Electronic Marketing and Purchasing

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Abstract

In the past thirty years, we have moved from the traditional exchange models of "explaining" and "managing" to the phenomena of the electronic revolution in buyer-seller networks, the development of network formations, and the impact of electronic communications such as electronic data interchange (EDI) and the internet on electronic commerce. These network approach models emphasize "understanding" and "developing" relationships in business networks (Johnston and Lewin 1996). Van den Poel and Leunis (1999) studied the capabilities of the World Wide Web (WWW) as a new type of non-store retailing in which the Internet is a direct link between the consumer and the retailer or producer, bypassing the traditional store. Although retailers typically have lower costs of operating a commercial activity on the Internet compared with a brick-and-mortar store, non-store buying is perceived to be more risky than retail store buying (Van den Poel and Leunis 1999; Spence et al., 1970; Festervand et al., 1986). One main reason for this is that customers are often unable to physically inspect products before the purchase. Their research confirms earlier findings that money-back guarantee is the most important risk reliever, followed by offering a well-known brand and a price reduction for Internet shoppers.

However, firms are seeing the value in customer account relationship management even for small customers. Oliver (1997) points out that everybody is not "*technothrilled."* Some customers do not mind paying a premium to keep the person-to-person contact when shopping (salespeople, clerks, and cashiers). Thus, when e-marketers obtain customers they must be proactive to keep the customer from "clicking-off" their site.

Oliver also suggests that electronic shopping might be context-dependent. The electronic experience is preferred at different times for different products. Oliver's context-dependent model for purchasing goods and services conceptualizes three levels of commerce ("marketplace" where personal interaction, ritual and sense of community predominate; "marketspace" which includes things that can be digitized and/or have strong brands that can be easily described and understood by vendor and purchaser; and "customerspace" where customers create their own goods or level of service. All three levels fall under the electronic market umbrella. In turn, a growth in the functions of "butlers," "intelligent agents," and "gatekeepers" will prevail (Oliver 1997). The "butler bundles the inputs of the person being served and delivers them completed – not the ingredients of a meal, but the meal itself. "Intelligent agents" are electronic versions of butlers. The intelligent agent is a search-and-find tool for the Internet or other electronic shopping service. The challenge in marketing,

as it always has been, is to give the customer what he, she or it wants - - whether it is the product or service, or the **ability** to create the product or service.

The purpose of this paper is to contrast the old models of dyadic and network marketing to the electronic marketing and purchasing paradigms that are emerging. Buyer-seller relationships will be transformed. Networks will be electronically wired to rapidly communicate end consumption through out the entire value chain. A great deal of the existing marketing infrastructure will be disintermediated and left obsolete. It is also possible that industrial marketing and purchasing, as we know it will vanish. The terms customer relationship management and enterprise resource planning may completely replace the terms of marketing and purchasing.

Introduction

In the past thirty years, we have moved from the traditional exchange models of "explaining" and "managing" to the phenomena of the electronic revolution in buyer-seller networks, the development of network formations, and the impact of electronic communications such as electronic data interchange (EDI) and the Internet on electronic commerce. These network approach models emphasize "understanding" and "developing" relationships in business networks (Johnston and Lewin 1996). Networks or alliances have become increasingly important due to competitive forces, technological innovations, and the need for resources (Johnston, Lewin, and Spekman 1998; Hamel, Doz, and Prahalad 1989; Ohmae 1989).

The impetus to understand buyer-seller relationships increased in the 1960s as was embodied in the Robinson, Farris and Wind (RFW 1967) model, the Webster and Wind (1972) model, and the Sheth (1973) model. Johnston and Lewin (1994) compared these three original models of industrial buyer behavior and extended them into an integrated model which includes nine explanatory constructs representing various stages of the organizational buying process (environmental, organizational, purchase, group, participant, seller, informational, and conflict/negotiation characteristics), along with four additional variables (decision rules, role stress, buyer-seller relationships, and communication networks).

Johnston and Lewin (1994) proposed that organizational buying behavior is related to the levels of risk associated with a given purchase situation. They acknowledged that many variables contribute to the level of risk, among which include environmental uncertainty, buyer competencies, type of product being purchased, complexity, novelty, and importance. Notwithstanding the fact that existing buyer-seller relationships tend to influence the perceived level of purchase risk, Johnston and Lewin's (1994) review revealed that as the risk associated with an organizational purchase increases, the following tendencies can be seen:

- The buying center becomes larger and members are more educated and experienced in their area of expertise
- Sellers offering proven products and solutions are welcomed, even though information search will be actively used in seeking a variety of information sources
- Within the buying center, conflict will increase and a "bargaining" (tit-for-tat) negotiation strategy might be employed, whereas, the collaborative or problem-

solving negotiation strategy approach might be used more within the buyer-seller dyad

- Established communication networks between buyer-seller dyad members facilitates information exchange and fosters cooperation.

The three original models viewed organizational buying behavior as a process. Important influences were categorized as environmental (referred to as "situational" in the Sheth model), organizational, and buyers' characteristics. To understand these influences and their potential impact on the buyer-seller dyad in purchase situations, a breakdown follows:

Environmental influences

Physical, political, economic, suppliers, competitors, technological, legal, and global aspects

Organizational influences

Size, structure, orientation, technology, rewards, tasks, and goal aspects

Buyers' Characteristics

Education, motivation, perceptions, personality, attitude toward risk, and experience aspects

The RFW and Sheth models have two other constructs in common - namely, purchase (or product) characteristics and seller characteristics. Purchase (product) characteristics are delineated as buy task, product type, perceived risk, prior experience, product complexity, and time pressure. Seller characteristics encompass price, ability to meet specifications, product quality, delivery time, and after-sale service.

Another construct, "Group Characteristics," is included in the Webster and Wind model. Dimensions in this category include size, structure, authority, membership, experiences, expectations, leadership, objectives, and backgrounds. The Sheth model also includes informational and conflict/negotiation characteristics. Informational (search) characteristics (which include sources and types of information) are salespeople, conferences and tradeshows, word-of-mouth, trade news, direct mail, and advertising. The conflict/negotiation characteristics are those employed in joint decision making (adopted from March and Simon 1958) such as problem-solving and persuasion, bargaining, and politicking.

Johnston and Lewin (1994) extended the models at both the intra-firm and inter-firm level. Herein. we will concentrate on the inter-firm level from which the "buyer-seller relationships" and "communication networks" emerge. Frequent variables used to examine buyer-seller relationships in the Johnston and Lewin (1994) study are power/dependence, behavior/performance monitoring, cooperation/trust, adapatability, commitment, and communication. The buying center and selling center concepts surround those purchasing activities that occur on the buying side and selling side of the dyad, respectively.

Interdependent Relationships

Tikkanen (1996) and Brandenbury and Nalebuff (1996) concentrate on understanding focal nets, value nets, and holistic network perspectives. Their points of departure from the previous managerial approaches lie in the conceptualization that business networks have become important due to relationships, positions, structures, and the integration of business processes in the overall value system. They suggest looking at business relationships, interactions (e.g., the electronic revolution), and interdependence from a less dichotomous view of buyer-seller relationships, and more from a comprehensive, subjective systems approach.

Networks such as the Internet can be viewed at both an organizational level and at an individual level. The organizational level encompasses the commercial and legal constraints of buying and selling products and services on certain terms. Whereas, at the individual level, personal contacts and individual relationships are established, which are beneficial to the involved actors. Interdependence implies that the actions of any participating actors can produce changes in the actions and behaviors of the other actors (Buchanan 1992; Gundlach and Cadotte 1994; Kumar, Scheer and Steenkamp 1995). A network of inter-organizational contacts, formal and informal, exists which includes many functions at different hierarchical levels within the participating organizations. These networks are rich, global, complex and boundless.

Companies today are establishing priorities and developing action plans that reflect the unique emerging relationships for buyers and sellers. Many of these relationships are designed to bring greater value to the customer by eliminating time, cost, inventory, and other inefficiencies in the supply chain. Electronic communications such as Electronic Data Interchange (EDI), Standard Interchange Language (SIL), DSD are strategies for pursuing this increase in efficiency.

To form a successful partnership or alliance, a strong, interdependent relationship is established to facilitate the flow of information, eliminate duplication, and streamline product delivery. EDI (electronically sending and receiving business documents between two different business management systems) as employed by some firms, reduces costs, time delays, and errors associated with paper-based information (Kurt Salmon 1996). These firms rely on EDI for accurate merchandising decisions, lessening out-of-stocks and adjusting shrinkage accordingly, whereby controls are put into place to account for the growing trend toward a consumer-focused economy. Activity-based costing (ABC) is useful as a tool for understanding the true costs of moving products through the supply chain. Once the major activities are determined, and the drivers of those activities identified, information is used to make informed merchandising decisions. Products vary tremendously in the amount of activity and costs required in bringing them to the customer. Thus, ABC associates costs with products to determine a measure of profitability.

EDI streamlines the functions of assortment, promotion, and distribution that can reduce new product introduction costs as well as product extensions. Any direct route that shortens (or disintermediates) the channel from the manufacturer to the consumer results in tremendous benefits from the synchronization of activities, reduced processing time, and the elimination of redundant and non-essential activities.

However, firms and consumers must be equipped with the technology to accommodate electronic communications. Point-of-Sale (POS) data can be used to develop strategic category plans, monitor space allocations, and measure performance. Continuous replenishment of inventory, demand forecasts, and other predetermined information is monitored to improve inventory turns, decrease cycle times and out-of-stocks.

Grönroos (1990) defined (relationship) marketing as: *Marketing ... to establish, maintain and enhance relationships with customers and other parties at a profit so that the objectives of the parties involved are met. This is done by a mutual exchange and fulfillment of promises."* Gummesson (1994) perceived the shift in the marketing paradigm to be one from which the 4Ps were the founding parameters to one in which the 4Ps are contributing parameters to relationships, networks, and interaction. Thus the move towards an interaction/network theory is timely. Studies of companies' links and positions within channels, and competition and complementarity within networks, is clearly a significant, emerging concept (Brandenbury and Nalebuff 1996).

The impacts of interdependence and information flows are becoming more emphasized, particularly in light of researchers' and practitioners' interests in relationship quality and long-term marketing relations or relational exchanges (Buchanan 1992; Gundlach and Cadotte 1994; Kumar, Scheer and Steenkamp 1995; Dwyer, Schurr, and Oh 1987; Heide and John 1992). Interdependence is conceptualized maximally in an electronic data interchange context. Organizations (both individuals and groups) are interdependent. Their interests and goals are related. This is a critical link between the structural and behavioral aspects of interdependence and the subsequent cooperation of organizations (Tjosvold 1986) that is necessary in a network context.

Though this study is limited to buyer-seller networks in large-scale operations, the need for becoming electronically wired is ever increasing. Bob Howe, president of Scient (an e-business systems innovator) claims that it can build a large-scale ".com" e-business from scratch in six to eight months, i.e. before the CEO of a business even knows what he or she really wants (The Economist 1999). Businesses can quickly create sustainable competitive advantages over slower-moving rivals. A case in point, Burger King put an SQL Server database in every hamburger store, but they still couldn't answer the question, "How many whoppers are we selling each day" (The Economist 1999)? The Economist further points out that General Electric (GE) has developed The Trading Partner Network, a web-based link to its suppliers enabling them to quickly and easily make bids for GE components contracts. Prominent features of this system are an electronic catalogue, the ability to make electronic purchases and the option of paying online with an electronic credit card. Procurement cycles have been cut in half, processing costs by a third, and the cost of goods purchased by 5-50%. The number of GE suppliers has come down and the remaining ones have become tremendously efficient. But, all companies are not jumping on the bandwagon to EDI and ECR activity. The basic thrust that some of the large companies will have to deal with is merging the back-office (EDI) with the front-office (Internet impact). Wal-Mart thus far has steered clear of the Internet as a major way for customers to procure. We turn now to a look at the basic features of the

actors, their roles, activities, and resources in the business context of an electronic revolution.

Wiring the Network

The overall structure of the network evolves from a focal net. The *focal net* is defined as a part of the greater industrial network structure that the focal firm is acting in and perceiving as relevant and meaningful. The focal net contains both direct and indirect relationships.

Timely and efficient dissemination of key information is a major impetus for network formulation. A good example of an industry where this new type of business-to-business and consumer interconnectivity is beginning to emerge is the grocery industry. The term being used in this industry for electronic linking of the supply chain members is efficient consumer response (ECR). Under this approach, distributors and suppliers work together to add greater value to marketplace offerings for the end-consumer. The focus is on the "efficiency" of the total supply system and not on the efficiency at each link in the chain. This strategy reduces total system costs, inventories, and physical assets. It also improves the end consumer's choice of high quality products.

Efficient Consumer Response (ECR)

ECR is more than just EDI and bar coding, although both are essential to the process. ECR really begins with a commitment on the part of distributor and supplier to reengineer their business processes to make them more efficient and to manage products by category rather than by brand. Automation (via EDI) is then utilized to reduce time required to share information and lower costs.

The network approach describes this contemporary interorganizational exchange process very efficiently. The concept of industrial networks allows us to move beyond the dyadic relationship to model system-wide effects, and adds to the interaction approach the knowledge that a relationship cannot be “managed in isolation” from other relationships and represents a conduit to other relationships through which resources are accessed (Easton, 1992). The development of mutually beneficial, cooperative networks of business relationships as suggested by Dwyer, Schurr, and Oh (1987) helps overcome the primary difficulties such as technological and economic aspects of ECR.

The changing competition from wholesale clubs has reshaped supplier-distributor-retailer-consumer relationships – focused SKUs (stock keeping units), streamlined logistics, and efficient in-store operations and mass merchants with broad SKUs at sharp EDLP (every day low prices), world-class logistics, customer service, and excellent management. In the typical distributor and supplier relationship without ECR, demand information available to the supplier is highly distorted by many factors not having much to do with actual consumer demand. The information may be of little value for production planning decisions. Suppliers may even have to purchase information about consumer buying from other sources such as point-of-sales data from 3rd parties. Suppliers carry high levels of safety stock to compensate and incur

high warehousing and inventory carrying costs. ECR enables a timely, accurate, paperless information flow with a smooth, continual, product flow from supplier via distributor and retailer to the consumer household.

There are four value-adding processes of the supply chain on which ECR focuses. Each of these core processes creates value by satisfying consumer needs for product, convenience and price. These **four Key ECR business process strategies** are: efficient store assortment, efficient replenishment, efficient promotion, and efficient product introduction. Taken together, these four processes have the estimated power to lower costs to the end consumer by 11 percent; save the industry $30 billion; and lower the overall system inventory by 40 percent (Kurt Salmon 1996). It is not a project, program, nor technology, rather it is a set of tools that must be developed and adopted in conjunction with other firms as partners. An obvious truth about ECR is that any company without the active participation of a majority of its suppliers or customers cannot realize the full benefits.

In the network approach, reality manifests itself as human intentionality. Human behavior is basically voluntaristic and intentional. Most network theorists share some common assumptions about the nature of contemporary business environments and the behavior of the business enterprise as it relates to interorganizational relationships (Pfeffer and Salancik 1978). Primarily, the market is perceived as a process of networking, linking market actors and their activities and resources. A process is set in motion because of the limited knowledge of the market actors. This knowledge is limited, bounded, subjective, and imperfect. The market process additionally is competitive, but predominantly cooperative. An important aspect to be discussed in the next section is the context of the business enterprise, i.e., the portion of the network relevant for its activities, or its *focal net.* What is perceived as relevant in a network is dependent upon the perception and interpretation of the context by the network actor(s). The context of the business enterprise is textured, with many actors of various behaviors, evolutionary patterns, and constant change with undetermined outcomes.

While systems, technology, and data integrity are extremely important, the ultimate success depends upon *managing the people and processes* that do the work. When a product goes out of stock, no one can blame the computer; it's knowledgeable people that handle business problems. There is an increased need for cross-functional teams that focus on the best way to get products from the beginning to the end of their company's segment of the distribution pipeline.

To move forward requires significant partnering, trust, and information sharing . These values have not typically characterized historical relationships. Significant process, organizational, and technological changes must be managed and internalized. Close collaboration is also required between players in the marketplace. Significant communication and commitment strategies are needed for start-up. The elimination of trust barriers is a must. Finding goals of commonality and compatibility is the basis of starting a mutual trust. Understanding each partner's business is crucial. Time and perserverance will also be key. Sacrificing short-term profits for long-term gains demands the partners have a long range view (Macneil 1980).

Context, Time And Space Of Information

Fundamental sources of wealth in millenium-driven economies are knowledge and information. Companies all over the world have access to the same market of bright employees, market research departments are more or less equal, and the competitive nature of industry makes it certain that rivals' products and processes are examined rigorously. For companies, the focal question is: "What information is needed to effectively manage our business processes so that we keep an advantage over our competitors?" Three important types of information (historical, factual and operational) and their interconnectedness are discussed.

The Trio of Information

To manage anything, you need three types of information: historical ("where have we been?"); factual ("where are we now?"), and operational ("where are we going?"). *Coopetition (*Brandenbury and Nalebuff 1996), when applied properly helps achieve the ECR objective of a timely, accurate, paperless information flow characterized by smooth, continual product flow matched to consumption.

Historically, Controlling product flow necessitates knowing how well your company is doing – that is, how well did your last sales promotion perform? Have you exceeded your sales targets and/or improved service to your customers? Precise, accurate and timely historical information is vital to decide where to focus your business processes. Knowing what happened in the past (such as can be provided from valuable census store scan data) allows you to fix it today.

Factually, where are you today? When your promotions are over, do you know whether you are under- or over-stocked? If so, by how much, and in which stores? These answers are needed quickly and accurately for further deployment of resources on a continual basis, over existing functional boundaries. Are your systems delivering you enough accurate information today that you know you have enough money in the bank to cover tomorrow's payroll?

Operationally, the moment you know both where you've been and where you are today, figure out where you're going (your paths forward). Knowing when the shipment is needed allows you to manipulate your resources to get the work done and to keep your customers satisfied. Profit is calculated from the management of this information component.

Substitution of Information for Inventory

The substitution of information for inventory is a driving force. The elimination of purchase orders and invoices in many businesses is just the beginning. Value chain players have the capability to integrate their distribution systems from retail point-of-sale terminals up through suppliers' manufacturing facilities for development of a world-class distribution system.

Knowing ahead of time what your customers really want enables you to produce products as needed, and to reduce uncertainty and inventories made up of safety

stock. In this vein, superior operational information about customer needs substitutes for inventory. It is a total waste for materials to arrive per agreed-upon schedule, in the right quantities, just to have the material sit on the factory floor waiting for capacity to be freed for production. No one wants to hear, "We were ready to ship, but there were no trucks available."

Retailers, wholesalers/distributors, and manufacturers have powerful information in their hands when they answer two critical questions:

What will I need on the shelf? and **What will I need to produce?**

Information and the Retailer

Participating in co-opetition arrangements allows retailers to predict stockouts and how to avoid them. Transportation of products and working capital decisions can be proactively managed for profit optimization.

Information and the Wholesaler/Distributor

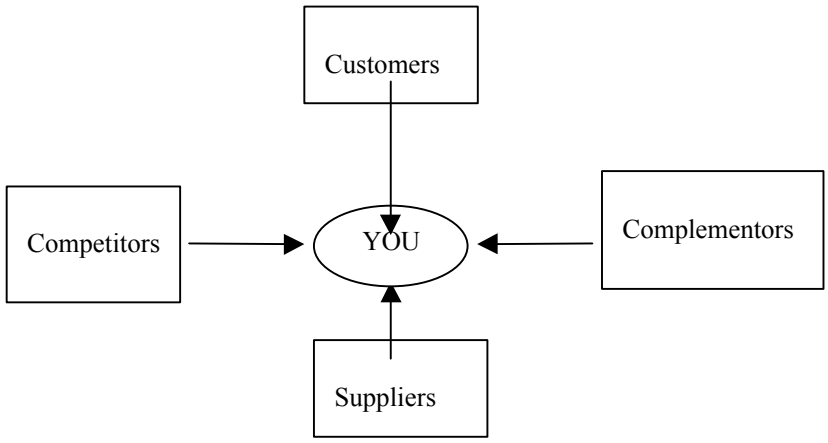
Wholesalers and distributors need not fear their position in the chain due to increased direct linkages between retailer and manufacturer. The strategic position that wholesalers and distributors occupy lends itself to unique custom packaging and delivery services, retail shelf replenishment services, cross-docking, and other information and transport services. For instance, manufacturers could ship products in bulk (unpacked bottles of good 'xyz'), then have the wholesaler/distributor provide the value-added service of delivering to the retail store, units of the product packaged to meet the shelf replenishment supplies for each individual retail outlet. Distribution Resource Planning (DRP) provides the necessary data for developing such profiles of retail stores. This new, unique significant role can reduce retail inventory, increase velocity across channels, and free valuable shelf space for other goods.

Manufacturers can synchronize their logistics and manufacturing resources closer to their retailing and wholesaling **co-opetitive partners**. Full truckloads mixed with products from several manufacturers can be visualized to aid material handling, inventory investment, demand-smoothing, and transportation and warehousing savings.

The Value Net

The key is to share this timely and accurate information with suppliers and other members of your Value Net. The Value Net is a schematic map to visualize your competitors, customers, suppliers, and resources (Brandenburger and Nalebuff 1996). In terms of viewing, the customers and suppliers are along the vertical dimension. From the customer viewpoint, an actor is your complementor if customers value your product more when they have the other actor's product than when they have your product alone. From the supply-side, a player is your complementor if it's more attractive for a supplier to provide resources to you when it's also supplying another actor than when it's supplying you alone.

FIGURE 1- THE VALUE NET*



* Adapted from Brandenburger and Nalebuff 1996.

The Value-Net reveals two fundamental symmetries in the game of business. Vertically - customers and suppliers are equal partners in creating value. Traditionally, we've listened to the customer - - "You've got the specs, you don't need to know what the product's for. Just give it to me on time at the lowest price." Now, it's time to listen to the supplier. Employees, too are suppliers, providing expertise, labor, and time. And as Brandenburger and Nalebuff (1996) suggest, we may be playing "catch-up" in our thinking about suppliers. Brandenburger and Nalebuff (1996) provide several more illustrations of their idea of co-opetition in the following passages:

McGraw-Hill CEO Joseph Dionne said when confronted with the question of whether there would be less demand from paper-print copies with the emergence of on-line, "In ten instances when they create an electronic version of the print edition … [demand for] the print version grows, too." Other scenarios such as the Jekyll & Hyde of computers and paper also illustrate the point. When computers were introduced, there was much talk about the "paperless office." However, the advent of computers has complemented far more than competed with paper, and at a substantial rate.

Originally, cable television was narrow caste and complemented network TV - now, they are competitors. Trade-offs may be that competitors can co-locate next to each other. It is probably true that competitors divide up the market, but they also share in creating the market. Utilities and phone companies today run phone and electric wires over a common set of poles. Strategy experts Gary Hamel and C. K. Prahalad in "Competing for the Future" (1995) say "Become more inquisitive and question why things are the way they are. Only then can you compete for -- and win the future." Companies must adapt to their competitors as well as to their co-opetitors.

The other symmetry is on the horizontal dimension for competitors and complementors. The "mirror image" of competitors is complementors. A complement to one product or service is any other product or service that makes the first one more attractive - i.e., computer hardware and software, hot dogs and mustard, catalogs and overnight delivery service; red wine and dry cleaners. The Value Net helps you understand your competitors and complementors "outside in." Who are the

players and what are their roles and the interdependencies between them? Reexamine the conventional wisdom of "Who are your friends and who are your enemies?" The suggestion is to know your business "inside out" and create a *value net* with the other players. Increase demand for whatever your customer sells.

There is a lot of leverage in a "knowledge-based" economy, especially one whose market has become as high-tech as ours. Technology increases competition. The cost of videoconferencing sometimes can be better, cheaper, and remotely more important than reliance on air travel. The Value Net is designed to counter the bias of focusing on only one part of your business.

In 1990, there was a wake-up call for the supermarket industry (Morgenson 1996). The Consumer Price Index had grown 5.4 percent while supermarket sales had increased only 5.1 percent. Alarmed by this, the Food Marketing Institute (a retailer and wholesaler trade association) hired consultants to study the question of why supermarket sales growth was slowing. The consultants' report, *Alternative Store Formats: Competing in the Nineties,* had a major impact on the packaged goods industry. The report showed that the lions' share of grocery sales increase was going to warehouse clubs. Until this report, traditional grocery retailers (chains like Kroger, Safeway, and A&P) had not considered themselves as being in competition with "alternative format" retailers (warehouse clubs like SAMs and Price Club, mass merchandisers like Wal-Mart and Kmart, and discount drug chains like Drug Emporium and Phar-Mor).

With this insight, these club stores, although designed to serve as a wholesaler for small businesses, were found to carry only 65 percent of their customers as businesses. And of the purchases made by business members, only 35 to 40 percent were for business uses. Therefore, 60 to 65 percent of the purchases made at these clubs were actually for personal use, and many of the products purchased (food, health and beauty aids, etc.) are also sold in traditional format outlets. Thus, from the tiniest private-label suppliers to giants such as Procter & Gamble Co., manufacturers were having to deal with category killers and other "power retailers."

Television advertising has contributed to national brand manufacturers' opportunity to build brand loyalty. Given this leverage, the national manufacturers could refuse to participate with retailers in private label manufacturing. Dave Nichols cites a Point of Purchase survey in which he states that private label is no longer "cheap and nasty." Nichol's contention is confirmed by a 1996 Gallup study in which 86 percent of the shoppers polled said that "private label products are equal to or superior to national brands (Morgenson, 1996)."

The network provides *efficiency* to deliver better and better products at lower costs, and *flexibility* to do so in different ways. A network needs a long-term approach to a relationship, not necessarily a long-term relationship, but an approach as if the relationship would last forever. This longer-term orientation is what Jackson (1985) describes as the "*lost-for-good"* account. The account faces very high costs of switching, makes substantial investments, has high perceived exposure, and possesses traits typical of relationship marketing partners. On the other end of the spectrum is the *always-a-share* customer that has a short-term orientation, lower switching costs,

emphasizes immediate issues, specific product variables, and traits typical of transaction marketing exchange partners.

As described in Robert Axelrod's (1984) book, *The Evolution of Cooperation*, three good personality traits for the maintenance of a business network are being: nice, provocative and forgiving. This strategy never really beats up opponents nor proponents; it manifests itself in doing well on average against opponents, and from taking a non-zero-sum approach. Taking the long-term approach *does* change the outcome. Being nice is the entry ticket to other potential, profitable games and networks. Being provocative allows for repetition which permits cooperation, and hence the importance of a long-term outlook. Trust is essential, as well as showing that you are willing to be forgiving and not ready to engage in opportunistic behavior (Williamson 1985). Managing the network involves effectiveness. Thus, in order to prosper the network has to be efficient and effective: it has to beat other organizational forms, and it has to distribute the gains in such a way that fosters loyalty, for without loyalty, there is no network. The entire system becomes self-reinforcing, for every character of the network builds upon the others: adaptation, specialization, trust, long-term outlook, etc. (Jarillo 1993).

Electronic Marketing and Purchasing

Van den Poel and Leunis (1999) studied the capabilities of the World Wide Web (WWW) as a new type of non-store retailing in which the Internet is a direct link between the consumer and the retailer or producer, bypassing the traditional store. Retail channel functions performed by the WWW were categorized as follows:

1. Non-store information channel;
2. Non-store reservation channel with a traditional mail or courier service delivery; and
3. Non-store purchasing and physical delivery channel.

Although retailers typically have lower costs of operating a commercial activity on the Internet compared with a brick-and-mortar store, non-store buying is perceived to be more risky than retail store buying (Van den Poel and Leunis 1999; Spence et al., 1970; Festervand et al., 1986). One main reason for this is that customers are often unable to physically inspect products before the purchase. Their research confirms earlier findings that money-back guarantee is the most important risk reliever, followed by offering a well-known brand and a price reduction for Internet shoppers.

National (Key) account relationship management is typically used in large organizations to keep a close tie with large volume and/or important customers. However, firms are seeing the value in customer account relationship management even for small customers. Oliver (1997) points out that everybody is not *technothrilled*. Some customers do not mind paying a premium to keep the person-to-person contact when shopping (salespeople, clerks, and cashiers). Thus, when e-marketers obtain customers they must be proactive to keep the customer from "clicking-off" their site.

Oliver also suggests that electronic shopping might be context-dependent. The electronic experience is preferred at different times for different products. Oliver's context-dependent model for purchasing goods and services conceptualizes three

levels of commerce. The first level is called "Marketplace," where personal interaction, ritual and sense of community predominate. Theater, exercise, street markets, special clothes and dining out are in this category. The next level, "marketspace," includes things that can be digitized and/or have strong brands which can be easily described and understood by vendor and purchaser. Financial services, music, software, pictures, home shopping, gaming, home banking, and travel booking belong here. Notice how Levi jeans also fit here. The third category, "customerspace," Oliver describes as the level where customers create their own goods or level of service. Examples include managing a family's health or personal financial plans.

All three levels fall under the electronic market umbrella. In turn, a growth in the functions of "butlers," "intelligent agents," and "gatekeepers" will prevail (Oliver 1997). The "butler bundles the inputs of the person being served and delivers them completed – not the ingredients of a meal, but the meal itself. "Intelligent agents" are electronic versions of butlers. The intelligent agent is a search-and-find tool for the Internet or other electronic shopping service. An example of an intelligent agent is Andersen Consulting's "Bargainfinder." This intelligent agent can search and find the best deals on the Internet for the lowest CD (Oliver 1997). "Gatekeepers" trade electronically for unfamiliar brands where there is a need for the customer to receive a guarantee. The challenge in marketing, as it always has been, is to give the customer what he, she or it wants - - whether it is the product or service, or the **ability** to create the product or service.

Entry barriers into e-markets are low, resulting in a larger number of smaller businesses worldwide (Porter 1980). But managers in many industries might see that early entry, trustworthiness, and competitive prices are critical success factors. While some business and industrial products are consumed in the value chain, most business-to-business networks are primarily established to support the production and delivery of consumer products. With the use of EDI throughout the entire supply chain, networks are intertwined and mutually interdependent. The concept of derived demand can be precisely calculated to optimize the operation of networks and prepare for consumer and business-to-business marketing situations.

However, one important drawback of EDI as offered by Kalakota, Oliva, and Donath (1999) is that it is very limited and inflexible. EDI is not conducive to real-time transaction-handling which makes it difficult for involved supply chain members to have up-to-date supplier information. Plus, the expense and complexity of EDI implementation makes EDI an unlikely solution for all but very large organizations.

E-transactions allow purchases to be made directly via the web site. Inherent in this arena is disintermediation of traditional channel structures. E-commerce is growing in stature. This digital interaction is becoming a dominant online marketing strategy for firms on the leading edge. Capabilities of e-commerce sites include customized web pages for buyers which link their front-end procurement operations with supplier's back-end activities to permit order checking by customers, input to production scheduling, and other automated supply chain transactions and information sharing (Kalakota, Oliva, and Donath 1999). The ultimate pinnacle is being termed E-business where business models are built around networking technology from the ground up, not incorporating any legacy systems or unneeded assets in the digital

marketplace (Kalakota, Oliva, and Donath 1999). Some of the more familiar e-businesses are Amazon.com Inc. and eBay Inc.

Vlosky and Fontenot's (1999) extranet survey found that factors influencing business-to-business buyer and seller partnership are the traditional ones - trust, commitment, power and dependence, information exchange, alternative partner arrangements, and switching costs. More and more people are communicating through e-mail instead of using the telephone (Morris 1999). Paying bills, buying gifts, purchasing homes and automobiles, making travel arrangements, and conducting many other activities are becoming quite common. Major "pull-type marketing questions of a quite different nature" are arising in the manufacturing arena, such as "Do you really know what your customer's customers want?" Kalakota, Oliva, and Donath (1999) predict that successful companies in the third millennium will need to manage assets other than the traditional capital equipment, copyrights, patents, and physical infrastructure. These assets are various forms of knowledge and information. Technology is revolutionizing markets to deliver customers what they want, and when they want it.

Strader and Shaw (1999) use the term interorganizational to include individual consumers, not just separate firms. So, in determining consumer cost differences for traditional and Internet markets, the electronic marketplace, or electronic market system, is described as an interorganizational information system that allows buyers and sellers to exchange information and products. They emphasize the need to study electronic markets to understand their impact on the participants, industries, and the economy.

Participant impact can surface in the form of an additional component of risk, *privacy risk*. Privacy risk reflects the degree of risk which customers envisage due to information collected about them as they shop (Jarvenpaa and Todd 1997). Industry and economy impacts entail viewing costs differently that comprise various components of our domestic trade and household budgetary figures. In traditional markets, only the product purchase price and applicable taxes, plus shipping and handling costs if applicable, were costs to the buyer, but e-market costs are now a factor to contend with, such as the fixed access costs and/or transaction costs paid to firms that operate the e-market.

Strader and Shaw's (1999) empirical findings reflect a major impact of E-markets on the sports trading card industry. They explain that unit search costs in electronic markets are lower than in other sales channels due to the ease, quickness, and inexpensiveness of comparing a large number of prices in an electronic market. They surmise that realistically, consumers could potentially find 50 times as many sellers of a product at a card show or in an e-market as can be found at a card shop.

Nevertheless, risks associated with payment, distribution, and seller opportunism can cause consumers actually to pay more for some products. Needless to say, not everyone is shopping via electronic markets, even if they have access. Consumer choice of traditional markets versus electronic markets is ripe for identifying and evaluating purchase behavior of those individuals concerned with costs. It will be important for sellers to establish themselves in the electronic market.

Strader and Shaw surmise that, over time, because consumer knowledge will be limited to those sellers that may be perceived as less risky, more trusted, or have a better reputation, sub-markets may form within the overall electronic market. Switching costs can be high (Jackson 1985) for any entity or customer to change. "Reputation" commands a price (Stigler 1961).

There will be major growth in industries for "e-lancers" or electronically connected freelancers (Malone and Laubacher 1998). The unit of analysis within corporations and interorganziational relationships is moving in this direction. Tasks are not assigned and controlled through upper- and mid-level management and supervision, but through autonomous independent contractors that join together into fluid and temporary networks to produce and sell goods and services. We can see e-lancers at work in the emergence of virtual companies, outsourcing, telecommuting and temporary workers. These trends point to the devolution of large, permanent companies into flexible networks of individuals. The Internet is the closest thing we have seen to Adam Smith's "invisible hand of the market."

Take for example the automotive industry, as depicted in highlights from the General Motors Corporation (GM) 1999 Annual Report. On the e-commerce front, GM created an organization (GM BuyPower.com) in the business-to-consumer (B2C) arena and formed several alliances (Sony, Net Zero, America Online, Kelley Blue Book, Edmunds.com) to enhance its visibility and accessibility on the Web. It also formed an alliance with Bell Atlantic/GTE Wireless to enable cellular telephone service to subscribers of OnStar in-vehicle communications services. Using OnStar technology, GM will begin selling the industry's first "Web cars" in Year 2000, which allows vehicle occupants to access the Internet in their cars. OnStar had approximately 100,000 subscribers in 1999, and is expected to grow to one million during Year 2000 and to four million by 2003. GM is moving at Internet speed to get from the Industrial Revolution of the 20th century into the Technology Revolution of the 21st century.

On the electronic business-to-business front (B2B), in 1999 GM TradeXchange was created, linking GM and its suppliers in a real time, on-line purchasing system that increased efficiency and lowered costs for all. On February 25, 2000, GM announced a historic project with Ford Motor Company and DaimlerChrysler to combine efforts to form an integrated B2B supplier exchange, creating the world's largest virtual marketplace. GM Buy power.com (E-GM business unit) was created last year to coordinate all of GM's b2C electronic commerce efforts. "E ventures" will be sizeable businesses in the near future, proclaims GM's management. They will allow companies to "Do things better, faster, and with less expense." For example, GM is the first automaker to conduct a B2B Internet auction for materials and equipment, through their GM TradeXchange Web site. Additionally, On Star is the building block of GM's "Web cars," providing an infrastructure to deliver in-vehicle features and functions such as Internet access, digital audio satellite broadcast, maintenance reminders and remote diagnostics navigation services, concierge services, cellular telephone service and emergency and medical services.

GM strives to be both global and local at the same time to capitalize on worldwide knowledge-sharing and to achieve economies of scale, but also to retain the flexibility to tailor individual products to individual markets. In 1998, GM took a big step by

creating a single global automotive operation, GM Automotive. They interwove global processes like purchasing, manufacturing, engineering, research and development, human resources, and communications across all regions of the world, providing economics of scale and giving enough local control to meet the needs of local markets. They added production capacity in regions where they saw growth opportunities, for instance, the Asia Pacific region and Brazil.

GM's strategic business actions include making it a high priority to integrate the principles and values of the fast-moving "e-world" inside its business. GM's management encourages a "sense of urgency" and stresses that the company's size is no longer a protector of security, but a threat. Being big is okay, as long as you are big and fast. They try to act with the speed and urgency of a small company. GM as *One Company* is what they are striving to be. Some major issues for all large, global companies today, including GM, are to struggle with the answers to questions such as "How do you remain on top of your game when everything around you is changing?" "How do you share learning fast enough and far enough? How do you best channel all of the creativity, technical know-how, and diverse insights of the people who make up your organization? How do you make breakthrough ideas the common currency of a company?" One way GM is attempting to respond is to "cross-sell additional GM products such as DIRECTV digital entertainment services, GMAC financial services and OnStar, as well as automotive service merchandising, parts, and accessories through GM Goodwrench Service and AC Delco. GM is trying to take full advantage of global resources. GM has instituted worldwide purchasing. GM also engages in competitiveness studies as a result of pricing pressure and excess capacity. They perform periodic evaluations of the carrying value of long- lived assets. These reviews are generally done in conjunction with the annual business planning cycle. They monitor the operations of third parties that are critical to their company's operations. Of prime importance now will also be the pending impacts of the Eurodollar conversion, which is intended to increase the pace of price harmonization throughout Europe.

A trend that is transforming businesses is segmentation (Young and Rubicam 1999). It's being driven by the huge, exponentially growing amount of data that consumers share. This trove of information allows for more meaningful and accurate predictive purchasing models. Formidable capabilities in customer relationship management, database marketing and interactive communications allow companies to focus on their audiences, customize messages, and increase response rates and value to their customers. Another trend is the convergence of media. Digital media opens the possibilities of jumping from television commercials deep into a related client web site, or from a coupon offer to actionable information on the Internet. Young and Rubicam (Y&R) is a leader in research and partnering with its clients. Y&R strongly believes that ideas create a brand and have the ability to transform a company. A brand as defined by Y&R is the sum total of all customer touchpoints, whether B2B (business-to-business) or B2C (business-to-consumer). That is why Y&R believes the best way to serve clients is with a network that stretches across 73 countries and includes 339 offices.

Conclusion

While the data discussed here focuses on two specific industries - grocery and automotive, most industries where there is a significant cost of managing the supply chain or a lot at stake with nourishing brand assets can benefit from this new approach to buyer-seller interaction. It is already taking place in other industries (quick response and electronic data sharing, to name a few). The requirements are that the companies in the industry view buyer-seller relationships in a cooperative manner and look for ways to improve interaction through sharing of information all along the value chain to the final customer. The bottom line, regardless of whether marketing and purchasing through traditional channels or through electronic means, is to build, leverage, protect and manage brand assets.

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