

# Customer Relationship Management System with a Screener

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## ABSTRACT

*How to find an organization's most potentially profitable customers is always an important issue. This study constructs a customer relationship management (CRM) system with the concept of "Screener", a synthesis of most those valuable customers and customer knowledge competence & management, by method of competitive structure and literature review. It will screen those new and retained customers in database and segment who would be potentially profitable customers. Contribution would be (1) Having them become really valuable customers; (2) Shortening time interval to speed up transactions; and (3). Churn rate is expected to decrease.*

**Keywords:** *Customer relationship management (CRM) system, Screener, Valuable customers, Profitable customers, Customer knowledge competence & management*

## INTRODUCTION

Firms are concerned with increasing customer value through analysis of the customer lifecycle today. The tools and technologies of data warehousing, data mining, and other customer relationship management (CRM) techniques afford new opportunities for businesses to act on the concepts of relationship marketing. The traditional process of mass-marketing is being challenged by the new approach of one-to-one marketing.

In general, consumer markets have several characteristics such as repurchasing over the relevant time horizon, a large number of customers, and a wealth of information detailing past customer purchases. The goal of CRM is to identify a customer, understand and predict the customer-buying pattern, identify an appropriate offer, and deliver it in a personalized format directly to the customer. Because it would be potentially valuable to customize marketing activities, CRM has been implemented as a prerequisite for marketing practice such as targeting of consumer segments for differential promotional activities (Ha, et al., 2002).

CRM activities generate better firm performance when managers focus on maximizing the value of the customer. Many writers on CRM issues focus on the identification, valuation, and retention of good customers (e.g., Dowling, 2002; Rigby et al., 2002; Verhoef, 2003; Winer 2001). A firm should put a great deal of emphasis on discovering who are best customers and how to find new customers that will be similarly loyal and profitable. At the same time, many companies would benefit immensely from avoiding customers at the other end of the value spectrum (i.e., bad customers). Management of the customer

development process is about building strong relationships with the organization's potentially most profitable customers.

### **The Method**

Method of paper review being used in this research, the authors are going to propose a CRM system with a “Screener”, which screens all new or acquired and retained customers to find out organization’s potentially most valuable customers. Since those potentially most valuable customers digged out by a screener, series of promotion activities to them could speed up their transaction value or reduce their churn rate hopefully.

## **DISCUSSION**

Traditional static CRM is about analyzing customer information for business decisions to help organizations understand customer needs, differentiate between customers via market segmentation, which implies that some customers are more profitable than others (Hughes, 1996), predict likelihood of customer churn, and perform analysis of customer loyalty and profitability, channel effectiveness and profitability, and sales campaign performance.

The knowledge of customer segmentation is then discovered from the database, which enables the retailer to understand the behavior of an individual customer and to make predictions about the behavior of others (Peppers and Rogers, 1997).

This study demonstrates the CRM system and identify that the most profitable customer by a screener is helpful understand characteristics of customer and facilitates marketing strategy development.

### **The Processes of CRM**

Peppers and Rogers (2000) suggested that the CRM process could be thought of as a series of four steps: identify, differentiate, interact and customize. The first step refers to the detailed view of the customer across several points of interaction. Differentiation pertains to the diverse needs and value potential of the customer base and provides direction for further interaction and customization of the product or service offering. Yet this view of the CRM process has been subjected to criticism mainly because it emphasizes mass customization, which is a product centric approach and considers the product to be the starting point of the planning process.

What do managers need to know about their customers and how is that information used to develop a CRM model (Winer, 2001)? Figure 1 shows the basic model, which contains a set of 7 basic components:

- a database of customer activity,
- analyses of the database,
- given the analyses, decisions about which customers to target,
- tools for targeting the customers,
- how to build relationships with the targeted customers,
- privacy issues,
- metrics for measuring the success of the CRM program.

### **Figure 1: Customer Relationship Management Model**

Source: Winer, (2001)

There is a universal, underlying cycle of activity that should drive all CRM initiatives. All initiatives and infrastructure development should somehow be linked to this core cycle of activity, as shown in Figure 2.

### **Figure 2: Customer Relationship Management Core Cycle of Activity**

Source: Nykamp, (2001)

As a cycle, the stages are interdependent and continuous. For interdependence, stages can't be implemented without the others. There are some points that should be considered in the implementation process, like that:

- Customization of products and services for customers requires an understanding of who your customers are;
- Interaction and delivery of increased value to customers requires development and customization of products and services to meet their needs;
- Retention of customers requires this delivery of increased value. The cycle is continuous by that their nature involves an ongoing series of interactions. Nykamp (2001) reported that as firms repeat this cycle with any customer or group of customers:
- Firm's CRM strategies and initiatives will become increasingly sophisticated.
- Customers will take notice of what firms are doing for them.
- Firms will thereby benefit from increased customer satisfaction, loyalty, and profitability, provided that firms continue the cycle and continue to invest in customer relationships. As firms move from one stage to the next, firms gain insight and understanding that supports and enhances firm's subsequent efforts (Nykamp, 2001).

Jayachandran, et al. (2005) proposed that implementation of CRM solutions needs a customer relational orientation and has processes in place to collect, analyze, and apply the acquired customer information.

The success of the CRM program by Winer (2001) showed us a set of 7 basic components. Peppers and Rogers (2000) suggested that the CRM process could be thought of as a series of four steps. All initiatives and infrastructure development should somehow be linked to this core cycle of activity, as shown by Nykamp (2001). On the basis of above literature, this research concludes the processes of CRM as Figure 3.

### **Figure 3: The Processes of Customer Relationship Management**

Source: This research.

An effective CRM system describes customer relationship in sufficient detail so that all aspects of the organization can access information, match customer needs with satisfying product offerings, remind customers of service requirements, know what other products a customer has purchased, and so forth.

The feedback of market actively enables the company to pin-point the problems related to product quality, pricing, communication with customers and other aspects of the marketing mix (Bearden and Teel, 1980; East 1996). Therefore, the system should encourage customers to complain, aiming at providing a better feedback to the company.

Customer relationship management exists only by integrating the knowledge discovery process with the management and use of the knowledge for marketing strategies. CRM will help marketers address customer needs based on what the marketers know about their customers, rather than a mass generalization of the characteristics of customers.

When firm practices customer relationship management, some feedback could adjust the CRM cycle and continue to invest in customer relationships. Companies usually offer customer information on how to use company products and services correctly, as well as information about company core competencies. This research integrates the opinions of feedback and figure 6 resulting in the new CRM process cycle, shown as Figure 4.

#### **Figure 4: The Feedback of Customer Relationship Management Processes**

Source: This research.

Customer feedback systems not only provide a service to deliver customers' complaints, but also become a source of spreading the reputation of the business, product, or service.

#### **Most Valuable Customers**

Most of a company's profits are derived from a small percentage of their customers, like the 80/20 principle, who are "heavy users" or "major customers." Zeithaml, et al. (2001) illustrate a framework called the Customer Pyramid that contains four levels from the top to the bottom, named the platinum tier, the gold tier, the iron tier, and the lead tier, in which the platinum tier describes the company's most profitable customers.

Zikmund, et al. (2002) mentioned that some typical ways to segment consumer markets are geographical variables, demographic variables, gender, income, age, education, marital status, family life cycle, ethnicity, lifestyle and psychographic variables, behavior patterns and expectations, ownership, recency of purchase, purchase frequency, consumption habits, benefits sought, customer service requirements, customer loyalty, permission granted, and lifetime customer value. The customer segmentation based on customer transactional and behavioral data (e.g. purchases type, volume and history, call center complaints, claims, web activity data, etc.) collected by various information systems is commonly used (Lee and Park, 2005).

Griffin (2003) pointed out traditional segmentation is based on demographic, firm graphic (focus on providing high-level descriptions of the market and it includes the industry definition, industry size, financial and business metrics, and geography.), attitudinal, and psychographic attributes. Value-based segmentation focuses on the revenue generated by customers, the cost to acquire/service/retain customers, and the resulting profitability of customers. Customer profitability, which is what CRM companies are really seeking, tends to be a product of lifetime value, frequency of purchase, and product holdings.

According to Figure 4, this research proposes to recognize the most valuable customers, shown as in Figure 5, by analyzing those previously retained customers' data in this section. The concepts or idea of previous research are helpful to select those so called most valuable customers depending on industrial attribute or company strategies, whose personal information or characteristics will be the core contribution to next stage, the screener.

### **Figure 5: A Conceptualization of Customer Knowledge Competence**

Source: Campbell, (2003)

#### **Customer Knowledge Competence & Management**

In this section, two areas are involved including customer knowledge competence and customer knowledge management. Koenig and Srikantiah (2000) believed that having good processes and systems to manage customer knowledge is important with reasons. Possessing customer knowledge will assist an organization to access new customer segments, achieve greater customer loyalty among its clientele, and provide customized products or services that mirror customers' needs (Croteau and Li, 2003).

Jayachandran, et al. (2004) showed that customer knowledge processes enhance the speed and effectiveness of a firm's customer response. Customer knowledge will help marketers address customer needs based on what the markets know about their customer, rather than on a mass generalization of the characteristics of customers (Shaw, et al., 2001).

Campbell (2003) conceptualizes customer knowledge competence as being composed of four organizational processes, generate and integrate customer knowledge within the organization:

- (1) A customer information process;
- (2) Marketing– IT (information technology) interface;
- (3) Senior management involvement; and
- (4) Employee evaluation and reward systems, as Figure 5.

Better knowledge of customer behavior enables firms to manage and target customers on the bases of evolving service experiences rather than stable demographic criteria, which increases the perceived value of the firm's offering and decreases the chance of loyal customers defecting to the competition (Glazer 1991).

Massey, et al. (2001) reported that customer interaction systems, integrated channel management, analytical tools are three key technological aspects of CRM enabling the creation, capture, and transfer of knowledge-based resources.

CRM is possible only by integrating knowledge deployment and providing feedback with customer knowledge competency and management to created knowledge-based CRM process that allow companies to evaluate key business measures customer satisfaction, customer profitability, or customer loyalty to support their business decisions. Utilization of any knowledge for a specific problem may result in additional knowledge, which can be abstracted out and stored in the knowledge repository for future use. Customer can provide feedback regarding to the quality of knowledge stored in the repository as well as how easy or difficult it is to search for relevant knowledge. Firms can identify new types of knowledge that need to be gathered based on strategic objectives and the changes that are taking place within the environment (Fahey, 2001; Reichheld and Schefter, 2000; Winer, 2001).

With increasingly abundant customer knowledge accumulation, companies could use this accompanied with information of those most valuable customers to construct and modify content of screener of the CRM system in next stage.

### **The Screener**

Since those most valuable customers are recognized, their common characteristics or information will become the core content of the screener. A firm needs to decide which the most relevant to its situation by considering factors from both the traditional elements, Griffin (2003), of concentrating on the age, sex, lifestyles, and other variables that can be used to segment target populations, and the other newer and more concerned ones, Griffin (2003), such as the present value of their customers, the potential lifetime value of their customers (if they remain loyal to the brand), the number of products their customers currently hold, and could hold, the frequency with which they buy their products or services, the customers' preferred means of contract/distribution (walk-in, e-commerce, telephone), or any combination of the above depending upon a company's customer knowledge base.

Hill and Alexander (2000) pointed out that depth interviews cover the full range of customer types as attitudes and priorities can vary considerably between different customers. In customer markets firm will need to consider segments according to: Age, sex, income or socio-economic group, family life-cycle, lifestyle and product usage.

Many major characteristics are routinely used for segmentation purposes. Others are used less often, mainly because of unavailability, and still others are specific to a particular company or list. Traditionally, customers were segmented by some criteria such as location, type of business, and

customer value. Newer approaches have also taken into considerations of buyer attitudes, motivations, patterns of usage, preferences, and customer value (Chen and Chang, 2004).

In this stage, those customers' characteristics and information are selected and disposed as

Table . Substance in this table will conceive the function of screeners, which are far different in various industries or companies and companies' customer knowledge competence and management. As a result, a 'screener' composes of substance of those geographic variables, demographic variables, lifestyles/psychographics, or behavioral patterns, but not those customers' transaction record.

**Table 1: Customer Segmenting Variables**

Segmenting variables	Examples of typical options or levels
Geographic variables	domestic/foreign/global, regions, zip codes, climate, population density, terrain
Demographic variables	gender, income, age, education, marital status, family life cycle, ethnicity, socio-economic group
Lifestyles/Psychographics	Activities (golf, fishing), interests (shopping), opinions values (patriotism, religion), attitudinal
Behavioral patterns	RFM (recency, frequency, monetary value of purchases), channel, benefits sought, service required, loyalty, permissions granted

Source: This research.

Relationship of those three preceding elements, most valuable customers, customer knowledge competence & management, and screener, in the CRM system is constructed shown as in Figure 6.

**Figure 6: The Transient Customer Relationship Management System**

Source: This research.

As the screener formed in a CRM system, it could effectively screens those originally acquired & retained customer database and those new customers, shown as Figure 6, to generate a new group of potentially valuable customers, discussed in next stage shown as in Figure 7.

### **New Group of Potentially Valuable Customers**

Once a new group of potentially valuable customers recognized out by the screener, they become new focused group of the company. As much literature revealed before, there will be 5 to 8 times of cost or even more for companies acquiring a new customer to retaining an existed one. Screener makes firms to recognize their new group of potentially valuable customers followed by series of targeted marketing campaigns, such as relationship marketing, promotion CRM, or customization activities. This would speed up those potentially valuable customers' transactions to increase companies' revenue progressively, while the companies could reduce these customers' churn rate conservatively.

Do something for those potentially valuable customers is another key point in this CRM system, so all sequential activities are relationship marketing, promotion CRM, customization, private issues, and so forth, shown as in Figure 7. CRM effectiveness will result from those CRM results and sequential measurement. Furthermore, measurement would also induce new issues for 'study' in next stage.

The screener always keeps updating periodically by functioning the elements of customer knowledge competence & management and most valuable customers. Therefore, new potentially valuable customers' database also generates timely and follows those CRM activity cycle shown as in figure 7.

### **Figure 7: The Completed Customer Relationship Management System**

Source: This research.

In addition, managers must constantly measure satisfaction levels and develop programs that help to advance performance beyond targeted customer expectations. A comprehensive set of relationship programs includes customer service, frequency/loyalty programs, customization, rewards program, and community building.

### **Study**

Followed the measurement element, 'Study' is an element in this CRM system to make customer knowledge plentifully, and it could be diversified. Nykamp (2001) reported that customer knowledge can be increased by:

- Profiling the customer base
- Segmenting your customer base
- Understanding share of customer wallet
- Estimating customer lifetime value
- Measuring customer retention and attrition
- Understanding customer product purchase and usage trends
- Approximating customer loyalty
- Monitoring customer satisfaction levels
- Understanding product impact on customer performance
- Understanding customer needs, attitudes, and preferences

Any type of study based on those results and sequential measurement is helpful to effectiveness of CRM system. Practices of CRM processes could not only find out the most profitable customer characteristics, but also gather information or knowledge on customer value. In this step of study, administering CRM process know-how will be brought to the element of customer knowledge competence and management. Updated customer knowledge competence and management plays role of constructing and modifying the screener to enhance screener's function. The loop from study to the element of customer knowledge competence and management is shown as in Figure 7.

## **CONCLUSION**

This research has established a CRM system, Figure 7, which contained a "screener" to screen and find the organization's valuable customers. A well-framed CRM system would help organizations implement their CRM much more effective and efficient hopefully. With a screener in a CRM system, firms could find out their own potential most valuable customer without much customer transaction information.

Time to make those potentially valuable customers becoming organizations' really valuable customers would be reduced, because of transactions would be speeded up through series of promotion, which also could consequentially make churn rate down to those potentially valuable customers. Furthermore, a concrete CRM system with powerful knowledge discovery process helps management make crisp marketing strategies.

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