purchase their products or services. His work is basically carried out in a stable period, compared to other phases, the enterprise pay the least and benefit greatest in this phase. If you try your best to retain your customers without identifying them before, a possible result is to pay higher costs and create lower value, and may even not enough to offset the costs^[5]. In this paper, we study customer retention under the mass customization services. This paper will use the customer relationship life-cycle theory and customer consumption emotion as well as customer loyalty to build three-dimensional structure model, and study all relevant factors how to promote customer relationship development from lower to higher.

2 CRM Lifecycle

CRM will be a breakthrough in the implementation of mass customization and an

essential component of mass customization. Gang Xiao, Zhang Yuan-ming ^[6] and other scholars combined MC and CRM proposing MC-oriented CRM, which is based on the MC ,through enhanced customer relationship management and the ability of acquisition and management customize information, when providing customer service, allowing customized demand information to transfer and share among various departments, to support business enterprises organize large-scale production according to customized needs, and ultimately to provide customers with satisfactory products. Customer relationship has obvious periodicity^[7], which can be divided into four stages, the probation, the formative stage, the stable stage, and the stage of degeneration, “four-stage model” for short. This model is the theoretical basis for the three-dimensional structure model that this paper raised.

(1)The Probation. During this stage, deficient understanding of each other and high uncertainty is the basic feature of the probation. The key aim of this stage is to evaluate the potential value of the other side and lower the uncertainty. Customers will do trial-purchase in this stage.

(2)The Formative Stage. The relationship of the two sides can enter into a new level, which indicates that during the probation, the customers are contented with the service provided by the company, and mutual trust and inter-dependency are established. In this stage, with the gradual maturity of their relation, the willingness of each side’s risk taking is increased.

(3)The Stable Stage. The two sides are highly contented with the value provided by each other; the two sides contributed considerable investment, visible and invisible, in order to keep the stable relationship; high-level resource exchange, i.e. large quantity of transaction. Therefore, in this period the inter-dependency between the two sides reached the highest point, and the company received the most economic returns. Customer retention is important in this stage.

(4)The stage of degeneration. This paper established the three-dimensional structure model of customer retention, and only concerns the first three stages of customer relation.

3 Three-dimensional Structure Model

3.1 CE-CRM two-dimensional structure model

From a psychological perspective, emotional, or feelings are subjective experiences arising from whether the objective things meet their needs. A stable experience associated with the social needs for a long time is generally called emotion, for example, the moral sense ^[8]. Thus, in a specific time and place, emotion is stable, but also can be measured. Westbrook and Oliver (1991) believe that the customer consumption emotion is a series of emotional reactions to the consumer experience of goods and services ^[9]. Therefore, the customer consumption emotions (CE) is with emotional stability on the one hand, on the other hand has emotional dynamic nature.

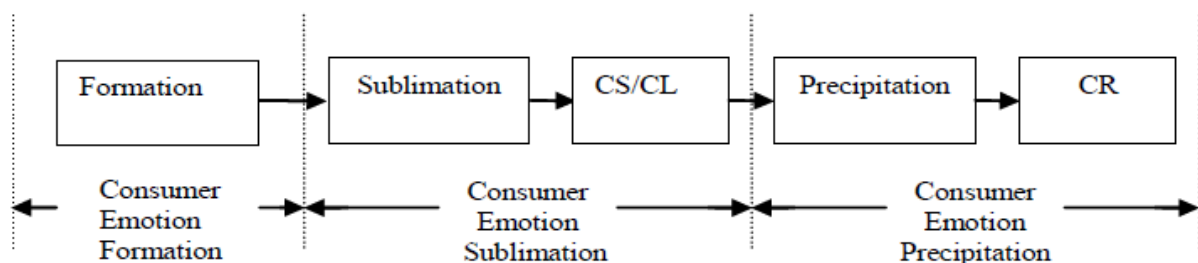


Figure 1 - Three Stages in the Consumer Emotion Process

Consumer will form a stable emotional experience in the long-term spending process, these emotional experience and the corresponding attitudes affect each specific consumer behavior in turn. Thus, a consumer behavior is not only an expression of an emotional of the

time, but also with consumer emotional characteristics and attitudes of the past. This study suggests that customers experienced through the consumer emotion formation, consumer emotion sublimation and consumer emotion precipitation three stages in the consumer process, (Figure 1).

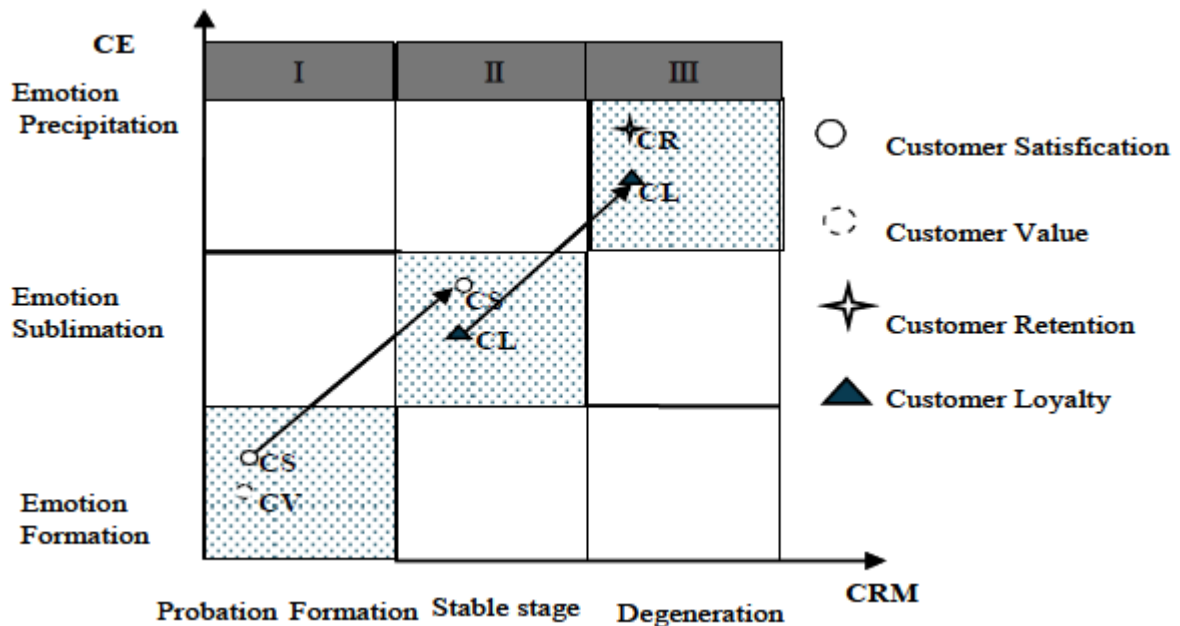


Figure 2 - CE—CRM Two-dimensional Structure Model

The stage division of customers' consumption emotions and the life-cycle theory of customer relation management can construct two-dimensional structure model (figure 2):

(1) In the CRM probation where the customer relation is being established, the two sides don't understand each other well, and the emotional bond between customers and company or the service is weak. The emotional bond can be influenced by the service quality, customer satisfaction, as well as customer value, and under such influence, the bond can be deepened or ended.

(2) In the CRM formative stage where customer relation develops fast, customers are highly satisfied with the company, and consumption emotion, particularly positive emotion, is strong. Such strong emotional bond will promote further development of customer relation.

(3) In the CRM stable stage where customer relation develops to the highest point, customers and companies established stable emotional bond. The positive accumulation of emotion is benefit to the stable development of company-customer relation. Meanwhile, in this period, the consumption behavior become more frequent and smooth, and their cooperation with the service staff is becoming more tacit. This period is the time when customers bring the maximum value to the company.

3.2 CE—CRM—CL three-dimensional structure model

Customer loyalty (CL) is particularly critical to the service sector, since consumer loyalty in the service is more widespread than that in the consumer products. And the services provided more opportunities for interpersonal interaction, thus providing opportunities for the development of loyalty, and loyalty is often used as a strategy to reduce risk^[10]. Gremler and Brown (1996) think that the service industry customer loyalty is "the extent of repeat purchase behavior and positive attitudes of a customer toward a specific service provider, and the tendency of customer choosing the service providers as the only objects to favor when increased demand for the service"^[11]. Oliver (1999) start from cognition, emotion, conative and behavior four dimensions to divide customer loyalty into four stages, namely, cognitive loyalty, affective loyalty, will loyalty, action loyalty^[12].

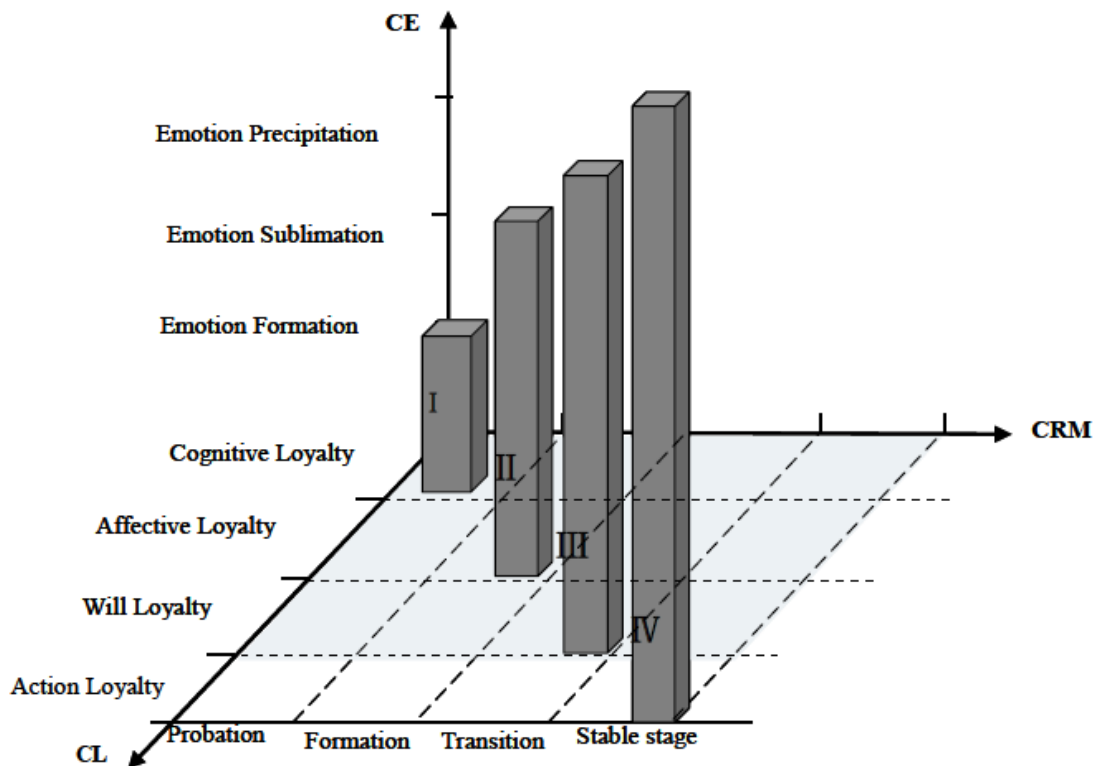


Figure 3 - CE—CRM—CL Three-dimensional Structure Model

On such a basis, this paper combines customer loyalty theory, customer consumption emotion and the two-dimensional model of customer relation, and establishes the dynamic model of CRM-based mass customization services customer retention (figure 3):

(1) Cognitive loyalty stage (In the CRM probation). In the CRM probation where the customer relation is being established, the two sides don't understand each other well, and the emotional bond between customers and company or the service is weak. In this stage, through providing customized service with low cost and high efficiency, mass customization services can exert positive influence on customers on their early consumption emotion, and can strengthen customers' cognition to brand and value, so that early cognitive loyalty can be formed.

(2) Affective loyalty stage (CRM formative stage). After the customers' trial purchase in the CRM probation, customers are highly satisfied with the quality of customized service, so their positive affection is deeper and their desire to purchase is stronger, and high affective loyalty is formed. During this time, repurchase, in rate, became a "certain thing", and due to customers' emotional preference, has higher endurance for price.

(3) Will loyalty stage (later period of CRM formative stage and early period of stable stage, i.e. transitional period). In this stage, customer relation has stabilized gradually, and customers emotionally depend on service firms. During this time, except strong intention to repurchase and price endurance, customers also have the intention to cross purchase. Even if more luring purchasing choices, customers still keep repurchasing. Customers not only have high economic switch cost, and also face psychological and spiritual switch cost, so a higher will loyalty is formed. Customers buy out of their intention.

(4) Action loyalty stage (CRM stable stage). After a series of satisfied purchase, customers' positive affection is accumulating and stable emotional bond is formed. Strong desire of mutually beneficial cooperation and behavior are motivated in customers. On the other hand, such stable emotional bond can bring about higher switch cost. In this stage, customers may spontaneously or positively spread the good reputation of the firm, and recommend new customers; they may also sincerely raise some constructive suggestions.

During this time, customers' loyalty developed into action loyalty. It is great importance to retention customers of service firms.

4 The Operation Mechanism of Three-dimensional Dynamic Model

4.1 CRM probation

During this stage, mass customization services can exert positive influence on customers on their early consumption emotion, and can strengthen customers' cognition to brand and value, so that customers can do a series of trial purchase on the basis of the knowledge about the brand and value. Through establishing one-to-one relation with customers, customized service firms fully realize customers' customized needs in order to provide satisfying service or products. If the value provided by the service firms is higher than customers' expectations comparison level (CL1), customers will be satisfied. The early affective dependency and cognitive loyalty are formed due to customers' high satisfaction to customized service quality, which promoted the further growth of customer relation.

4.2 CRM formative stage

Consumption emotions and the customer accepted value formed in the probation period will lead to a series of repeat purchase. Initially established customer relationships and emotions would be greatly facilitated transaction costs savings, meanwhile service companies have increased customer satisfaction based on customer relationship management platform and advanced customized services capacity, which make positive consumer emotions to become increasingly sublimation to form a high emotional loyalty, this emotional loyalty to drive the further development of customer relationship. In the customer relationship development process, the customer always been to assess the relative value of services, but the reference point for comparison are changing over time, to the later of formative stage, the customer will compare the value provided by the previous stage to the expectancy-value offered by the best alternative service firms. Therefore, at this stage, service companies should provide superior quality of service, make customers realize the value of the enterprises providing can be greater than the alternative services, consolidate customer relations, and thus develop into a higher stage——stable stage.

Customers have more confidence for corporate customized services and emotional dependence. At this time customers not only have strong repeat purchase intention and price tolerance, but also create cross-buying intentions. In the late of the CRM formative stage, customer intentional loyalty become more obviously.

4.3 CRM stable stage

After a series of satisfying purchases, customer relation is becoming stable, and emotional bond is formed because their positive emotion is continuously accumulated. Such emotional bond is not only beneficial to the formation of customer satisfaction and customer loyalty, it also lets customers shoulder comparatively high switching cost, which has important influence in the stable period of customer relation, advancing the formation of customer retention. During this stage, the reference point of customer value is greatly changed, which is not only to estimate the value that customers attained from the relation, but also to estimate the value service firms attained form the relation. The value that both sides attained must be equal, or it is unfair. Service firms grasped a lot of customized information, and if they ignore higher level of expectation of customer value, it might cause customers' sense of crisis and betrayal. Therefore, service firms should reinforce their contact with customers, make customers trust the servicing firm more, and make them believe that this firm has the ability to continuously provide higher value than the competitor in the future. In this way, firms can promote the formation of action loyalty and to really retain the customers.

5 Conclusion

The customization in the MC is driven by the customer, so customer retention to a

large extent influence the effective implementation of mass customization. For mass customization, because of a change in the role of customers, customer retention reasons, causal relationship of various structural variables has its unique. In this paper, through understanding and in-depth study of the theory of mass customization and customer retention and CRM, on the basis of the conclusion of previous research results, build CRM-CE-CL three-dimensional structural model, and explain the operation mechanism of this model.

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