E-Commerce Marketing Strategy on the Basis of Customer Value and Customer Loyalty

Gang Fang, Xiongjian Liang

Department of Economics and Management
Beijing University of Posts and Telecommunications
Beijing, 100876, China
E-mail: fanggang8610@163.com

Abstract— **The enterprise e-commerce marketing strategy is developed on the basis of a scientifically-based segmentation of its customers, and the key way to its profits is to try to build and maintain the customer loyalty. Therefore this paper brings together customer-value and customer-loyalty to segment e-commerce customers, and then establishes a customer-segmentation-matrix of customer-value and customer-loyalty, and finally it explores the respective characteristics of different types of customers and proposes that enterprises should take different e-commerce marketing strategies to different types of customers.**

Keywords-customer value; customer loyalty; e-commerce marketing

I. INTRODUCTION

Philip Kotler has suggested that under certain constraints the customer is the pursuer of the maximum value, so the real target of the enterprise is the value [1]. Value drives the behavior of most consumers and is also the key determinant of customer buying behavior. According to a research of William A. Sherden, 20% of the most important enterprise customers create 80% of the enterprise profits, but 50% of the profits are offset by 30% of the enterprise customers who bring negative profits [2]. In today's rapid development of Internet technology, network information sharing allows the unfavorable situation of asymmetric information in the e-commerce market completely changed, and greatly reduces the cost of brand switching. Moreover, according to a research report called Online Retail Forecast 2005-2010 by Jupiter Research which is an authoritative research institute in the United States, after 2006, the key to the growth of online sales is no longer acquiring new customers, but is increasing the existing customers spending. Therefore, cultivating and improving customer loyalty (CL) and strengthening the relationship with customers are essential for the development of e-commerce marketing (e-marketing). The challenge the e-commerce enterprises are facing has been expanded from the price competition to the more extensive marketing competition. In previous research papers, some authors analyzed e-marketing from the only perspective of customer value (CV), some analyzed from the only perspective of customer satisfaction [3-5], and some discussed the relationship between CV and CL [6]. However, no papers have analyzed e-

marketing strategies from the perspectives of both CV and CL. Therefore, this paper focuses on how companies should carry out the necessary analysis of their customers on the basis of CV and CL before they develop and operate e-marketing, and how companies classify and management their customers in order to maximize profits, and then this paper presents some e-marketing strategies based on all the above discussions.

II. CV-CL INDEX DETERMINATION

A. CV in E-Commerce and CV Index-Variable Determination

Philip Kotler suggests in his book Marketing Management that CV is the difference between the benefits which customers obtain from certain product or service and the costs which are caused when customers assess and receive and use this certain product or service [7]. Woodruff defines CV as "a customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving customer's goals and purposes in use situations"[8]. Walter, Thomas Ritter, and Hans Georg Gemunden believes that CV is decision-makers' perceived trade-off between benefits and sacrifices in a business relationship [9]. Thus, there are generally two angles to define the meaning of CV: one is from a customer's point of view, that CV is the comparison between what customers obtained and what customers paid [10-12]; the other is from a company's point of view, that CV is the value that customers create and contribute for companies' interests. This paper regards CV from an e-commerce company's perspective as the comparison between the incomes which the company earns when they offer online consumers products or services and the corresponding costs which the company pays.

Customer segmentation model based on CV has appeared in many previous studies. For example, Verhoef and Donkers divided CV into customer current value (CCV) and customer potential value (CPV), and built CV-distinction-matrix on the basis of CCV and CPV, and finally presented corresponding investment strategies for each type of customer segments [13]; Werner Reinartz and V. Kumar segmented customers based on both customer-profit-contribution(i.e., customer value quantity) and customer-relationship-sustainability [14]; Yangming Zhang, Jiayin Qi, and Huayin Shu also proposed an index

system (Tab. 1) based on both CCV and customer future value for CV evaluation [15], and then established CCV-CPV customer-segmentation-matrix (Fig. 1)[16]; Gengmiao Zhang and Yuanyuan Chen also constructed a matrix of customer-value amount-value growth (Fig. 2)[17].

TABLE I. CUSTOMER VALUE EVALUATION INDEX SYSTEM

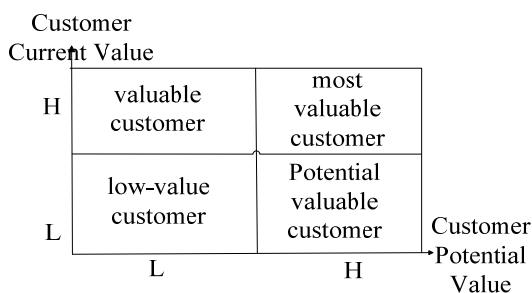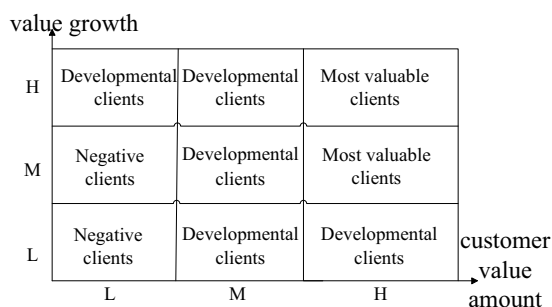| CUSTOMER VALUE EVALUATION INDEX		
CUSTOMER CURRENT VALUE	*Profit Contribution Index*	Monthly consumption expenditure
		The average cost per minute call
CUSTOMER FUTURE VALUE	*Stability Index*	Stability of monthly consumption
	Loyalty Index	Erosion tendency

Figure 1. Customer classification.

Figure 2. The matrix of customer-value amount-value growth.

B. CL in E-Commerce and CL Index-Variable Determination

The meanings of CL in previous papers have developed from consumer-behavior-based to consumer-psychology-based, as collated in Tab. 2. And domestic and foreign scholars have discussed CL with the characteristics of the network environment for e-commerce. After studying some Internet companies and online consumer behavior in America, Frederick publishes in Harvard Business Review an article which points out that there is CL in the online world and that the basic theories of traditional CL also apply to network economy [18]. In the study of CL for Internet retailers, Srinivasan defines e-loyalty as customer's repeat purchase behavior due to customer's preferences of online retailers [19]. Therefore, based on the previous views of CL as are mentioned above, this paper defines CL for e-commerce as

follows: e-commerce customers maintain the commitments and the preferences of the company's products and services, and have the immunity to other competitors in the industry, and are willing to maintain the business relationship with the company to repeat purchase for a long term.

TABLE II. DEFINITIONS OF CUSTOMER LOYALTY IN SOME RELEVANT RESEARCH PAPERS

SCHOLARS	THE MEANING OF CUSTOMER LOYALTY
Brown (1952)	Buying behavior consistency for certain product of a particular brand.
Jacoby (1971)	Customer loyalty is customers' buying behavior which was the result of customers' mental activities. Customer brand preference can be divided into three regions: acceptance, neutrality, and refusal, and the gap between the three regions is used to measure customer loyalty.
Lutz (1986)	Customer loyalty is the continuity of buying behavior for a company's services or products.
Blackman & Crompton (1991)	Customer loyalty is measured in two aspects: customers' behavior and customers' attitude. Behavioral loyalty is the customer's actual consumption behavior, while attitudinal loyalty mainly considers the psychological level.
Oliver (1997)	Although consumers may be impacted by their surrounding environment or may switch their preference brand due to the brand's competitors in the same industry, their commitments to the preference brand in the future remain unchanged.
Peltier & Westfall (2000)	Reflecting and measuring customer loyalty can be made from some aspects such as customer's attitude, intention, possibility, cognitive behavior.

Bain & Company believes that CL is the key to the profitability growth for e-commerce enterprises. A successful e-marketing strategy should fully consider the impacts of CL to corporate profits and should pertinently manage and develop customers with different loyalty. Few previous papers introduce CL as a variable in customer classification, and in the domestic research papers some scholars have constructed customer segmentation model based on customer satisfaction [20]. However this paper believes that customer satisfaction is the basis of CL and is the process of achieving CL, and that a high level of CL is the ultimate guarantee for companies' long-term healthy developments. An investigation report made by some American scholar shows that in the satisfied and very satisfied customers there are 65% to 85% respondents purchasing products and services from other companies [21-22], so customers with high degree satisfaction do not necessarily exhibit a high level of CL. According to the theory of consumer behavior, CL contains two aspects: customer acquisition and customer retention. The former means both the first time buyer-seller relationship and the stage between the first and the second transaction. It enters the customer retention phase as long as the second time buyer-seller relationship establishes. Therefore, this paper considers CL as another variable for e-commerce customer segmentation.

III. THE ESTABLISHMENT OF CV-CL CUSTOMER SEGMENTATION MATRIX

Firstly, segmenting customers from CV dimension is based on each customer's annual profits in the company's annual financial statements, and takes the percentage which the value

of each customer accounts for all customers' value into consideration. This paper regards the top 30% clients of each customer group as the ones with a high level of CV, and the rest of each customer group as the ones with a low level of CV.

Secondly, segmenting customers from CL dimension is based on both customer acquisition stage and customer retention stage. And after sorting all customers in descending order according to the frequency of customer repeat purchase, this paper regards the top 20% customers as those with high degree of CL, the middle 50% as those with medium degree of CL, and the rest 30% as those with low degree of CL.

Thirdly, this paper assumes that high-CL-level customers are more likely to achieve higher CV than low-CL-level customers. This assumption is reasonable according to the definition of CL discussed in the previous section. The more loyal customers are, the more frequency their repeat purchase behaviors are, and the more possible they will promote the brand. On the contrary, the lower the CL level is, the easier they will abandon their original consuming habits and switch the brand.

Fourthly, considering the diminishing marginal utility, this paper assumes that the cost for improving the degree of CL from a low level to a high level is progressively increasing.

Fifthly, CL improvement can be achieved through increasing business investment and optimizing resource allocation. For example, e-commerce enterprises strengthen technical and financial input in the online shopping environment (e.g., the web platform design) to effectively raise customer traffic and to create active consumer cognitive [23].

Thus, taking CV-CL as the index, this paper establishes the customer-segmentation-matrix for e-marketing, as shown in Fig. 3.

Customer Value

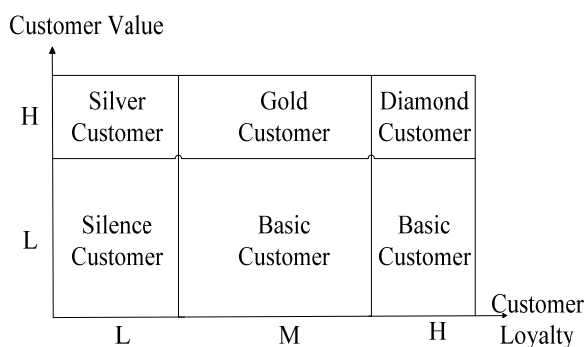|	L	M	H
H	Silver Customer	Gold Customer	Diamond Customer
L	Silence Customer	Basic Customer	Basic Customer

Customer Loyalty

Figure 3.   The matrix of customer-value amount-value growth.

The matrix divides e-commerce customers into five categories: customers with high CV and high CL are the most popular customers for companies, and are called Diamond Customers; in the high-CV-level customers, those with medium CL are called Gold Customers, and those with low CL are called Silver Customers; in the low-CV-level customers, those with high and medium CL are called Basic Customers, and those with low CL are called silence customers.

IV.   E-MARKETING STRATEGIES FOR DIFFERENT CATEGORIES OF CUSTOMERS

E-marketing is a series of activities implemented by means of Internet technology in order to develop market demand and to maintain existing customers and to maximize the satisfaction of consumers. E-marketing and traditional marketing are no different on the targets of this series of activities, but in the implementation of strategies and in the targets completion, e-marketing and traditional marketing have lots of distinct characteristics. For example, information network technology which is the foundation to realize e-commerce transactions creates the possibilities to completely eliminate information-transmission-barriers which is very common in traditional marketing, and greatly improves the situation of asymmetric information, and thus ensures the full realization of marketing objectives. Indeed, e-marketing is not simply using electronic means to carry out traditional marketing, but is a series of changes in traditional marketing in the aspects of concept, process, and scope and so on. Therefore this paper suggests that enterprises should formulate and implement e-commerce strategies which adapt to the network economy after segmenting online customers scientifically. According to the five online-customer-categories discussed in the previous section, this paper are proposing differentiation e-marketing strategies for the characteristics of different types of customers, as described below.

First of all, Diamond Customer has the greatest amount of CV and the highest level of CL--as shown in Figure.3--so customers in such type are the most ideal clients. And these clients have a great current contribution value to companies, and also have a considerable contribution value in the future, so they are the main source of corporate profits. Enterprises need to attach great importance to the relationship management with Diamond Customer, in order to maintain their loyalties at the minimum cost and to develop long-term close cooperation with them and to establish a lasting strategic alliance. This will not only help to further expand the profit margin and maintain the stability of transactions, but also effectively prevent the competitors. For example, normally e-commerce payment procedures are designed relatively complicated for the sake of the safety of deals, but enterprises can take one-to-one marketing strategy to Diamond Customer who has a very high credit rating and design special e-commerce green channel for each Diamond Customer to simplify the purchase process and create a personal electronic file for every Diamond Customer to provide more convenient and more personalized service.

Second, Gold Customer is characterized by large amount of CV and a not-high-level CL who is usually the key account. Because they contribute a lot to companies' income, gold customers have a great amount of CV. However they are not very loyal because sometimes they are likely to be lured by competitors' preferential treatments. Therefore, the marketing strategies should be trying to guide consumption habits and consumption preferences of Gold Customers, and to improve their loyalties, training them to become Diamond Customers. For example, the range of customer benefits can be expanded by demonstrating to customers a wide range of innovative

services and product portfolio, and then enterprises can lock the customers more firmly.

Third, in the customers with large-CV-amount, although the CL-level of Silver Customers is at the lowest position, their high spending power creates relatively large contributions to companies' current revenues. So enterprises should appropriately strengthen the guidance for Silver Customers according to the marketing strategies for Gold Customers, and gradually improve Silver Customers' loyalties in order to make them become Diamond Customers eventually. For example, in addition to locking customers more firmly by providing them more vested interests, companies should also be frequent interaction with customers, understand customer needs in time, and establish communications with customers on a psychological level, so that customers can experience the honorable feeling of privileges.

Fourth, although Basic Customers have low contribution value to company's current revenue, which can be reflected from their low amount of CV, their high loyalty makes them have a large expected contribution value to company's future income in a longer period. Then Basic Customers can share the fixed costs for enterprises. Therefore, companies should not easily give up such customers, and the marketing strategies for them should be exploring and enhancing the amount of CV as soon as possible, so that the expected contribution value can be transformed into the current contribution value as early as possible. Thus, although companies will probably lose part of current profits in the process of further developing Basic Customers due to substantial resources investment and hysteresis of customers' contribution value, this investment is profitable in the long term.

Fifth, Silence Customers' CV-amount and CL-level are both very low, and such customers are always very sensitive to the price and are not willing loyal to the company. So Silence Customers are the most unpopular clients, and companies should take indifference marketing strategies for such customers and should not waste resources for them.

V. CONCLUSIONS

This paper establishes a CV-CL customers segmentation matrix on the basis of two dimensions: customer-value and customer-loyalty, and then analyzes the characteristics of different types of customers under e-commerce environment, and finally puts forward e-commerce marketing strategies for each type of customers, which will provide enterprises effective guidance to customer management practice and e-commerce business operation.

REFERENCES

[1] R. B. Woodruff and S. F. Gardial, Know your customers: New Approach to Understanding Customer Value and Satisfaction, Blackwell Puhlishers lnc., 1996.

[2] W A. Sherden, Market Ownership[M]. The Art and Science of Becoming # 1. New York, 1994.

[3] Junmei Zhang, A Research on E-business Model Innovation on the Base of Customer Value, Strategic Thinking for the Next Economy, Vol. 35, pp.117-120, 2009 (In Chinese).

[4] Chaoxi Yu, B2C Online Sales Business Mode Based on Customer Satisfaction, Wuhan: Huazhong University of Science and Technology, 2006, pp.47-104 (In Chinese).

[5] Amit Raphal and Zott Christoph, "Value-Creation in E-business," Strategic Management Journal, Vol. 22, pp.493-520, July 2001.

[6] Jinxiang Zha, A Research on the Relationship of Customer Value and Customer Loyalty on the Base of B2C E-Commerce, Hangzhou: Zhejiang University, 2006 (In Chinese).

[7] Philip Kotler, Marketing Management, 13th ed., New Jersey: Prentice Hall, 2008.

[8] R. B. Woodruff, "Customer Value: The Next Source for Competitive Advantage," Journal of the Academy of Marketing Science, Vol. 25, pp.139-153, 1997.

[9] A. Walter, T. Ritter and H G. Gemunden, "Value Creation in Buyer-Seller Relationships,"[J] Industral Marketing Management, Vol. 30, pp.356-377, 2001.

[10] W. Ulage, "Customer Value in Business Markets,"[J] Industrial Marketing Management, Vol. 30, pp.315-319, 2001.

[11] J. A. Anderson and J. A. Narus, Business market Management: Understanding, Creating, an Delivering Value[M], New Jersey: Prentice Hall, 1999.

[12] W. Ulage and S. Chacour, "Measuring Customer-Perceived Value in Business MarkeLs: A Prerequisite for Marketing Strategy Development and Implementation,"[J] Industrial Marketing Management, Vol. 30, pp.525-540, 2001.

[13] C. P. Verhoef and B. Donkers, "Predicting Customer Potential Value and Application in the Insurance Industry,"[J] Decision Support Systems, Vol. 32, pp.189-190, 2001.

[14] W. J. Reinartz and V. Kumar, Correct the Misunderstandings of Customer Loyalty, Harvard Business Review, Vol. 2, Social Sciences Academic Press(China), 2002 (In Chinese).

[15] Yangming Zhang, Jiayin Qi, and Huaying Shu, "Study on Mobile Customer Value Evaluation," Chinese Journal of Management Science, Vol. 13, pp.560-563, October 2005.

[16] Jiayin Qi and Huaying Shu, Customer Value's Evaluation, Modeling and Decision Making, Beijing University of Posts and Telecommunications Press, January 2005.

[17] Gengmiao Zhang and Yuanyuan Chen, "Enterprise Marketing Strategy on the Basis of Custom-value," Modern Economic Science, Vol. 26, pp.89-111, September 2004.

[18] Frederick, F. Reichheld, and Phil Schefter, "E-loyalty, Your Secret Weapon on the Web," Harvard Business Review, Vol. 7, pp.105-113, 2000.

[19] Srini S. Srinivasan, Rolph Anderson, and Kishore Ponnavolu, "Customer Loyalty in E-Commerce: an Exploration of its Antecedents and Consequences," Journal of Retailing, Vol. 78, pp.41-50, 2002.

[20] Guozheng Zhang, "A Research on the Customer Segmentation on the Basis of CLV and Customer Satisfaction," in Proceedings of Symposium on the Marketing Innovation and Development in China, Changsha, 2009, pp.123-127 (In Chinese).

[21] Diange Chen, "Marketing Management Based on Customer Loyalty," in Proceeding of 2006 Annual Conference of China Marketing Association, Beijing, 2006, pp.359-365 (In Chinese).

[22] W. J. Reinartz and V. Kumar, "Store-, Market-, and Consumer-Characteristics: the Drivers of Store Performance," Marketing Letters, Vol. 10, pp.5-23, 1999.

[23] D. L. Hoffman and P. Novak, "A New Marketing Paradigm for Electronic Commerce," The Information Society, Vol. 13, pp.43-54, 1996.