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The Marketing
Information Revolution

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Professor Blattberg's primary research is in the area of database marketing. He develops statistical models for new product forecasting, direct marketing, and promotional and price elasticity estimation and has published articles in the *Journal of Marketing Research*, *Management Science*, *Econometrica*, *Journal of Marketing*, and other academic journals. A recent monograph analyzes the uses of scanner information in the food retailing industry, and a book, *Sales Promotions*, was released in January 1990. Professor Blattberg serves as director for the Center for Marketing Information Technology, which focuses on improving marketing productivity and effectiveness by studying how information should be used. He has served as a consultant on database marketing and the development of decision support models to many private firms. He also serves as a director of First Tennessee Bank Corporation (Memphis).

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The Marketing Information Revolution

A Glimpse into the Future

You regularly shop at Bob's Food Emporium, where you use your "frequent buyer card" as you check out. The cashier takes an optical scanning wand and reads the bar code on your card, and your account is automatically credited with the dollar amount of today's purchases. The total dollars you spend over the year entitles you to savings of up to 1 percent. At the end of the year, you receive a certificate for free products at Bob's based on your cumulative spending. Last year this certificate was worth \$50 or half of your average weekly expenditures on groceries. You are also eligible for special coupons from manufacturers who participate in Bob's frequent buyer program.

The card appears innocuous. The frequent-user program is like S&H green stamps, except that participants do not need to bother gluing stamps into books, making the process easier for the customer. Yet this card has the potential to change how consumer products are marketed. The information collected about the customer provides both the retailer and manufacturers with the opportunity to develop highly sophisticated marketing programs.

Let us examine how this frequent-user card will work. The retailer captures and maintains all purchases for the cardholder, making it possible to track and analyze the product categories and brands the customer purchases. A clever retailer

will also collect information from the customer on household characteristics such as address, income, education, family structure, competitive shopping behavior, frequency of shopping, and other pertinent information. This information will enable the retailer and manufacturers to develop highly specialized, one-on-one marketing programs.

Bob's Emporium can develop promotions tailored to individual customers based on their shopping behavior. A family with two teenage boys probably consumes large amounts of milk, bread, soft drinks, luncheon meats, and snack foods. A couple in their seventies may purchase more analgesics, denture products, and prunes. Should the retailer promote the same products to these two highly distinct customers? No. Through specialized direct-mail programs and knowledge of purchasing behavior, a retailer can target promotional mailings for products and brands that each customer regularly purchases.

Is simply maintaining information about demographics all that is required? Again the answer is no. Consider two couples in their forties who are college educated, have household incomes of \$70,000 and have no children. One couple travels extensively and uses convenience products such as microwave gourmet dinners. The other eats at home regularly, buying expensive products such as steaks, fancy desserts, and special breads. The couples have the same demographics but very different purchasing behaviors. The use of specific customer purchasing information is critical in designing promotional strategies for these two couples.

The above examples describe how retailers can use purchase information, but manufacturers can also use these data to design special promo-

tions. Suppose Coca-Cola obtained information about each household's soft drink purchases and identified loyal Coke drinkers. To maintain loyalty to their products, they could offer these households coupons for free Coca-Cola products based on annual Coke purchases. They could also identify loyal Pepsi households and offer them a special incentive such as a free two-week supply of Coke to entice them to switch brands. The result is highly targeted promotions offered by manufacturers to reward brand loyalty or encourage brand switching. Today, firms offer generic promotions and hope through self-selection that the appropriate customers will respond, a method far less cost effective than targeted promotions.

Using Bob's customer database it is possible to calculate the value of a customer, which dictates how much the firm should invest in acquiring a new customer. Suppose a customer makes fifty purchases of \$10 each over a year. The incremental gross margin is 50 percent. The customer is worth approximately \$250 per year to the firm. If this is discounted at a high rate, 20 percent, to represent the time value of money and the risk of losing the customer, then the lifetime value of the customer to the firm is \$1,250. The firm can use the lifetime value to determine how much to invest in acquiring this type of customer. Clearly, it would be willing to make a significant investment. Today, few firms know the value of a new customer. However, with detailed purchase and promotional histories, accurate marginal costs, and net present value models, it is possible to make these calculations. This information can then be used to determine the level of marketing investment to make in acquiring new customers.

In summary the database available from Bob's frequent buyer card will have the following effect on marketing:

- Promotions will be tailored to individual customer shopping behavior.
- Direct-marketing advertising will be used to target specific customer profiles based on behavioral data.
- Retailer allegiance and brand loyalty will be rewarded through frequent buyer programs.
- The value of acquiring a new customer can be measured.

Detailed purchase, promotional, and demographic information and the effective use of one-on-one marketing tactics make this scenario possible.

The Emergence of Customer Information Firms

Bob's Emporium represents a new institution—a customer information firm, which combines individual purchase histories with profiles of attitudes, demographics, life-styles, and competitive usage to market its products and services. The critical differentiating feature of such firms is that their marketing activities are driven by detailed customer information, not by the type of products or services they market. Customer information firms transcend common distinctions of industrial, consumer, or service marketers. They rely on information to define their markets.

Four examples illustrate how these companies market. These firms are American Express, Citicorp, Spiegel, and Philip Morris. American

Express is a classic example of a customer information firm because of its strong direct-marketing expertise. Through its credit card division, it collects information on customer purchasing behavior. By classifying the types of credit card transactions processed for each customer, American Express is able to profile its cardholders. A customer who purchases a large number of airline tickets is a heavy traveler. Other travel-related companies can then send direct-response advertising to this customer. American Express also contracts with syndicators who “private label” products and services. Because of this detailed information, it has become one of the top ten catalog companies in the United States and has purchased several publishing companies that use direct-marketing as a channel of distribution. Thus, American Express utilizes the information available from its financial services credit card division to generate additional profits by selling products to its customer base.

Another example is Citicorp Information Services, which provides frequent buyer programs to food retailers. Like Bob’s Food Emporium, Ucrops of Richmond, Virginia, in cooperation with Citicorp, began an experiment several years ago in which retailers offered customers frequent buyer cards that resulted in gifts and discounts. Citicorp provided Ucrops with data-processing and marketing expertise to implement the program. Ucrops reports that sales increased 15 percent because of the marketing programs that utilized the database. The significance of the experiment is not Ucrops’s immediate sales increase but the way in which it will change retailing. Retailers will become customer information firms as a by-product of their normal business activities.

Syndicators will develop merchandise to be sold based on purchase patterns, thus allowing retailers to make profits by selling additional products to their existing customers. Citicorp also wants to buy information from retailers and then sell it to manufacturers who in turn will use it to target customers, based on their buying behavior.

Spiegel is a traditional direct marketer. However, it recognized, as have many other catalog companies, that information "drives" its business. It bases promotional decisions on information generated from its customer files or from outside list vendors. The information is assembled in a traditional customer information file. Spiegel then decides which catalogs to send a specific customer based on past purchase behavior. A woman who purchases shoes from Spiegel will be sent an accessories catalog. A customer who purchases sheets will be sent a housewares catalog.

This is not all that Spiegel can do with its customer information. Recently retired CEO Henry A. Johnson believed that Spiegel was not only a catalog marketer but also a life-style marketer. Its customer is an upscale working woman aged twenty-five to forty. This market segment has other needs that Spiegel can meet, such as those for insurance products or travel-related services. From its detailed customer information, Spiegel can determine the profile of customers who respond to different types of services. Does the Spiegel fashion-conscious customer also respond to solicitations for luxury vacations? Information allows Spiegel to expand its product offerings and lower its marketing costs.

Philip Morris and R. J. Reynolds are developing the capability to become customer information firms by creating detailed databases of cigarette smokers. These databases will contain information about brands and amounts purchased, when smokers began smoking, and extensive attitudinal and demographic information. Once collected, this information can be used to target brand-loyal smokers as well as purchasers of competitive brands. These databases give both Philip Morris and Reynolds an advantage over competitors such as Brown and Williamson and Liggett. Both firms can expand their databases to include customers of Kraft and General Foods (Philip Morris) and Nabisco and Standard Brands (Reynolds). These firms could have detailed customer purchase histories on a wide spectrum of consumer non-durable goods. As long as the economic value of the product is large enough, special direct-marketing programs can be developed.

Nothing has been said about industrial marketers since the examples have focused on consumer products. The opportunity also exists for industrial marketing firms to apply the same principles, and some already have. When an industrial firm's sales force sells directly to the user, the transition to a customer information firm is far easier because the number of customers is much smaller. It can use its direct sales force to develop detailed customer profiles that include information about the decision maker, the purchaser, the user, and the influencer. This file can also contain information about normal product usage, competitors that sell to the account, and the sales potential of the account. More sophisticated customer information files may contain an organizational flow

chart of the firm, noting who is responsible for each type of decision. Personal information about influential individuals may also be maintained. While this may sound like the year 2001, the technology already exists to maintain such information. Most firms' sales forces, however, do not want to communicate this information back to headquarters; ironically, it would be of great value to them if it were available on a systematic basis. It could improve the effectiveness of marketing activities and identify other types of products and services that the firm could sell.

In summary, there are a growing number of firms that can be classified as customer information firms. These firms have developed extensive customer databases to market their existing products more efficiently and to identify potential customers for other products and services. These firms will emerge as leading competitors in their industries because they are able to maximize sales to their customer base. They gain additional revenue by knowing more about their customers than competitors do so that they can efficiently sell what customers need.

How Will Customer Information Change Marketing?

This section identifies the changes customer information will make through installed base marketing, product development, advertising, and pricing and promotions.

Installed Base Marketing

By analyzing direct-marketing companies' promotional expenditures, the economic conse-

quences of the trade-off between acquiring new customers and selling to existing customers becomes apparent. In general, existing customers are far more profitable than new customers because they have already “agreed” to purchase from the firm. The barriers of resistance to becoming a customer have been overcome. While acquiring new customers is important, it is essential to focus a significant part of the firm’s marketing effort on its current customer base. This is called installed base marketing. In marketing to its installed customer base, the firm needs to identify products and services that will (1) appeal to customer needs and (2) be consistent with the image of the firm. Companies such as Sears have utilized their customer affinity to market other types of products to their customer base. Sears sells Allstate insurance, launched the Discover card, and acquired Coldwell Banker and Dean Witter.

This raises the interesting issue of affinity to the organization. For example, the American Association of Retired People (AARP) and the United States Automobile Association (USAA, an insurance company catering to retired military officers) have strong customer affinity created by an “allegiance” among group members. Retired people feel they are discriminated against and need a lobby in Washington. AARP offers them a solution. Because they feel an affinity, AARP can market products to this group and thus serves a “retailing” function. Since they understand their members’ needs, AARP can offer better products and services to their affinity group.

What does this imply for other firms? To exploit its customer database, a firm must create an affinity with its customers. Thus, a company

like Spiegel needs to focus on an image that emphasizes its unique servicing ability to busy, hard-working women of the relevant age and income range. It can then promote other products or services that meet this segment's needs.

Information makes it possible for a firm to become an installed base marketer. This requires a detailed customer database and a focus on creating an affinity with the customer base. If successful, firms lower their marketing costs because they sell existing customers new products or services. Without information, it is difficult to target the firm's existing customers and to determine the effectiveness of different marketing programs.

Product Development

Marketing to an installed customer base raises issues about how firms should develop and introduce new products or services. Firms normally develop new products that provide a fit between their existing production technology and specific customer needs. Which customer needs are met is constrained by the firm's current technology. Research and development is based on utilizing the firm's current level of product and technical knowledge. Meeting customer needs is, therefore, tempered by the business and markets the firm serves. Can a broader perspective be applied to product development? More specifically, instead of constraining the firm on the basis of its current production and technical expertise, could the firm focus on the affinity group it is serving? Can USAA provide other services that its affinity group, retired military officers, wants? Yes, but the firm must not look at its technical expertise to determine what to provide;

