GUEST EDITORS' OVERVIEW OF THE ISSUE Supply Chain Management in a Networked Economy

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Why a special issue of *Journal of Retailing* on Supply Chain Management? The first, and probably the most obvious reason is that the retailer and its customer are at the end of the supply chain. In fact, several recent initiatives in industry have expanded the traditional boundaries of logistics to include consumer data collected by retailers and shared with key vendors. For instance, the Food Marketing Institute introduced the Efficient Consumer Response (ECR) initiative (Blattberg and Fox, 1995; Kahn and McAlister, 1997) to provide better value to customers by developing stronger and more efficient relations with their suppliers. Part and parcel to the success of ECR is channel-wide sharing and utilization of consumer purchase information.

The second reason for this special issue is that marketing and distribution have always been inextricably linked. Although always one of the four Ps (place), the logistics and distribution discipline has gone through some hard times. Until fairly recently, and certainly within the last 20 years, logistics and supply chain managers had not yet broken through the warehouse glass ceiling into the board rooms. Yet, marketing and logistics, a major component of supply chain management, have a common root grounded firmly in economics. For instance, both marketing (Bartels, 1976) as well as logistics (Stock and Lambert, 2001) claim a report on the distribution of farm products to be the first scholarly effort in their respective disciplines (Crowell, 1901, cited in Langley et al. Undated). Recently, however, marketing scholars are again claiming territorial rights to supply chain management (cf. Blackwell and Blackwell, 1999). Reasons for this renewed interest in integrating the two disciplines include: corporate emphasis on horizontal (coordinated) decision-making across previously "functional" areas of business; concern for understand-

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Journal of Retailing, Volume 76(4) pp. 415–429, ISSN: 0022-4359 Copyright © 2000 by New York University. All rights of reproduction in any form reserved. ing, measuring, and quantifying the customer value created by logistics; and the development and integration of marketing and logistics strategies.

Finally, recent supply chain initiatives in the networked economy as well as sophisticated systems integration have melded the practitioner and academic interests in the area. These initiatives and their implications for research in supply chain management are discussed later in this overview.

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There is nothing more important within the realm of supply chain management than the management of inventory (e.g., Fisher, 1997). After all, the procurement and sale of inventory is the raison d'etre of all merchandise retailers. Retailers' ability to coordinate inventory procurement with their vendors can bring about an insurmountable competitive advantage. Therefore, it is not surprising that the first two articles in this special issue are concerned with automatic replenishment systems. Automatic replenishment systems (ARPs) also known as—vendor managed inventory (VMI) systems are part of an overall Quick Response inventory strategy designed to lower inventory investment, while at the same time increase product availability. By coordinating the demand for merchandise replenishment with vendors, these "pull" inventory systems more accurately match inventory with demand than the more traditional "push" systems.

The first article, "A Decision Support System for Vendor Managed Inventory," (Achabal, McIntyre, Smith, and Kalyanam, 2000) describes a decision support system that is being used by a major apparel manufacturer with many of its key retail accounts. The benefits that accrued to this particular vendor's retailers were significant and included higher inventory turnover and higher sales due to an improved in stock inventory position.

The second article, "The Effectiveness of Automatic Inventory Replenishment in Supply-Chain Operations: Antecedents and Outcomes," (Myers, Daugherty, and Autry, 2000), examines the impact of ARPs across firms. Although several hypothesized relationships were found to be nonsignificant, probably due to the newness of ARP programs with many retailers, they did find that ARP effectiveness was related to managerial commitment, and ARP service effectiveness was related to firm strategic performance.

Category management is another issue that has received a great deal of attention in retailing and supply chain management in both the academic and trade publications. Popular in grocery and discount store operations, but applicable across other retail businesses, category management is designed to coordinate all of the marketing activities of a category, rather than individual vendors, with the objective of maximizing the profitability of the category. The third article, "Determinants and Outcomes of Plan Objectivity and Implementation in Category Management Relationships," (Gruen and Shah, 2000) describe a study in which they identify, and then empirically test, factors that they believe impact a category's performance. They found that implementation of category plans had a greater effect on category management process was a critical component of the implementation of category plans. Preplanning agreements between

retailers and their vendors were also found to impact both the objectivity and implementation of the category plans.

The next two articles set forth situations under which different supply chains should most efficiently operate. "Is Channel Coordination All It Is Cracked Up To Be," (Ingene and Parry, 2000) questions the conventional wisdom about channel coordination. Specifically, the authors take exception to the commonly held belief in the marketing science literature that vendors should set prices that maximize supply chain profit, that is, achieve channel coordination. Specifically, they compare two variations of the maximize-channelprofit rule (a linear quantity-discount schedule and a menu of two-part tariffs) with an alternative, nonlinear quantity-discount schedule that does not maximize channel profits. Empirical results suggest that the manufacturer's optimal choice among these three policies is dependent on the retailers' opportunity costs, the retailers' relative size and the degree of inter-retailer competition. Further, in their examination of a two-part tariff pricing strategy, channel coordination was not in the vendor's best interest. As a result, and at least within the confines of their model, they conclude that it may not be in the vendor's best interest to offer retailers the same wholesale-price schedule, that is, coordinate the channel.

An interesting complement to the Ingene and Parry (2000) article is the research set forth here by Mentzer, Min, and Zacharia (2000). They identify conditions under which supply chain members should strive for a strategic versus an operational partnership. Strategic partnering is an on-going, long-term interfirm relationship for achieving strategic goals, which delivers value to customers and profitability to partners. Operational partnering is an as-needed, short-term relationship for obtaining parity with competitors. One might think that supply chain members should strive for strategic partnership because they lead to sustainable competitive advantages, whereas operational partnering leads to competitive parity. Mentzer et al. (2000) note that there are tradeoffs to be made. Operational partnering requires less time, effort and partnership-specific assets to maintain. Operational partnering may therefore be more appropriate and more likely to succeed than strategic partnering in particular retail supply chains and between particular firms.

We are certain that you will find these articles interesting and complementary to your reading in supply chain management. Naturally, however, this special issue cannot cover the gambit of topics that should and could be examined. In the following pages, we briefly overview a number of additional topics and research issues also deserving of research attention.

SUPPLY CHAINS: THEN AND NOW

Supply chain management used to be simple compared to what it is today. Manufacturers sold to wholesalers or directly to retailers. Salespeople called on their supply chain customers and wrote orders. Or, retailers called in their orders or sent them by mail. This low-tech supply chain started to die out in the 1980s and was almost extinct by the mid-1990s.

UPC, EDI, QR were the key supply chain acronyms of the 1990s. Retailers scanned

UPCs (universal product codes). Orders were transmitted computer-to-computer through EDI (electronic data interchange) systems, resulting in OR (Ouick Response) inventory systems designed to improve product availability, while at the same time lowering inventory investment. Before the Internet, EDI systems were proprietary, that is, owned and operated either by a retailer, a vendor, or a third-party provider known as a value added network (VAN). These systems were generally very expensive to develop and required a significant commitment by all parties involved. Increasingly, EDI data are being transmitted over the Internet through extranets. An extranet is a collaborative network that uses Internet technology to link businesses with their suppliers, customers or other businesses. Extranets are typically private and secure in that only certain parties can access them. For example, several global retailers, including PETsMART and France's Carrefour are using a supplier-buyer extranet network. Suppliers can feature their products, buyers can issue requests for proposals, and then the two parties can electronically negotiate an order and product development (Koloszyc, 1999). Also available over the Internet are intranets, which are secure communication systems that take place within one company.

Collaboration, Planning, Forecasting and Replenishment (CPFR) takes EDI to a new level (Cooke, 1998, Parks, 1999). Popular in grocery and drug industries, CPFR is an inventory management system for the sharing of information among channel members. Here, the retailer sends information to a manufacturer who uses the data to construct a computer-generated replenishment forecast. This forecast will then be shared with the retailer before being executed. By using CPFR, the manufacturer and retailer jointly resolve replenishment issues.

The role that the Internet and other emerging technologies are playing on the supply chains is ripe for future research (Lancioni, Smith, and Oliva, 2000). Lancioni et al. (2000) in a survey of 181 executives found that more and more organizations were using Internet applications in a number of logistical or supply chain areas, such as transportation (56.2%), order processing (50.7%), purchasing/procurement (45.2%), customer service (42.5%), vendor relations (45.2%), inventory management (30.1%), and production scheduling (12.3%).

Supply chains are changing dramatically as the world economy becomes networked. These changes provide exciting research opportunities for academics from varied disciplines from operations management to social psychology. Examine the extended supply chain in Figure 1. Note that Networks/Technology/and the Internet are at the nexus of the Vendor/Retailer/Customer triangle. The traditional domain of logistics and supply chain management has been the Vendor-to-Retailer link. Although our list is not all encompassing, all of the articles included in this special issue are represented by the first four categories of the vendor-to-retailer link. The managerial implications and research opportunities of retailer networks are discussed below.

Looking at the Retailer-to-Customer link, we note several topics of likely interest to both marketing and supply chain researchers that are not considered in this Special Issue. Data warehouses and loyalty programs; multiple selling channels; assortment planning; third party logistics intermediaries; and location issues are all ripe with new problems to be solved and research questions to be answered. Reverse logistics—the process of getting merchandise back through the channel had previously been the domain of the Retailer-





to-Vendor link. In today's environment reverse logistics has become a more salient issue in the Retailer-to-Customer link as clicks and mortar and clicks only retailers worry about processing merchandise returned as a result of Internet purchases. There is a common link for each of the topics discussed in the Retailer-to-Customer link. Each is concerned with increasing customer service, while at the same time decreasing costs.

Finally, the growth of the Internet has expanded the research opportunities in the Vendor-to-Customer link. Disintermediation resulting from manufacturers selling directly to the ultimate consumer has occurred with increased frequency and intensity as a result of the Internet. Also, manufacturers have an increased interest in and ability to strengthen their customer orientation. In the next few sections, we will explore the research possibilities from an e-retailing perspective.

MANUFACTURER/VENDOR-TO-RETAILER

Research on the manufacturer/vendor-to-retailer link in the supply chain (Figure 1) has an important place in the marketing and logistics literature in general and in the *Journal of Retailing* in particular. It is also the traditional domain of business-to-business, sales management, and channel research. The domain hasn't changed in the networked environment. On a very basic level, some of the issues, such as channel conflict and channel structure, remain the same. The research setting and the relative importance of the topics, however, are shifting in the networked economy. Although all of the articles in this Special Issue of *Journal of Retailing* are within the domain of the Manufacturer/Vendor-

to-Retailer link, we have chosen one interesting topic to illustrate the research opportunities in this area—Retailer Networks.

Retailer Networks

A rich area for supply chain research in the networked economy is in the area of retailer networks. Some very traditional sales networks such as Avon are developing a strong Web presence. The degree to which and the ways in which this new channel option will affect its current supply chain configuration from a dealer and fulfillment perspective will have significant implications for both researchers and managers.

Although most experts are predicting that bricks and mortar retailers who have an aggressive Internet presence will ultimately win the war against their clicks-only rivals, some innovative business models afford advantages not available to traditional supply chains. For instance, Send.com, a purveyor of gifts and experiential gift packages, utilizes a dealer network that affords it a competitive advantage over other clicks-only retailers. They contract with local retailers and service providers for wine, candy, restaurants, golf clubs, spas, and so forth. Gift-givers specify a particular "package" to send.com. They arrange for delivery of the product or service with their dealer network, but carry no inventory and have no financial investment in the retailer or service provider. Research on these new channel configurations may provide new perspectives on how more traditional channels could more effectively operate.

Some innovative retailers will garner some share of their respective markets because they can provide products/services or a supply chain configuration that cannot be easily duplicated by their more traditional competitors. It will be interesting to study the aggregate effects of these new entries in specific retail markets. Some would suggest that they would capture market share from the traditional leaders. Others would argue a Pareto Optimal situation in which the new entrants and traditional market leaders will benefit as a result of total market expansion and the adaptation of the new technologies and innovations introduced by the new entrants.

RETAIL-TO-CONSUMER

Traditionally, the retailer to consumer link had not been under the auspices of supply chain management. In fact, it is at this node that the traditional logistical responsibility ends and marketing begins. Throughout the last decade, however, traditional boundaries have blurred. The mid-1990s marked the beginning of the ECR initiative in the grocery and discount chain industries (Blattberg and Fox, 1995; Kahn and McAlister, 1997). In these and other retail industries, experts now believe that the greatest incremental benefits in supply chain management can be derived by concentrating on the demand or customer side, as opposed to the supply or supplier side (Blackwell and Blackwell, 1999; Poirer, 1999). In the previous decades, research and study has significantly advanced supply-side

knowledge. Demand, as opposed to supply, chains have therefore now become a more frequently discussed topic in both academic and practitioner circles. More and more companies are realizing the need to broaden their focus from improving internal efficiencies (i.e., supply chains) to serving their customers effectively (e.g., Parasuraman and Grewal, 2000a, b; Poirer, 1999).

To understand the customer or demand side of the supply chain, we believe it is of major importance to comprehend the role of data warehouses and loyalty programs.

Data Warehouses and Loyalty Programs

A data warehouse is the coordinated, and periodic copying of data from various sources, both inside and outside the enterprise, into an environment ready for analytical and informational processing (Simon, 1997). Data warehouses go hand-in-hand with retail loyalty programs. Loyalty programs provide data for the warehouses, and information from the warehouses help direct loyalty programs' strategy.

In the past, both retailers and their supply chain partners had used customer purchase data primarily for inventory management—the retailer-to-vendor link in Figure 1. Today's data mining techniques, however, provide information about individual customers previously unavailable, thus expanding research opportunities in the customer-to-retailer link.

Both areas—data warehouses and loyalty programs—are ripe with opportunities for researchers. One particular use of a data warehouse is a market-basket analysis in which retailers analyze the data (or mine the data) to determine what predominant categories individual customers are buying. Programs then group customers into clusters based on their purchases. Wal-Mart, for instance, uses data mining to change the location of many items in their stores (Nelson, 1998). Wal-Mart Supercenters displays bananas next to the corn flakes (to help sell more cereal) as well as in the produce section. Interestingly, however, market-basket analysis has not been explored in the marketing/supply chain academic literature.

Retailers are just beginning to harness the power of data warehouses. By collecting purchase and other information from their customers, Internet retailers can provide a level of customized service heretofore available only through the best specialty stores. For instance, JCPenney's just4me.com site enables petite, tall, and plus-size women to create a virtual model and "try on" clothing designed to look good on them. Programs like this build loyalty in three ways. First, customers are drawn to retailers with these customized programs because they provide superior help in finding what they want. Second, a customized program cannot readily be duplicated by competition. Finally, customer preference data can be used to plan future assortments and target promotions to individual customers.

Multiple Selling Channels

As a way of competing with their clicks-only competitors, some bricks retailers are experimenting with different strategies that utilize Internet technology to enhance customer in-store experience. Some place kiosks in the store to facilitate customer connections to the Internet site. Customers can get product and availability information from the kiosk and then purchase the product in the store. Alternatively, they can view the product in the store, purchase it over the Internet, and have it delivered to their home. Customers may also place an order on the net and pick it up in the store. For those who crave faster gratification or want to avoid delivery charges, this hybrid approach may be appealing.

These multiple selling channels create interesting opportunities and challenges from a supply chain management perspective. The rules governing merchandise assortment decisions will be fundamentally different. If consumers embrace the opportunity to view merchandise in the store and take delivery at home, then the amount of in-store safety stock required to meet demand is significantly reduced. In the extreme, stores, or at least certain merchandise categories, could become showrooms with no merchandise for immediate sale. A challenge for retailers who encourage their customers to order over the net and pick up in the store will be to insure the merchandise is, in fact, ready when the customer arrives. This may sound easy, but in reality requires extreme discipline and coordination of the supply chain function.

Although new to the Internet channel, financial services retailers have long offered customers multiple selling channels. Banks, for instance, offer PC banking, teller banking, ATM banking, and now Internet banking. It is possible to learn about what might occur in the Internet product environment by studying analogous situations from service industries. Looking at financial services directly, researchers can examine the role that Internet technologies play, how quickly they diffuse, and the affect they will have on the relative efficiency of the channel. Research can also assess whether these alternative channel options add to the end-value received by the customers and whether they add to the profitability of the supply chain.

The Internet Retailer's Assortment Planning Dilemma

Internet-only retailers face a very different set of issues than traditional bricks and mortar retailers with an Internet presence. First, Internet-only retailers are not constrained by their investment in stores. Second, Internet-only retailers do not have to stock every item that they sell. They can, for instance, stock their best-selling items in distribution centers and have other items shipped directly from wholesalers or manufacturers. Finally, and most importantly, because the size of store and level of inventory investment constraints are relaxed, Internet-only retailers can provide a wider variety, deeper assortment, and higher level of product availability more easily than bricks and mortar retailers can.

Herein lie several issues in terms of making variety and assortment decisions. An important function of retailers has been to provide a carefully edited selection of merchandise that meets the needs of their target customers. dELiAs, for instance, is a catalog and Internet retailer that targets teenage girls. Now, suppose that dELiAs begins to expand their variety and assortment on their Internet site. They decide to offer six casual dress styles instead of three, for instance. In the past, buyers were able to choose the products

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they believed were the *very* best choices for their customers. If they relax their vigilance with regard to choosing only what they believe will be the best choices, they will begin to loose their cache with their target customers.

Staples.com, on the other hand, would view the assortment flexibility available through their Internet operation as a way to solve *all* of the purchasing needs of their target customers—small businesses. As a result they carry significantly more items at Staples. com than they do in their bricks and mortar stores.

These assortment planning issues are important to retailers and should be quite interesting to supply chain researchers. Questions include: Should retailers use distribution centers or have merchandise drop-shipped from vendors? What is the optimal assortment strategy? Should a retailer maintain a carefully edited assortment or be everything to everybody?

Location

The networked economy has the potential of overturning everything we know about how we locate stores and distribution centers. Currently, retailers utilize fairly sophisticated geographic information systems (GIS) and other models such as CHAID (χ^2 Automatic Interaction Detection) to determine the best location for a new store or joint set of stores. But these information systems and models are not currently set up to measure the demand from Internet customers who can be located anywhere in the world.

The answers to the following questions will provide managers with needed information and fodder for research for years to come. First, will bricks and mortar stores with a strong Internet presence continue to need the same number of stores in the same locations as they do now? Second, should distribution centers continue to be located around stores, or should their location consider Internet sale endpoint locations? A corrolary question is, should retailers utilize their current distribution centers that are generally designed to send multiple items to stores, or should separate centers be set up to handle Internet orders? Finally, how will Internet sales affect the quantity and type of shopping centers that are being developed and renovated?

Third Party Logistics Intermediaries

The small shipment problem is another interesting research issue facing retailers who utilize multiple selling channels. A fundamental change in the retail supply chain as a result of online shopping is the way in which customers take possession of merchandise. In a traditional bricks and mortar setting, large quantities of merchandise are delivered to a store and sold one at a time. In an e-retail setting, merchandise must be delivered to customers one at a time. Although catalog retailers are used to shipping small shipments, distribution centers for bricks and mortar are typically not set up to handle them. This situation brings intriguing research opportunities.

What is the ideal distribution center configuration in an e-retailing environment? Should

"bricks and clicks" retailers separate their bricks from their clicks distribution operations? What is the best way to handle the potential small delivery explosion? Is there a niche for another link in the supply chain that delivers merchandise "the last mile" to the customers' home?

Reverse Logistics

Reverse logistics is a term used primarily to describe the process of merchandise returns from customers to retailers and then retailers back to vendors. As a research topic, its traditional domain has been in the retailer-to-vendor link because customers of bricksand-mortar stores typically brought the merchandise to stores. Although an important issue, retailers normally had to deal with reverse logistics when customers brought back merchandise that they didn't like or was defective.

Reverse logistics systems have never been simple or inexpensive. The items may be damaged, and without the original shipping carton, thus causing special handling needs. Transportation costs can be high because items are shipped back in small quantities. Reverse logistics is a more serious problem with catalog and Internet retailers than bricks and mortar-only retailers because returns from customers are much higher than for bricks-and mortar retailers. In fact, they are between 25 and 40%. It is easy to imagine that the reverse logistics cost could equal or exceed the value of merchandise in systems designed primarily for forward logistics.

Supply chain researchers are faced with several interesting challenges with regard to reverse logistics. First, there are new business opportunities through the Internet. For example, thereturnexchange.com, helps retailers and their vendors solve these problems by taking over the return process. Second, it would be important to study how third party logistics intermediaries can help retailers cope with the rise in returns associated with Internet purchases.

VENDOR-TO-CUSTOMER

The vendor-to-customer link is arguably the most studied link in traditional marketing circles. Brand management, pricing, promotion, and consumer behavior are all typically studied from the view of the vendor/manufacturer. There are, however, at least two issues that have become increasingly important to supply chain researchers and managers as a result of advances in the networked economy, technology, and the Internet. These two issues, which are discussed in this section, are disintermediation and customer orientation.

Disintermediation

Disintermediation has become a topic of increasing intensity as e-tailing grows in importance. In a retailing setting, disintermediation occurs when a manufacturer or

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wholesaler competes directly with its retailers. Disintermediation usually arises when a vendor decides to vertically integrate either for economic or strategic reasons, by starting retailing activities. Disintermediation can be illegal if it restrains competition by either systematically undercutting the retail price of the retailers they sell to or by making merchandise that is not otherwise available difficult to obtain.

Some manufacturers, for example, Compaq, HP, and IBM, believe that selling over the Internet directly to the ultimate consumer can increase their profit margins by circumventing their current retail channels, both Internet and bricks and mortar retailers. From a competitive perspective, the Internet becomes just another channel to these manufacturers—no different than opening a chain of factory outlet stores.

A number of these organizations (e.g., Compaq) have suffered because their traditional manufacturer-retailer relationships have resulted in high inventory carrying costs as compared to certain predominantly catalogue and click retailers (e.g., Dell, Micron, and Gateway). The fact that their products are technology oriented and have a short life cycle has further exasperated their problems. Thus, competing on the Internet has become a strategic imperative.

Other manufacturers, notably Levi Strauss and Reebok, experimented with disintermediation and concluded that it was not worth the trouble for two important reasons. First, manufacturers are generally not set up to perform the fulfillment functions necessary to move merchandise from the factory to the customer. They are accustomed to manufacturing and shipping large quantities. Second, manufacturers do not want to anger their current retail customers by competing with them. Home Depot, for example, issued a warning to vendors suggesting that anyone attempting to sell direct will be treated as a competitor. In other words, Home Depot would cut them off (*Industrial Distribution*, 1999). Researchers can explore the "real" profit implications of disintermediation from a vendor's, a retailer's, or from a total channel perspective. Optimal distribution configurations and networks can also be explored.

Manufacturers are utilizing several tactics to attempt to appease their traditional retail customers while selling over the Internet. They are offering a selection of brands and products only available on-line. For instance, P&G is selling a premium line of cosmetics direct to the consumer via the Internet. Their site, Reflect.com, is a personalized beauty experience that suggests products based on individual skin tones, texture, color and so on. Other vendors are simply attempting to keep a low profile, sell only higher price points over the Internet, or leave the execution of promotional events to the exclusive domain of traditional retailers (Meriefield, 1999). An assessment of the viability of each of these branding strategies would be useful from both pragmatic and theoretical perspectives.

It is also important to examine how the use of these alternative channels affects the supply chain and the efficiencies of the manufacturer. Industries experiencing disintermediation are perfect for examining channel power and conflict—a topic with a long and rich history in marketing channels. (For a recent comprehensive review and historical perspective see Frazier, 1999.) Issues pertaining to channel conflict, alienation and cooperation are likely to be very fruitful avenues of research. For instance, experts believe that the disintermediation issue will turn into a power battle of the brands. Toys "R" Us needs Barbie dolls more than Home Depot needs Armstrong flooring, for example. The channel partner with the strongest brand will be able to dictate whether disintermediation takes place (Rubinson and Levy, 1999).

Customer Orientation

The networked economy facilitates a stronger customer orientation by vendors. For instance, customers can communicate directly with manufacturers through email. Also, CPFR and other techniques in which vendors take an active role in the management of inventory helps keep vendors abreast of customer demand in real time, thus enabling them to work quickly with retailers to provide customers exactly what they want—when they want it.

Clearly, in today's highly competitive markets, vendors need to be in touch with their customers. Sheth, Sisodia, and Sharma (2000) and Parasuraman and Grewal (2000a) have indicated that more and more firms (and vendors) need to focus on customer-oriented practices. By following such an orientation, vendors are likely to play a greater role in driving markets as opposed to reacting to markets (Jaworski, Kohli, and Sahay, 2000). They cannot just rely on data provided by their retailers. Vendors need constantly to assess customer perceptions of the value proposition of their products and services, availability/ stock-out, and support services provided. Each of these areas is likely to be a fruitful area of future enquiry.

Recent research has clearly articulated the role of intelligence generation in the creation of customer value or the value proposition (Slater and Narver, 2000; Parasurman and Grewal, 2000b). Vendors need to be constantly monitoring the value proposition of their products and services. They need to clearly understand how facets of their supply chain, such as availability of the product (lack of stock-outs), customer support services, return policies among others are going to influence customer perceptions of value. Recent research has identified at least four key dimensions of value—acquisition (benefits to costs), transaction (deal aspects), in-use (utility of using the product) and redemption (residual benefits at trade in time) (Grewal, Monroe, and Krishnan 2000; Parasuraman and Grewal, 2000).

Vendors can directly influence the acquisition value by influencing the availability of the product. This would reduce the time-cost of the acquisition and increase likelihood of adoption. Customer support services are likely to play an important role in the benefit side of the acquisition and the in-use utility. Use of Web-based information by the vendor can also have an important role in influencing these four dimensions. For example, vendors could post the trade-in value of their products (e.g., it is easy to find this information for cars). Clearly, these areas need more attention.

SUMMARY AND CONCLUSIONS

The purpose of this overview has been twofold. First, it has served as an introduction to this special issue of *Journal of Retailing* on Supply Chain Management. We hope you will

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find the five articles contained in this issue to be both interesting and useful for practitioners and as a springboard for additional research in the area by both marketing and supply chain researchers. The second objective is to provide a framework for examining present and future domains for supply chain research in a networked economy and propose some specific directions for future research in the area. We do not anticipate that our exposition of research topics to be all-inclusive. However, we hope that these issues will stimulate future research.

The overview, organized around Figure 1, illustrates that the traditional domain for supply chain research and the province of each of the papers in this Special Issue is the vendor-to-retailer link in the Networked Economy Induced Supply Chain triangle. We expect the vendor-to-retailer link to always be important and ripe with research issues worthy of pursuit. Although certainly not the only Network/Internet issue in this domain, we also examine how new forms of retailer networks develop as a result of the Internet. Since franchising comprises such a large component of retailing, it will be interesting to watch the impact of the networked economy on this and other retailer networks in the future.

Supply chain researchers have not traditionally studied the retailer-to-customer side of the triangle in Figure 1. Yet, as a result of the networked economy, several issues have surfaced that we believe will be of increasing importance. Specifically, these are data warehouses/loyalty programs, multiple selling channels, assortment and location issues, third party logistics intermediaries, and reverse logistics.

In the section on the vendor-to-customers link in Figure 1, we examine research issues associated with disintermediation and customer orientation. Like the retailer-to-customer link, marketing, rather than supply chain researchers has traditionally studied the interaction between vendors/manufacturers and customers. Today, however, as a result of the networked economy, there are many topics that should keep both camps jointly busy for some time to come.

We began this overview by asking the question, Why a special issue of *Journal of Retailing* on Supply Chain Management? This Journal, like many marketing journals, has a long history of publishing articles on distribution and other channel-related issues. We believe that the research issues consequent to the growth of the networked economy will provide opportunities for scholars from many disciplines to undertake supply chain research for many years to come.

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