

Customer Relationship Management:
A Framework, Research Directions, and the Future

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Introduction

The essence of the information technology revolution and, in particular, the World Wide Web is the opportunity to build better relationships with customers than has been previously possible in the offline world. By combining the abilities to respond directly to customer requests and to provide the customer with a highly interactive, customized experience, companies have a greater ability today to establish, nurture, and sustain long-term customer relationships than ever before. The ultimate goal is to transform these relationships into greater profitability by increasing repeat purchase rates and reducing customer acquisition costs.

Indeed, this revolution in customer relationship management or CRM¹ as it is called, has been referred to as the new “mantra” of marketing.² Companies like Siebel, E.piphany, Oracle, Broadvision, Net Perceptions, Kana and others have filled this CRM space with products that do everything from track customer behavior on the Web to predicting their future moves to sending direct e-mail communications. This has created a worldwide market for CRM products and services of \$34 billion in 1999 and which is forecasted by IDC to grow to \$125 billion by 2004.³

The need to better understand customer behavior and focus on those customers who can deliver long-term profits has changed how marketers view the world. Traditionally, marketers have been trained to acquire customers, either new ones who have not bought the product category before or those who are currently competitors' customers. This has required heavy doses of mass advertising and price-oriented promotions to customers and channel members. Today, the tone of the conversation has changed from customer acquisition to retention. This requires a different mindset and a

different and new set of tools. A good thought experiment for an executive audience is to ask them how much they spend and/or focus on acquisition versus retention activities.

While it is difficult to perfectly distinguish the two activities from each other, the answer is usually that acquisition dominates retention.

The impetus for this interest in CRM came from Reichheld⁴ where he showed the dramatic increase in profits from small increases in customer retention rates. For example, his studies showed that as little as a 5% increase in retention had impacts as high as 95% on the net present value delivered by customers (advertising agencies) with a low of 35% (computer software). Other studies done by consultants such as McKinsey have shown that repeat customers generate over twice as much gross income than new customers. The considerable improvements in technology and innovation in CRM-related products have made it much easier to deliver on the promise of greater profitability from reduced customer “churn.”

For example, Exhibit 1 shows the results from a 1999 McKinsey study on the impact of improvements in a number of customer-based metrics on the value of Internet companies. The metrics are divided into three categories: customer attraction, customer conversion, and customer retention. As can be seen, the greatest leverage comes from investments in retention. If revenues from repeat customers, the percentage of customers who repeat purchase, and the customer churn rate each improves by 10%, the company value was found to increase (theoretically) by 5.8%, 9.5%, and 6.7% respectively.

A problem is that CRM means different things to different people. For some, CRM means direct e-mails. For others, it is mass customization or developing products that fit individual customers' needs. For IT consultants, CRM translates into complicated

technical jargon related to terms like OLAP (on-line analytical processing) and CICs (customer interaction centers).

A major purpose of this paper is to provide a managerially useful, end-to-end view of the CRM process from a marketing perspective. The basic perspective taken is that of the customer, not the company. In other words, what do managers need to know about their customers and how is that information used to develop a complete CRM perspective? The basic model is shown in Exhibit 2 and contains a set of 7 basic components:

1. A database of customer activity.
2. Analyses of the database.
3. Given the analyses, decisions about which customers to target.
4. Tools for targeting the customers
5. How to build relationships with the targeted customers.
6. Privacy issues.
7. Metrics for measuring the success of the CRM program.

In addition, academics are interested in the CRM space for its research potential. Implications for new research areas will be discussed throughout the paper organized by the components of the CRM framework. Finally, at the end of the paper, we will discuss a number of future directions for CRM.

Creating a Customer Database

A necessary first step to a complete CRM solution is the construction of a customer database or information file.⁵ This is the foundation for any customer

relationship management activity. For Web-based businesses, this should be a relatively straightforward task as the customer transaction and contact information is accumulated as a natural part of the interaction with customers. For existing companies that have not previously collected much customer information, the task will involve seeking historical customer contact data from internal sources such as accounting and customer service.

What should be collected for the database? Ideally, the database should contain information about the following:

- Transactions. This should include a complete purchase history with accompanying details (price paid, SKU, delivery date)
- Customer contacts. Today, there is an increasing number of customer contact points from multiple channels and contexts. This should not only include sales calls and service requests, but any customer- or company-initiated contact.
- Descriptive information. This is for segmentation and other data analysis purposes.
- Response to marketing stimuli. This part of the information file should contain whether or not the customer responded to a direct marketing initiative, a sales contact, or any other direct contact.
- The data should also be over time.

Companies have traditionally used a variety of methods to construct their databases. Durable goods manufacturers utilize information from warranty cards for basic descriptive information. Unfortunately, response rates to warranty cards are in the 20-30% range leaving big gaps in the databases. Service businesses are normally in better shape since the nature of the product involves the kind of customer-company

interaction that naturally leads to better data collection. For example, banks have been in the forefront of CRM activities for a number of years. Telecom-related industries (long distance, wireless, cable services) similarly have a large amount of customer information.⁶

The following are illustrations of some corporate database-building efforts:

- The networking company 3Com created a worldwide customer database from 50 “legacy” databases scattered throughout their global operations. They built customer records from e-mails, direct mail, telemarketing, and other customer contacts, with descriptive information by department, division, and location.
- Thomson Holidays, the British tour company developed a Preferred Agents Scheme to enlist the assistance of travel agents in building the database. They collect customer descriptive information and data on trips taken. This enables them to calculate the profit on a per customer trip basis.
- Taylor Made, the golf equipment manufacturer, has a database of over 1.5 million golfers with their names, addresses, e-mail addresses, birthdays, types of courses played, and vacations taken.

Companies such as Procter & Gamble and Unilever selling frequently-purchased consumer products have greater problems constructing databases due to lack of systematic information about their millions of customers and the fact that they use intermediaries (i.e., supermarkets, drug stores) that prohibit direct contact. The challenge is to create opportunities for customer interaction and, therefore, data collection. This can be from running contests to encouraging customer visits to Web sites. Waldenbooks

offers a 10% discount on purchases if customers provide information to the company and become Preferred Readers.

Exhibit 3 gives a general framework for considering the problems in database construction.⁷ Firms in the upper left-hand quadrant have many direct customer interactions (banks, retail) and therefore have a relatively easy job constructing a database. Firms in the lower right-hand quadrant have the most difficult job because they interact less frequently with customers and those interactions are indirect (through channels) in nature. Auto and furniture manufacturers are examples here. The other two boxes represent intermediate situations.

The point of this framework is that unless you are in the high-direct box, you have to work harder to build a database. The Thomson Holidays example above is a good illustration of a company that used channel incentives to take a low frequency product and still obtain customer information. Kellogg has developed a creative solution to the problem through its “Eat and Earn” program where children find a 15-digit code inside cereal boxes and then go to the company’s Web site, enter some personal information, and become eligible for free toys. The task is then to move towards the upper left-hand quadrant through increased customer contact and “event” marketing.

A number of possible areas of research in the database area are the following:

- What is the value of the database? While some research has started in this direction⁸, since the database is a significant corporate asset, more work from an accounting perspective is needed.
- What is the best database design from both an information and user standpoint?

- How can companies integrate disparate databases (e.g., marketing and production, globally) more efficiently?
- What are some new strategies for data generation?

Analyzing the Data

Traditionally, customer databases have been analyzed with the intent to define customer segments. A variety of multivariate statistical methods ranging such as cluster and discriminant analysis have been used to group together customers with similar behavioral patterns and descriptive data which are then used to develop different product offerings or direct marketing campaigns.⁹ Direct marketers have used such techniques for many years. Their goals are to target the most profitable prospects for catalogue mailings and to tailor the catalogues to different groups.

More recently, such segmentation approaches have been heavily criticized.¹⁰ Taking a large number of customers and forming groups or segments presumes a marketing effort towards an “average” customer in the group. Given the range of marketing tools available that can reach customers one at a time using personalized messages (what has been referred to as “1-to-1” marketing), there is less need to consider the usual market segmentation schemes. Rather, there is increased attention being paid to understanding each “row” of the database, that is, each customer and what he or she can deliver to the company in terms of profits.

As a result, a new term, lifetime customer value or LCV, has been introduced into the lexicon of marketers. The idea is that each row/customer of the database should be analyzed in terms of current and future profitability to the firm. When a profit figure can

be assigned to each customer, the marketing manager can then decide which customers to target.

A model of the profitability of a customer based on past and current purchases is the following¹¹:

$$\text{Profits}_t = \sum_T [\sum_J (P_j - C_j) - \sum_K MC_k] ,$$

where:

t = the current time period,

T = the total number of time periods in the database,

J = the number of products purchased,

K = the number of marketing tools used to target customers,

P_j = Price of the jth product purchased,

C_j = Cost of the jth product purchased,

MC_k = Cost of the kth direct marketing tool (customer acquisition costs).

In words, the profit that a customer has produced for the firm is the sum of the margins of all the products purchased over time less the cost of reaching that customer. These costs include any that can be broken out at the individual customer level such as direct mail, sales calls, etc. Note that mass advertising would not be part of this formula. It could be assigned to individual customers by computing a per customer dollar amount but because it is the same for each customer, it would not affect the rank ordering of the customers in terms of their profitability.

The equation can be used as the basis for LCV calculations by adding forecasts for the major parameters and discounting back. This obviously requires assumptions about future purchasing, product and marketing costs, as well as how long the customer

can be expected to remain with the firm. Generally, this will result in a number of scenarios for each customer depending upon these assumptions.

The equation not only is the basis for LCV, but it can also be used to show where additional profits can be obtained from customers. Increased profits can result from:

- Increasing J, the number of products purchased, by cross-selling;
- Increasing P, the price paid, by up-selling or charging higher prices;
- Reducing C, product marginal costs;
- Reducing MC, the customer acquisition costs.

Other kinds of data analyses besides LCV are appropriate for CRM purposes. Marketers are interested in what products are often purchased together, often referred to as market basket analysis. Complementary products can then be displayed on the same physical page in a hard-copy catalogue or virtual page on a Web site.

A new kind of analysis born from the Internet is clickstream analysis. In this kind of data analysis, patterns of mouse “clicks” are examined from cyberstore visits and purchases in order to better understand and predict customer behavior.¹² The goal is to increase “conversion” rates, the percentage of browsing customers to actual buyers.

Research issues include the following:

- What is the appropriate valuation method? Do current methods capture all of the aspects of customer value?
- How do we impact the parameters of the model, e.g. increase P and J?
- How can we modify the model to incorporate data from Web clickstream and log file data?
- Are there new market segmentation and analysis tools that can do a better job?

Customer Selection¹³

Given the construction and analysis of the customer information contained in the database, the next step is to consider which customers to target with the firm's marketing programs. The results from the analysis could be of various types. If segmentation-type analyses are performed on purchasing or related behavior, the customers in the most desired segments (e.g., highest purchasing rates, greatest brand loyalty) would normally be selected first. Other segments could also be chosen depending upon additional factors. For example, if the customers in the heaviest purchasing segment already purchase at a rate that implies further purchasing is unlikely, a second tier with more potential would also be attractive. The descriptor variables for these segments (e.g., age, industry type) provide information for deploying the marketing tools. In addition, these variables could be matched with commercially-available databases of names to find additional customers matching the profiles of those chosen from the database.

If individual customer-based profitability is also available through LCV or similar analysis, it would seem to be a simple task to determine on which customers to focus. The marketing manager can use a number of criteria such as simply choosing those customers that are profitable (or projected to be) or imposing an ROI hurdle. The goal is to use the customer profitability analysis to separate customers that will provide the most long-term profits from those that are currently hurting profits. This allows the manager to "fire" customers that are too costly to serve relative to the revenues being produced. While this may seem contrary to being customer-oriented, the basis of the time-honored "marketing concept," in fact, there is nothing that says that marketing and profits are

contradictions in terms. The 80/20 rule often holds in approximation: most of a company's profits are derived from a small percentage of their customers.

For example:

- AT&T offers different levels of customer service depending upon a customer's profitability in their long-distance telephone business. For highly profitable customers, they offer "hot towel," personalized service. For less profitable customers, you get automated, menu-driven service.
- The wireless provider PageNet raised monthly rates for unprofitable subscribers. Clearly, the intent was to drive them away.
- Similarly, Federal Express raised shipping rates for residential customers in expensive-to-serve areas where their volume did not justify normal rates.

The point is that without understanding customer profitability, these kinds of decisions cannot be made.

On what basis should these customer selection decisions be made? One approach would be to take the current profitability based on the above equation. An obvious problem is that by not accounting for a customer's possible growth in purchasing, you could be eliminating a potentially important customer. Customers with high LCV could be chosen; this does a better job incorporating potential purchases. However, these are difficult to predict and you could include a large number of unprofitable customers in the selected group. No matter what criterion is employed, de-selected customers need to be chosen with care. Once driven away or ignored, unhappy customers can spread negative word-of-mouth quickly, particularly in today's Internet age.

Some research issues in this area are the following:

- What is the optimal selection criterion?
- Are there new models of customer categorization?
- What is the optimal mix of customer types?

Targeting the Customers

Mass marketing approaches such as television, radio, or print advertising are useful for generating awareness and achieving other communications objectives, but they are poorly-suited for CRM due to their impersonal nature. More conventional approaches for targeting selected customers include a portfolio of direct marketing methods such as telemarketing, direct mail, and, when the nature of the product is suitable, direct sales. Writers such as Peppers and Rogers¹⁴ have urged companies to begin to dialogue with their customers through these targeted approaches rather than talking “at” customers with mass media.

In particular, the new mantra, “1-to-1” marketing, has come to mean using the Internet to facilitate individual relationship building with customers.¹⁵ An extremely popular form of Internet-based direct marketing is the use of personalized e-mails. When this form of direct marketing first appeared, customers considered it no different than “junk” mail that they receive at home and treated it as such with quick hits on the delete button on the keyboard. However, sparked by Godin’s call for “permission”-based programs whereby customers must first “opt-in” or agree to receive messages from a company, direct e-mail has become a very popular and effective method for targeting customers for CRM purposes.¹⁶ Companies such as Kana and Digital Impact can send very sophisticated e-mails including video, audio, and web pages. Targeted e-mails have

become so popular that Jupiter Media Metrix projects that over 50 billion of them will be sent in 2001.

A study by Forrester Research shows why this is so.¹⁷ Exhibit 4 demonstrates that e-mail is a very cost-effective approach to customer retention. Through lower cost per 1,000 names by using the company's own database (the "house" list) and greater clickthrough rates than those afforded by banner advertisements and e-mails sent to lists rented from suppliers, companies can reduce their cost per sale dramatically.

Some examples are the following:

- Southwest Airlines's e-mail-based Click 'n Save program has 2.7 million subscribers. Every Tuesday, the airline sends out e-mails to this database of loyal users containing special fare offers.
- The bookseller Borders (Borders.com, Borders and Waldenbooks offline retailers) collected all of its customer information into a single database. The company then uses e-mails tailored to the customer's reading interests to alert them about upcoming releases.
- The Phoenix Suns basketball team sends streaming video messages from its players promoting new ticket packages and pointing them to the team's Web site.

The main criticisms of targeted e-mails have focused on the privacy issue which will be discussed below.

Some research issues are the following:

- How do should we allocate resources over acquisition, retention, and greater purchasing?

- Does permission matter? What are the consumer behavior implications of permission vs. no-permission?
- What is the optimal allocation of resources over the different targeting tools? On-line vs. offline?

Relationship Programs

While customer contact through direct e-mail offerings is a useful component of CRM, it is more of a technique for implementing CRM than a program itself.

Relationships are not built and sustained with direct e-mails themselves but rather through the types of programs that are available for which e-mail may be a delivery mechanism.

The overall goal of relationship programs is to deliver a higher level of customer satisfaction than competing firms deliver. There has been a large volume of research in this area.¹⁸ From this research, managers today realize that customers match realizations and expectations of product performance, and that it is critical for them to deliver such performance at higher and higher levels as expectations increase due to competition, marketing communications, and changing customer needs. In addition, research has shown that there is a strong, positive relationship between customer satisfaction and profits.¹⁹ Thus, managers must constantly measure satisfaction levels and develop programs that help to deliver performance beyond targeted customer expectations.

A comprehensive set of relationship programs is shown in Exhibit 5 and includes

- Customer service
- Frequency/loyalty programs

- Customization
- Rewards programs
- Community building.

Customer Service

Because customers have more choices today and the targeted customers are most valuable to the company, customer service must receive a high priority within the company. In a general sense, any contact or “touch points” that a customer has with a firm is a customer service encounter and has the potential to gain repeat business and help CRM or have the opposite effect. Programs designed to enhance customer service are normally of two types. *Reactive* service is where the customer has a problem (product failure, question about a bill, product return) and contacts the company to solve it. Most companies today have established infrastructures to deal with reactive service situations through 800 telephone numbers, faxback systems, e-mail addresses, and a variety of other solutions. *Proactive* service is a different matter; this is a situation where the manager has decided not to wait for customers to contact the firm but to rather be aggressive in establishing a dialogue with customers prior to complaining or other behavior sparking a reactive solution. This is more a matter of good account management where the sales force or other people dealing with specific customers are trained to reach out and anticipate customers’ needs.

A variety of systems leveraging the Web assist both kinds of service. Charles Schwab has established MySchwab which allows customers to create personal Web pages linking them to all Schwab services including stock quotes, trading, retirement planning analyses. In this way, the company empowers the customer to deliver their own

service. Other Web-based services such as LivePerson, HumanClick, and netCustomer are bolt-on products that when added to a company's Web site, provide customers with the ability to interact with service representatives in real time. Companies like Kmart are investing large amounts of money into kiosks that provide information on product availability, order status, and a variety of other service-related topics.

Loyalty/Frequency Programs

Loyalty programs (also called frequency programs) provide rewards to customers for repeat purchasing. A recent McKinsey study²⁰ found that about half of the ten largest retailers in the U.S. in each of the top seven sectors (category killers, department stores, drugstores, gasoline, grocery, mass merchandisers, specialty apparel) have such programs with similar findings in the U.K. The study also identified the three leading problems with these programs: they are expensive, mistakes can be difficult to correct as customers see the company as taking away benefits, and, perhaps most importantly, there are large questions about whether they work to increase loyalty or average spending behavior.²¹ A problem that can be added to this list is that due to the ubiquity of these programs, it is increasingly difficult to gain competitive advantage.

A number of Web-based companies providing incentives for repeat visits to Web sites include MyPoints and Netcentives. Although these have not been wildly successful, it is clear that the price orientation of many Web shoppers creates the need for programs that can generate loyal behavior.²²

Customization

The notion of mass customization goes beyond 1-to-1 marketing as it implies the creation of products and services for individual customers, not simply communicating to

them. Dell Computer popularized the concept with its build-to-order Web site. Other companies such as Levi Strauss, Nike, and Mattel have developed processes and systems for creating customized products according to customers' tastes. Slywotzky refers to this process as a "choiceboard" where customers take a list of product attributes and determine which they want.²³ The idea is that it has turned customers into product *makers* rather than simply product *takers*. Shapiro and Varian²⁴ argue that such customization is cheap and easy to do with information goods. Such customization is termed "versioning." It is, of course, easier to do this for services and intangible information goods than for products but the examples above show that even manufacturers can take advantage of the increased information available from customers to tailor products that at least give the appearance of being customized even if they are simply variations on a common base.

Community

One of the major uses of the Web for both online and offline businesses is to build a network of customers for exchanging product-related information and to create relationships between the customers and the company or brand. These networks and relationships are called *communities*. The goal is to take a prospective relationship with a product and turn it into something more personal. In this way, the manager can build an environment which makes it more difficult for the customer to leave the "family" of other people who also purchase from the company.

For example, the software company Adobe builds community by devoting a section of its Web site to users and developers. They exchange tips and other information which binds them more to the company and its brands. By giving the customers the

impression that they own this section of the site and being open to the community about product information, Adobe creates a more personal relationship with its customers.

Some research issues in the area of building relationship programs are the following:

- What are the key drivers of satisfaction when a company has both an on-line and off-line presence?
- Is there a difference between “proactive” (the company contacts the customer) and “reactive” (the customer contacts the company) customer service?
- What loyalty program strategies are effective differentiators?
- How to mass customize? Methods for determining what kinds of product options customers want and how to manufacture them.

Privacy Issues

The CRM system described in this paper depends upon a database of customer information and analysis of that data for more effective targeting of marketing communications and relationship-building activities. There is an obvious tradeoff between the ability of companies to better deliver customized products and services and the amount of information necessary to enable this delivery. Particularly with the popularity of the Internet, many consumers and advocacy groups are concerned about the amount of personal information that is contained in databases and how it is being used. Thus, the privacy issue extends all the way through the hierarchy of steps outlined in Exhibit 1.

This is not a new issue. Direct marketers have mined databases for many years using analyses based on census tract data, motor vehicle records, magazine subscriptions, credit card transactions, and many other sources of information. However, with the “in your face” nature of unwanted direct e-mails and the increasing amount of information that is being collected surreptitiously as people browse the Web through nefarious “cookies,” these concerns have received more prominence.²⁵ The defining moment in Web privacy occurred in 1999 when the Web ad serving company Doubleclick announced that it was acquiring the direct marketing data base company, Abacus Direct, with intentions to cross-reference Web browsing and buying behavior with real names and addresses.

A study by Forrester Research found a continuum of privacy concerns²⁶:

1. Simple irritation. This comes mainly from unwanted e-mails.
2. Feelings of violation or “How do they know that about me?”
3. Fear of harm. This could come from browsing X-rated sites, booking travel that a consumer does not want others to know about, etc.
4. Nightmarish visions: the IRS, “Big Brother,” and other thoughts.

As of this writing, there are 8 Internet privacy bills being considered by Congress. The current debate about privacy and the debate in Congress centers around how much control Web surfers should have over their own information. While many argue that it is in customers’ best interests to give as much data as possible in order to take maximum benefit of what the Web has to offer, many disagree. The opponents formalize their arguments in the following two options:

“Opt-in”: In this case, Web users must consent to the collection and use of personal data. This gives the customer more control over their own information and would help to build industry confidence. However, from the marketer’s perspective, this may substantially reduce the amount of information available in data bases.

“Opt-out”: This is the Web version of the direct marketing “negative reply” whereby a customer has to explicitly forbid the collection and use of personal data. This gives more information to marketers and therefore potentially improves the products and services available to customers. However, the customers bear the loss of control.

These issues are only going to become thornier as the proliferation of wireless devices means more information about customers becoming available over time.

Some possible research topics in the privacy area are the following:

- Are there ways to build privacy “screens” into current Internet systems (e.g., Microsoft’s P3P technology)?
- How important in privacy to consumers? How does this vary globally?
- What are the components of privacy?
- How can a company build “trust” into its Web site?

Metrics

The increased attention paid to CRM means that the traditional metrics used by managers to measure the success of their products and services in the marketplace have to be updated. Financial and market-based indicators like profitability, market share, and profit margins have been and will continue to be important. However, in a CRM world,

increased emphasis is being placed on developing measures that are customer-centric and give the manager a better idea of how her CRM policies and programs are working.

Some of these CRM-based measures, both Web and non-Web based are the following:²⁷

- Customer acquisition costs
- Conversion rates (from lookers to buyers)
- Retention/churn rates
- Same customer sales rates
- Loyalty measures.
- Customer share or share of requirements (the share of a customer's purchases in a category devoted to a brand).

All of these measures imply doing a better job acquiring and processing internal data to focus on how the company is performing at the customer level.

The Future of CRM

With the increased penetration of CRM philosophies in organizations and the concomitant rise in spending on people and products to implement them, it is clear we will see improvements in how companies work to establish long-term relationships with their customers. However, there is a big difference between spending money on these people and products and making it all work: implementation of CRM practices is still far short of ideal. Everyone has his or her own stories about poor customer service and e-mails sent to companies without hearing a response. Despite several years of experience,

Web-based companies still did not fulfill many Christmas orders in 2000 and customers continue to have difficulties returning unwanted or defective products.

We can expect that the technologies and methodologies employed to implement the steps shown in Exhibit 1 will improve as they usually do. More companies are recognizing the importance of creating databases and getting creative at capturing customer information. Real-time analyses of customer behavior on the Web for better customer selection and targeting is already here (e.g., Net Perceptions) which permits companies to anticipate what customers are likely to buy. Companies will learn how to develop better communities around their brands giving customers more incentives to identify themselves with those brands and exhibit higher levels of loyalty.

One way that some companies are developing an improved focus on CRM is through the establishment or consideration of splitting the marketing manager job into two parts: one for acquisition and one for retention. The kinds of skills that are need for the two tasks are quite different. People skilled in acquisition have experience in the usual tactical aspects of marketing: advertising, sales, etc. However, the skills for retention can be quite different as the job requires a better understanding of the underpinnings of satisfaction and loyalty for the particular product category. In addition, time being a critical scarce resource makes it difficult to do an excellent job on both acquisition and retention. As a result, some companies have appointed a chief customer officer (CCO) whose job focuses only on customer interactions.

A possible marketing organizational structure is shown in Exhibit 6. In this organization, the person overseeing the company's marketing activities, the VP-Marketing, has both product management and the CCO as direct reports. The CCO's job

is to provide intelligence to the VP from marketing research and the customer database for use by product managers in formulating marketing plans and making decisions. In addition, the CCO manages the customer service operation. Although it would perhaps seem more logical for the CCO to report to product management, the reporting arrangement to the VP-Marketing is a signal to the company of the prominence of the position. The CCO also interacts with other company managers whose operations may have a direct impact on customer satisfaction.

The CCO at EqualFooting.com, a company offering streamlined purchasing, financing, and shipping services for small manufacturing and construction businesses, has the job of integrating marketing and operations to make sure that customers are satisfied.²⁸ An alternate conceptualization is to create two jobs, customer managers and capability managers.²⁹ The former oversee the relationship with customers while the latter make sure that their requirements are fulfilled.

The notion of customer satisfaction is being expanded to change CRM to CEM, Customer Experience Management.³⁰ The idea behind this is that with the number of customer contact points increasing all the time, it is more critical than ever to measure the customer's reactions to these contacts and develop immediate responses to negative experiences. These responses could include timely apologies and special offers to compensate for unsatisfactory service. The idea is to expand the notion of a relationship from one that is transaction-based to one that is experiential and continuous.

The "bottom line" is that companies that are not taking a customer-centric view of their business operations are going to be passed by those that view relationship-activities

as the key to long-term profitability. In this paper, it has been shown specifically what steps must be taken to implement such a system.

Exhibit 1

Impact of a 10% Improvement in Indicator on the Current Value of E-Commerce Firms

<u>Metric</u>	<u>Definition</u>	<u>Value</u>	<u>If Improved 10% to</u>	<u>Incr.in Value</u>
<i>Attraction</i>				
Visitor Acquisition Cost	Marketing \$/ visitor	\$5.68	\$5.11	0.7%
New visitor Change	Increase in the number of new Visitors, 1Q-2Q	62.4%	72.4%	3.1%
<i>Conversion</i>				
New cust. Acq. Cost	Marketing \$/ customer	\$250	\$225	0.8%
New cust. Conversion Rate	% of new visitors who become customers	4.7%	14.7%	2.3%
New cust. Revenue Change	Increase in new revenue, 1Q-2Q	88.5%	98.5%	4.6%
<i>Retention</i>				
Repeat-cust. Revenue Momentum	Increase in revenue from repeat customers, 1Q-2Q	21.0%	31.0%	5.8%
Repeat-cust. Conversion	% of customers who become repeat Customers	30.2%	40.2%	9.5%
Customer Churn rate	% of customers repeating, 1 st Half of 1999	55.3%	65.3%	6.7%

Source: McKinsey & Co. (1999)

Exhibit 2

Customer Relationship Management Model

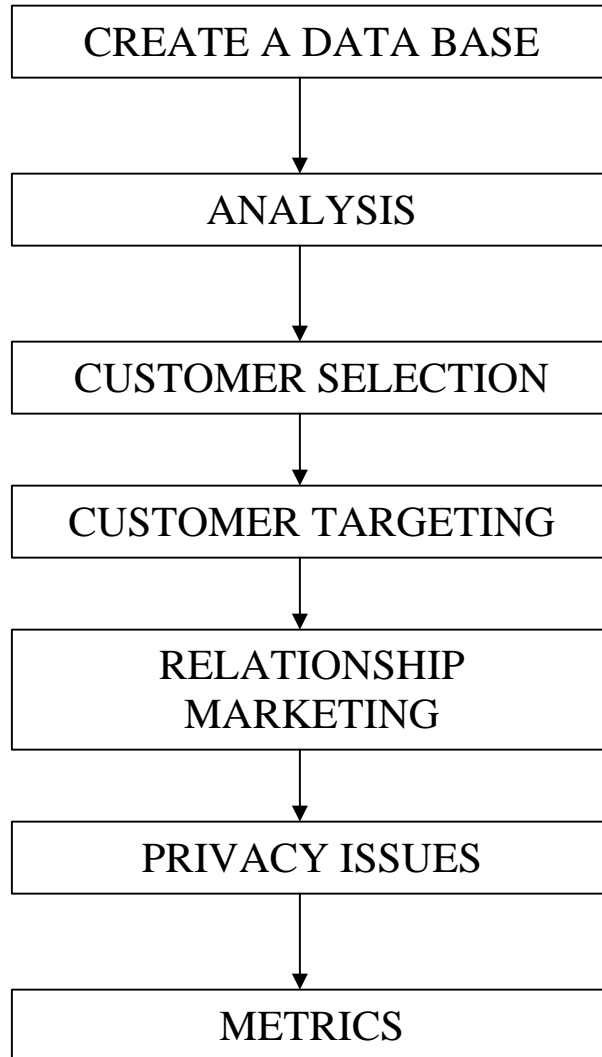


Exhibit 3

Getting More Customer Interaction

Customer Interaction

		Direct	Indirect
Interaction Frequency	High	Banks Telecom Retail	Airlines Packaged goods Drugs
	Low	Personal Computers Internet Infrastructure	Furniture Autos

Exhibit 4

E-mail Generates the Lowest Retention Costs

	Customer Acquisition			Customer Retention	
	Direct mail to Rented list	Banner advertising	Email to rented list	Direct mail to "house" list	Email to "house" list
Cost per ,000	\$850	\$16	\$200	\$686	\$5
Click-through rate	N/A	0.8%	3.5%	N/A	10%
Purchase rate	1.2%	2.0%	2.0%	3.9%	2.5%
Cost per sale	\$71	\$100	\$286	\$18	\$2

Source: Forrester Research, 2000

Exhibit 5

Customer Retention Programs

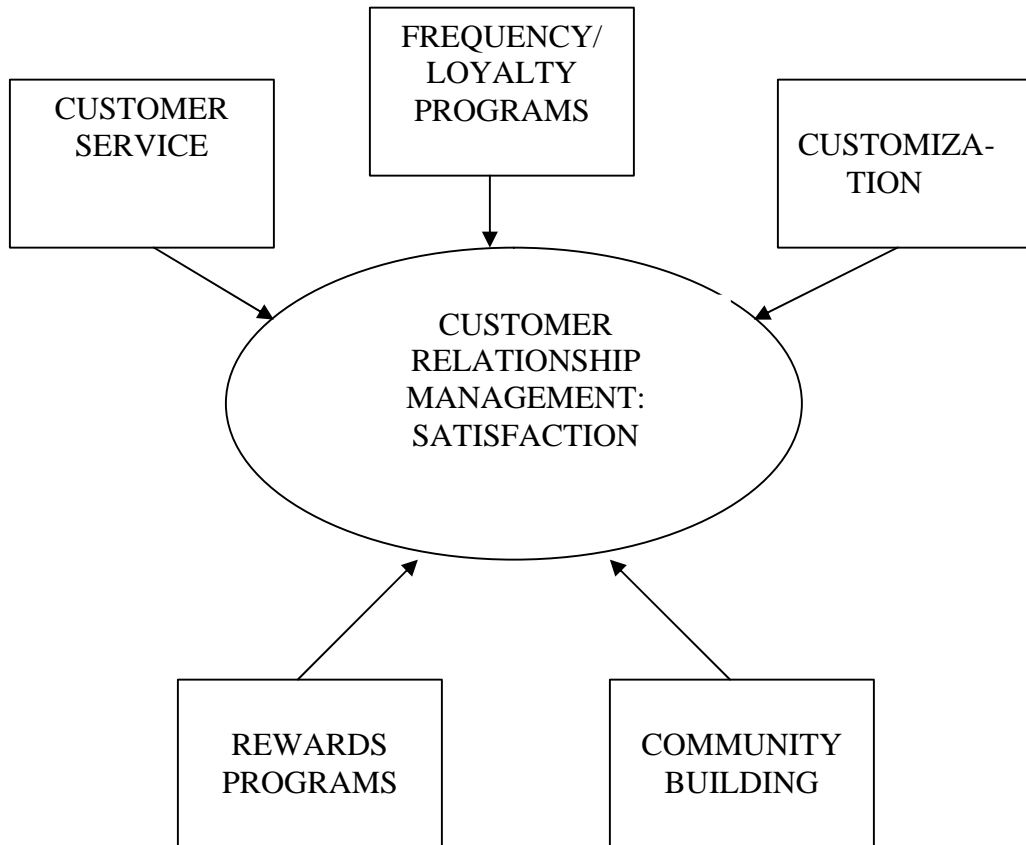
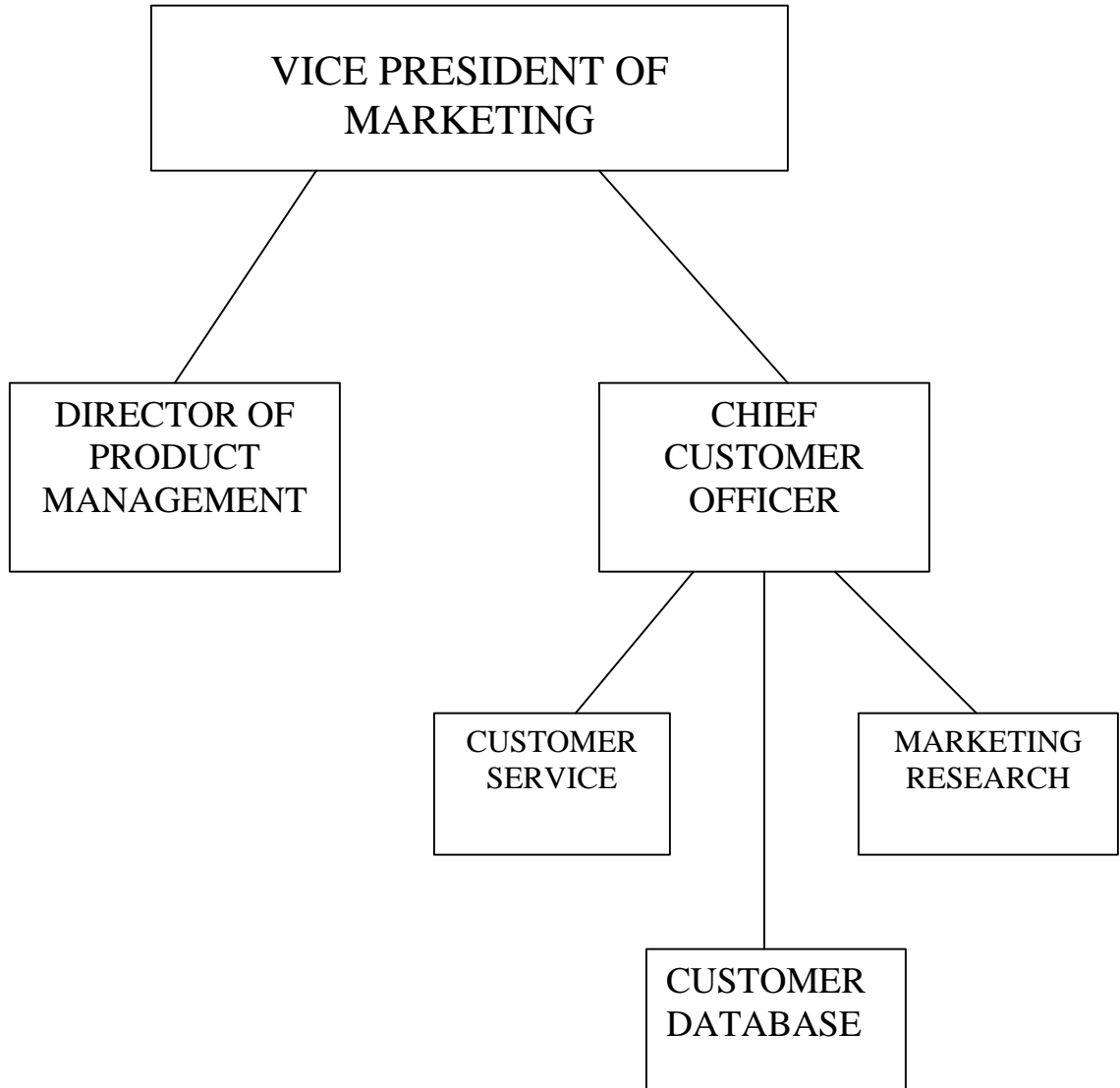


Exhibit 6

A Future Marketing Organization



¹ If all the components of the CRM system are Web-based including the company, eCRM or electronic CRM is sometimes the term that is used.

² *ICONOCAST*, January 4, 2001.

³ *ICONOCAST*, October 12, 2000.

⁴ Frederick F. Reichheld, *The Loyalty Effect*, (Cambridge, MA: Harvard Business School Press).

⁵ See, for example, Rashi Glazer, "Winning in Smart Markets," *Sloan Management Review*, Summer, 1999, pp.59-69.

⁶ Of course, this does not mean that they are using it in the way we will describe later in this paper.

⁷ This figure is due to Professor Florian Zettelmeyer, University of California at Berkeley.

⁸ Rashi Glazer, "Measuring the Knower: Towards a Theory of Knowledge Equity," *California Management Review* v40, n3, Spring 1998, pp.175-194

⁹ See, for example, Michel Wedel and Wagner A. Kamakura, *Market Segmentation: Conceptual and Methodological Foundations*, 2nd edition, (New York: Kluwer Academic Publishers, 1999).

¹⁰ Don Peppers and Martha Rogers, *The One to One Future*, (New York: Doubleday, 1993), Ch.4.

¹¹ For other formulas, see Paul D. Berger and Nada I. Nasr, "Customer Lifetime Value: Marketing Models and Applications," *Journal of Interactive Marketing*, Winter, 1998, pp.17-30.

¹² Wendy W. Moe and Peter S. Fader describe clickstream analysis more completely in their paper, "Uncovering Patterns in Cybershopping," published in this issue.

¹³ Valarie A. Zeithaml, Roland T. Rust, and Katherine N. Lemon elaborate on this section in their paper, "The Customer Pyramid: Creating and Serving Profitable Customers," published in this issue.

¹⁴ Peppers and Rogers, *op.cit.*

¹⁵ There is some disagreement about how successful 1-to-1 on the Internet has been. For a perspective on the negative side, see Susan Kuchinskas, "One-to-(N)one?" *Business 2.0*, September 12, 2000, pp.141-8.

¹⁶ Seth Godin, *Permission Marketing*, (New York: Simon & Schuster, 1999).

¹⁷ Jim Nail, "The Email Marketing Dialogue," Forrester Research Inc., January 2000.

¹⁸ Richard L. Oliver, *Satisfaction: A Behavioral Perspective on the Consumer*, (Boston, MA: Irwin McGraw-Hill, 1997), and Valarie A. Zeithaml and Mary Jo Bitner, *Services Marketing*, (Boston, MA: Irwin McGraw-Hill, 2000) are good examples.

¹⁹ Eugene W. Anderson, Claes Fornell, and Donald R. Lehmann, "Customer Satisfaction, Market Share, and Profitability," *Journal of Marketing*, July, pp. 53-66.

²⁰ James Cigliano, Margaret Georgiadis, Darren Pleasance, and Susan Whalley, "The Price of Loyalty," *The McKinsey Quarterly*, number 4, 2000.

²¹ See also Grahame R. Dowling and Mark Uncles, "Do Customer Loyalty Programs Really Work?" *Sloan Management Review*, Summer, 1997, pp.71-81, and Werner J. Reinartz and V. Kumar, "On the Profitability of Long-Life Customers in a Noncontractual Setting: An Empirical Investigation and Implications for Marketing," *Journal of Marketing*, October, 2000, pp.17-35.

²² It is not clear that this is loyalty in the true sense as better price deals quickly draw price elastic shoppers away.

²³ Adrian J. Slywotsky, "The Age of the Choiceboard," *Harvard Business Review*, January-February, 2000, pp.40-1.

²⁴ Carl Shapiro and Hal R. Varian, *Information Rules*, (Cambridge, MA: Harvard Business School Press, 1999).

²⁵ For an interesting analysis of how much information can be obtained merely from your computer connection to the Internet, visit www.privacy.net.

²⁶ Jay Stanley, "The Internet's Privacy Migraine," Forrester Research, Inc., May, 2000.

²⁷ Donald R. Lehmann and Russell S. Winer, *Product Management*, 3rd ed., (Burr Ridge, IL: McGraw-Hill, 2001).

²⁸ Audrey Manring, "Profiling the Chief Customer Officer," *Customer Relationship Management*, January, 2001, pp.84-95.

²⁹ B. Joseph Pine II, Don Peppers, and Martha Rogers, "Do You Want to Keep Your Customers Forever?" in J. Gilmore and B. J. Pine II, eds., *Markets of One*, (Cambridge, MA: Harvard Business School Press, 2000).

³⁰ CustomerSat.com newsletter, December 29, 2000.