
E-relationship marketing: changes in traditional marketing as an outcome of electronic customer relationship management

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Abstract

Marketing concepts and definitions have remained relatively unchanged until recently. Electronic customer relationship management (eCRM) has forced marketing managers to reevaluate how, when and to what extent they interact with their customers. This paper is focused on the role of specific marketing concepts and how eCRM has enhanced or altered each concept. Every topic discussed is illustrated with current business examples. Several examples from the business trade press are used to illustrate the success an organization can achieve when using eCRM to enhance marketing skills.

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Introduction

Electronic customer relationship management (eCRM) is the latest technique companies are using to increase and enhance their marketing skills and capabilities. Traditional definitions of marketing according to Stanton *et al.* (1994) include a philosophy or orientation for the whole business – defining the primary goal of everyone in the organization or the identification and creation sustainable competitive advantage. This paper explores how eCRM expands these traditional definitions of the marketing concepts and enables a company to meet their internal marketing objectives. The paper also expands on the basic research issue for markets on how best to integrate eCRM to be both effective and efficient for an organization (Romano and Fjermestad, 2002, 2003). The following key topics are discussed: customer buying, marketing strategies, and the evolution of customer call centers to a customer e-contact center in relation to an eCRM implementation. In addition, marketing strategies, forming a strategic alliance, customer strategy and product differentiation will be discussed in terms of an eCRM implementation.

Customer buying behavior

A customer is an individual or organization that makes a purchase decision. The purchase decision is based on the customer satisfying their wants and needs (Stanton *et al.*, 1994). This gives a challenge to the marketing manager. According to Allen and Fjermestad (2001), the marketing manager must be able to show, communicate and demonstrate how their product can satisfy the wants and needs of a customer.

When purchasing a product the customer will either make a high or low involvement decision. A high involvement purchase will occur when a consumer is dissatisfied with the quantity or quality of information about the purchase situation and decides to actively collect, and evaluate more products. A low involvement purchase is when a customer is comfortable with the information and alternatives readily available. A low involvement purchase is usually related with impulse buying (Stanton *et al.*, 1994). An objective of the marketing manager (and sales representatives) is to be able to relate and react to both types of purchase decisions. Customer relationship management

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(CRM) tools can help a sales representative and marketing manager relate to both types of purchasers.

E-piphany (Maselli, 2002) developed a technology that can deliver information to the sales representative about the customer. This information is presented before the customer is contacted in order to help the sales representative prepare for the sale. The software will pull all relevant product, sales data and customer information from one or multiple sources in the organization. This information is available via the Web, e-mail and/or by mobile access. By providing information about a product before a customer requests it, the customer may be converted from a high involvement to a low involvement purchaser.

In addition to influencing the purchasing involvement, eCRM can also help create customer profiles and customized products. Traditionally customer profiles were either demographic or behavior-based. A demographic profile may have included marital status, if customer had children, where the customer lived and what magazines he/she liked to read. A behavior-based profile may describe the number of times a customer clicked a particular Web site because it is more focused around the "action" of the customer (Novo, 2003). eCRM can add "intelligence" to the customer profiles and can help deploy customized products.

The health care industry is one taking advantage of eCRM customer profile technology and customizable products. Humana, one of the largest health insurers is using eCRM technology to create health plans for its patients (Berinato, 2002). The goal of the new system is to stabilize the cost of healthcare. The patient will no longer have money deducted from their paychecks and instead will be given an allowance each year. The allowance is determined by asking the patient a series of health and medical questions through an online application. Once the patient has completed the questionnaire a series of health plans will be presented to the patient. Each health plan will have a specific allowance amount. A healthy patient will have a lower allowance than a patient on chronic medication. The eCRM system also allows patients to see the cost of brand name versus generic drugs, the cost of doctors and emergency room visits. Since the patients have an allowance and know the cost of an emergency room, unnecessary trips to the emergency room may be avoided (Berinato, 2002). By creating the customer profiles with an eCRM the patient and the company may save time and cost saving.

Along with cost savings eCRM solutions can help companies add to the bottom line. The traditional way of judging success of a Web site is to

count the number of visitors to a page. Additionally, many companies critique their Web site by the number hits and page views within a specific time frame. However, given that only two percent of Web visitors will actually make a purchase, companies should spend more time tracking why Web visitors abandon their purchase or shopping cart (Roussel-Dupre, 2002). A company can use eCRM to identify an Internet niche to increase online purchases and reduce abandoned purchases. For example Ritz Interactive Inc. (Roussel-Dupre, 2002) has identified a niche selling digital cameras online. Photography is one of Ritz Interactives core e-commerce markets. Through research, the company realized that the 25 percent of all digital cameras are purchased online. This is not surprising considering the demographic similarities of the digital camera consumer and the online shoppers. Ritz Interactive may even be able to expand this niche by creating customer profiles and allowing them to customize their digital camera.

When a company has a highly customized product it requires extreme care and focus when discussing the product specifications and taking a customer order. Paper orders can become misplaced and information can be omitted. Moving the ordering process to an online system will give the customer and customer service representatives a better chance of succeeding. Invacare, a home medical equipment company implemented an eCRM solution to help the marketing, sales and customer service representatives (McCall, 2002a). The system implemented did not require customers to download any software to their desktops and it was integrated into Invacare's existing legacy systems. This allowed for a customer to log onto the Web site and customize their medical equipment (for example a wheel chair). The Web site would alert a customer when information was missing or was incorrect for the particular item being customized. Once the information has been entered the customer is presented the price and the ability to purchase the item. The customer can log back onto the Web site to view the status of their order. While viewing the status of their order, Invacare presents the customer with items similar to their purchase based on the existing customer profile. This capability is available because of the new eCRM solution. The eCRM is thus allowing sales representatives to view customer information from anywhere and has freed up customer service representatives to focus on obtaining new customers.

Marketing strategy

Having detailed customer information from an eCRM system allows a company to predict the

kind of products that a customer is likely to buy as well as the timing of the purchases. Customer information collected is useful for developing an effective marketing strategy. A strategy includes an integrated view of the customer, customer decision analytic and optimized customer interactions (Gaines, 2002). A company may choose a number of marketing strategies including: strategic alliance, customer focused strategy and product differentiation.

Strategic alliance

Forming of a strategic alliance is a tactic a company can use when developing an effective marketing strategy. A strategic alliance is an agreement between two or more individuals or entities stating that the involved parties will act in a certain way in order to achieve a common goal. Strategic alliances usually make sense when the parties involved have complementary strengths. A successful strategic alliance and a successful eCRM implementation will have benefits for the customer and the company.

Cytc Corp is an example of this success (McCall, 2002b). The company develops manufacturers and sells products for medical diagnostic applications. The company distributes its products globally to medical laboratories that in turn sell its products to healthcare professionals. The company had grown from a sales force of 75 sales representatives to over 150, a year later. When the company employed only 75 sales representatives all collected data were written down on notepaper and entered into the database by administrative assistants. Since the sales representatives were meeting with physicians with limited time, their notes were often difficult to read and incomplete. It could take up to the three weeks for the data to be corrected, uploaded and reports provided to management. Cytc Corp implemented an eCRM solution to improve this process (McCall, 2002b).

The eCRM solution consisted of four major pieces, a centralized application that was responsible for linking the new software to the existing ERP system, an application loaded on all sales representatives' laptops, synchronization software and reporting software. Additionally, the eCRM solution implemented has Web component which will allow for information access anywhere in the Web. This solution allows the company to save \$200,000 a year in data entry costs and has allowed the company to focus on obtaining a strategic alliance. The eCRM solution has allowed Cytc to capture the different testing physicians are doing, which types of test are covered by insurance companies and what objections physicians may have toward new tests.

This information can now be presented a potential strategic alliance for developing product-marketing partnerships. These partnerships are essential for Cytc to maintain its growth.

Customer strategy

Cytc's marketing problem was organizing its internal information and presenting it to potential business partners. Customers have this same type of problem when trying to look through the large amounts of information provided by competing products/services. An effective marketing strategy can be achieved by developing an effective eCRM customer strategy (Rigby *et al.*, 2002). The idea behind developing a customer focused strategy is not to mold the customer to the company's goals but to listen to the customer and try to create opportunities beneficial to both. It is important to offer customers what they are currently demanding and anticipate what the customer is likely to demand in the future. This can be achieved by providing multiple access channels for customers to use such as traditional e-mail, telephone, fax and preparing for future channels such as wireless applications. A business eCRM guide [1] published a set of headlines that companies should take to heart "Offer solutions, not headaches. . .business should seek ways to decrease the 'work' of the household, such as empowering customer services agents to make it right, right away and updating customers on sales and promotions via their preferred communication method". In other words, give customer a choice not to receive e-mails if they do not want them, allow a customer to choose the delivery method of information via phone or fax and offer a customer the means to consistently update and change how and when they are contacted by the company.

In the short to medium term, this information helps an organization create more effective and focused marketing/sales campaigns designed to attract the desired customer audience. Advantages are gained when accurate customer information is available real-time. This is called analytical CRM (Dyche, 2001; Rong *et al.*, 2001). Analytical CRM is a combination of a data warehouse or data mart integrated with business intelligence analytical systems (online analytical processing – OLAP). The objective of such a system is to give an organization competitive intelligence, the power to tailor marketing, for example, efforts to single-customer specifics, and the data-to-action speed to realize value from efforts faster than ever. Information is pulled from all systems and organized into a way that is easy to see what products and services are the right ones to offer to a customer, how the organization is doing or perceived by a particular customer and which

customers would prefer to end the relationship (Gaines, 2002).

The information retrieved in OLAP can be used with eCRM by allowing for more targeted campaigns and tracking of campaign effectiveness. Launching a new product in the market requires an effective marketing campaign and complete understanding of the company customers. In the 1970s J.M. Smucker Company wanted to implement a new product as part of their product mix expansion strategy. Adding a new product to an existing product mix is often necessary to compete with competitors and keep customers satisfied. The Smucker Company (Wells, 2002) tried this approach unsuccessfully by adding pickles to their existing product lines. This product was launched without complete analysis of the existing customer base. Smuckers' customers related to products in the cooking oils, fruit, peanuts and sweeteners. Pickles were not sweet and thus they were not embraced by their existing customers. eCRM may have helped Smuckers implement a successful product mix expansion and increase customer satisfaction. CRM can identify which products customers embrace and which new ones will be successful. Before an expansion, addition or removal of a product line the management team must first understand their customers. Smuckers now understands this and is adding two new product lines, Jif Peanut Butter and Crisco. Both of these product lines were carefully evaluated for acceptance by existing customers and were chosen based on their established reputation. Smuckers has implemented the tools necessary for a successful product mix expansion and increased customer satisfaction.

Product differentiation

As discussed above in the Smuckers example, today's customers are faced with choosing between different product alternatives. Customers use information for their purchase decision from two sources: commercial and social. Commercial information is media advertising, store clerks, telemarketing and direct mail. Social information can be found in the form of word-of-mouth communication. Word-of-mouth communication occurs on daily basis between family, friends, acquaintances and co-workers. By improving customer service, social information for a product may become more positive. If a product is hard to differentiate in the market place it is more important to have positive social information (Stanton *et al.*, 1994).

FedEx, UPS and US Postal Service have a product that is hard differentiate (Maselli and Colkin, 2002). However, FedEx and UPS have taken a slight lead over the US Postal Service using

eCRM to help with product differentiation. In 1998, FedEx scored 80 percent in customer satisfaction and UPS and US Postal Service scored 77 and 75 percent, respectively. The close gap has since been widened due to increased eCRM applications implemented at FedEx and UPS. FedEx has implemented a system that will track every part of the transaction. The data are combined into a database and evaluated on a daily basis. Customers can communicate to FedEx via the Web or the call center and let them know if the package was damaged, on time and if the billing was correct. FedEx tries to maintain the same high level of customer experience online and in the call center. UPS has also tried to expand the customer perception. Every application implemented at UPS must have a documented benefit to the customer, improve customer service and decrease cost over a period of time. The company has implemented an online service for customers to track packages and installed an automated voice response system. The company has not forgotten the importance of "live customer service representative" and has trained their call center representatives in the latest technology. The efforts by FedEx and UPS have paid off with increased customer satisfaction. In 2002, FedEx has an 82 percent customer satisfaction rating and UPS had an 80 percent rating. According to Maselli and Colkin (2002), the US Postal Service has lost customer satisfaction over the years and is at 73 percent. FedEx and UPS continue to learn the benefits of treating every customer the right way.

Call centers/e-contact centers

Treating customer the right way, every time is the goal of many customer service representatives in call centers. With the evolution of the Internet, traditional call centers have evolved into an e-contact center. The purpose of an e-contact center is to provide a personal customer service experience that is individualized to each customer's needs and questions (Deitel *et al.*, 2001). An e-contact center is made up of multimedia channels including a call center, Web site, online chat rooms and e-mail services. The traditional brick and mortar call centers are "becoming a thing of the past". Customers who are interacting with a company on the Internet prefer to get their answers on the Internet. A Web enabled contact center can provide information via instant messages to customers. Customers no longer have to remain on hold waiting for a representative to take their call. Companies need to integrate all customer databases to meet the needs of the customers who send an e-mail today

but calls tomorrow. Using the Web will allow customers to see their complete account information online, where in previous time only customer service representatives had the information. The key to a successful e-contact center is integration. An integrated call center allows companies to communicate with the customer more effectively and in the manner each individual customer prefers (Mauriello, 2002).

Best Buy has implemented an e-contact center (Cohn, 2002). The system implemented can digitally record calls, enables administrators to evaluate how agents were responding, provide training when necessary, and record how e-mails were answered and how the e-mail was structured to the customer. Best Buy can track the quality and consistency of customer service delivered by recording the way a customer service representative handles a customer. It is a way of making sure a "standard response" is not told or sent to every customer. Best Buy wants to ensure a customer question is directly answered regardless of the media channel. The new e-contact center also allows for the supervisors to rate/grade the representatives. Representatives who score low have the appropriate training sent directly to their desktops. Best Buy now focuses their attention on the customer and answering their questions.

Conclusion

This paper has shown how eCRM can add to traditional marketing concepts. eCRM is not here to change the marketing but instead to enhance it. As demonstrated above established companies have found more success by embracing eCRM. When companies understand customer buying behavior they can enjoy cost savings and increased customer loyalty as shown with Humana (Berinato, 2002). A strategic alliance can be formed to leverage one company's existing marketing experience and increase sales of the other. Identifying products customers want is the first step of product mix expansion, new product launches and product differentiation. Finally, call centers are evolving into e-contact centers with the help of eCRM. Marketing managers have a wealth of eCRM tools available to them to help them achieve their goals and objectives. Together eCRM and marketing managers can successfully implement new products, launch new marketing campaigns, and satisfy customer needs and wants.

Note

1 Ecrmguid.com, www.ecrmguid.com

References

- Allen, E. and Fjermestad, J. (2001), "E-commerce marketing strategies: an integrated framework and case analysis", *Logistics Information Management*, Vol. 12 No. 1, pp. 14-23.
- Berinato, S. (2002), "Heart of health-care change", *CIO Magazine*, 15 June, pp. 89-94.
- Cohn, M. (2002), "Best Buy beefs up customer value at the call center", *Internet World*, June, pp. 42-3.
- Deitel, H.M., Deitel, P.J. and Steinbuhler, K. (2001), "e-customer relationship management", in Horton, M. (Ed.), *e-Business & e-Commerce for Managers*, Prentice-Hill, Upper Saddle River, NJ, pp. 272-300.
- Dyche, J. (2001), *The CRM Handbook*, Addison-Wesley, Boston, MA.
- Gaines, S. (2002), "Customer interaction: Accenture + Teradata raise the bar", *Teradata*, 2Q, p. 25, available at: www.teradatamagazine.com
- McCall, J. (2002a), "CRM and content management: configured for success", *Integrated Solutions*, June, pp. 96-8.
- McCall, J. (2002b), "Put the 'c' in CRM", *Integrated Solutions*, June, pp. 5-10.
- Maselli, J. (2002), "How may I help you? Could mean so much more", *Informationweek.com*, 18 March, p. 30, available at: www.informationweek.com
- Maselli, J. and Colkin, E. (2002), "Couriers deliver customer service", *Informationweek.com*, 3 June, p. 60, available at: www.informationweek.com
- Mauriello, J. (2002), "Integration relieves call center hang-ups", *Integrated Solution*, August, pp. 72-3.
- Novo, J. (2003), "Turning customer data into profits with a spreadsheet", available at: www.jimnovo.com/profiles.htm
- Rigby, D.K., Reichheld, F.F. and Schefter, P. (2002), "Avoid the four perils of CRM", *Harvard Business Review*, Vol. 80 No. 2, pp. 101-9.
- Romano, N.C. and Fjermestad, J. (2002), "Electronic commerce customer relationship management: an assessment of research", *International Journal of Electronic Commerce*, Vol. 6 No. 2, pp. 61-113.
- Romano, N.C. and Fjermestad, J. (2003), "Electronic commerce customer relationship management: a research agenda", *Information Technology and Management*, Vol. 4, pp. 233-58.
- Rong, G., Wang, M. and Liao, S. (2001), "Building an eCRM analytical system with neural network", *Proceedings of the Seventh Annual Conference on Information Systems*, Boston, MA.
- Roussel-Dupre, S. (2002), "Taking an e-focus", *Integrated Solutions*, June, pp. 40-6.
- Stanton, W.J., Miller, K.E. and Layton, R.A. (1994), *Fundamentals of Marketing*, McGraw-Hill, Roseville, NSW.
- Wells, M. (2002), "The perfect combo", *Forbes Magazine*, April, pp. 226-8, available at: www.forbes.com/forbes/2002/0415/226.html

Further reading

- Greenberg, P.L. (2001), *Capturing and Keeping Customers in Internet Real Time*, McGraw-Hill, New York, NY.

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