

# The Role of Logistics Leverage in Marketing Strategy

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**ABSTRACT.** In today's environment-where changes in price, promotion, and product often are quickly imitated-the way to sustain competitive advantage may lie in changes to ancillary services, such as logistics. By leveraging excellent and superior logistics services, intricately linked with marketing strategy, firms can potentially create and maintain competitive advantage. The purpose of this paper is to begin the theoretical development process by understanding the implications of logistics leverage on marketing strategy. Two sources of antecedent justification, application of extant literature and observation of the phenomenon through case studies, are employed to develop the theoretical model. Conclusions, with implications for managers and suggestions for future research, are also provided. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <[getinfo@haworthpressinc.com](mailto:getinfo@haworthpressinc.com)> Website: <<http://www.HaworthPress.com>> D 2001 by The Haworth Press, Inc. All rights reserved.]*

**KEYWORDS.** Logistics leverage, competitive advantage, logistics theory, logistics case studies

## **INTRODUCTION**

Many companies competing in global markets have decreased prices (Craig 1997), improved products (Woodruff and Gardial 1996), and reduced design-to-shelf cycle times (Camp 1989), only to find

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these strategies quickly copied by competitors (Porter 1985). Companies are actively searching for ways to build a sustainable advantage in the marketplace (Day 1994; Innis and LaLonde 1994). In the 1980s, many firms turned to quality improvements in product design and internal processes to achieve competitive advantage (Stahl 1991, 1999). Today, however, organizations have focused on delivering customer value to remain competitive (Woodruff and Gardial 1996).

In the current environment, it is difficult to maintain differential advantages that accrue from changes in product, promotion, or price. Many of today's products, albeit manufactured in different global locations, have become homogenized and indistinguishable to the customer (Daugherty, Stank and Ellinger 1998). Given the ever-shortening technology cycle, companies trying to create or maintain differentiation in the marketplace often find product changes quickly greeted by a counter move from competitors. Likewise, changes in promotion and price may be quickly duplicated. A particular challenge for marketing strategy today is determining how to promote products whose features are perceived as homogenous by customers. Since for many companies any change in product, promotion, or price has only a temporary impact in their markets, the way to sustainable competitive advantage may not lie in changes in the product, promotion, or pricing strategies of the company, but rather in improving ancillary services, such as logistics (Bowersox, Mentzer, and Speh 1995). For this reason, logistics has been suggested as the strategic "battleground ... displacing manufacturing, marketing, and quality as the focus of top management" (Woods 1991). Many firms now stress logistics capabilities as a means of creating differentiation (Anderson and Narus 1995).

Such service improvements are most likely to yield a sustainable positional advantage (Day and Wensley 1988) in the market when implemented through changes in the corporate infrastructure-people, technology, facilities and/or strategic corporate relationships. A key marketing strategy that can potentially create and maintain this positional advantage is termed logistics leverage (Bowersox, Mentzer, and Speh 1994). Logistics leverage is defined here as *the achievement of excellent and superior, infrastructure-based logistics performance, which-when implemented through a successful marketing strategy-creates recognizable value for customers*. As such, logistics leverage represents a maintainable "positional advantage" for the company-value added services that the custom-

er recognizes as important, and (since it requires changes in the corporate infrastructure) that the competition cannot readily match.

The purpose of this paper is to begin the theoretical development process by understanding the implications of logistics leverage on marketing strategy. To do so, two sources of antecedent justification—the extant literature and observation of the phenomenon (Mentzer and Kahn 1995)—are employed to develop the theoretical model. The former source consists of a review of the relevant literature, while the latter consists of several case examples explicating the nature of logistics leverage. From this dual base, a theoretical model of the dimensions of logistics leverage, its antecedents, and its consequences are presented. From this model, implications for managers and future research are also discussed.

### *LITERATURE REVIEW*

Marketing strategy has adjusted over the years to challenges from competitive and economic pressures. During the 1960s, marketing strategy primarily focused on developing long-range forecasts and budgets. Since this was a period of economic boom, management had the luxury of long term planning horizons. During the 1970s, many organizations adopted a product management structure, whereby each product was managed by one or more managers. However, market volatility, in the form of high inflation, high unemployment, and a wave of consumer discontentment, proved this strategy ineffective in maintaining competitive positioning. The 1980s brought increased global competition that negatively impacted consumer loyalty. This decade also brought transportation deregulation, opening the way to strategic logistics options that were once closed to the marketing manager. The 1990s were marked by amazing growth in information technology. Such growth paved the way for the development of strategic supply chain relationships, shorter product to market time, and gave momentum to the growth in consumer power via the Internet. Information technology brought a wave of fast paced strategic challenges to managers who wanted to maintain their competitive advantage (Schewe and Smith 1983; Williams 1994).

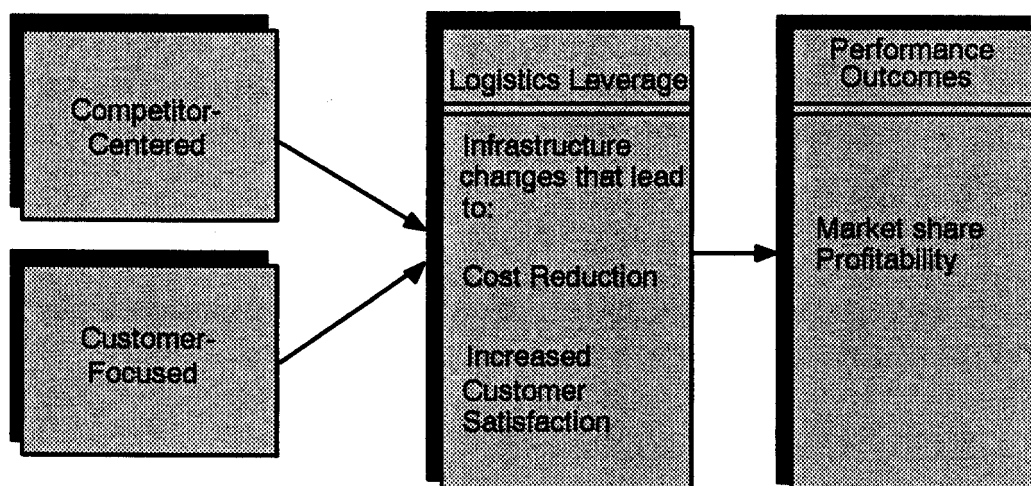
Porter (1985) defines competitive advantage as sustaining superiority of interrelated activities within the firm. Day and Wensley (1988) use the term positional superiority or advantage to mean "a relative superiority in

the skills and resources a business deploys. Stalk, Evans, and Shulman (1992) refer to "capabilities-based competition" as the ability to sustain competitive positioning. Although several researchers have used different nomenclature, they each describe a similar underlying premise—firms must not only achieve and implement corporate strategies to bring about superiority in the market, they must sustain it.

The question managers face is how to maintain such an advantage given factors such as the homogenization of products and shortening product-to-shelf cycles. A careful review of the work by Porter (1985), Bowersox, Mentzer, and Speh (1995) and Innis and LaLonde (1994) reveals some insights. Each refers to logistics as instrumental and central to providing competitive advantage. Unlike a product change or enhancement, achieving logistics superiority (because it involves changes in the people, technology, facilities and/or strategic corporate relationships infrastructures of the company) is a capability difficult to imitate. In addition, regardless of whether managers define their market as competitor-focused or customer-driven, achieving competitive advantage through leveraging logistics is likely to achieve and maintain competitive superiority.

These aspects lead us to the theoretical model in Figure 1, where the managerial focus of competitor-centered and/or customer-focused leads to logistics leverage, which in turn leads to performance outcomes.

FIGURE 1. The Role of Logistics Leverage in Achieving Competitive Advantage



The literature-based antecedent justification for each of these model components is now discussed.

### ***Managerial Focus***

Managers are faced with the daunting task of identifying and developing unique capabilities to achieve a defensible position in the marketplace. The *how* of achieving and maintaining a superior competitive position is at the heart of strategic management. According to resource-based theory, there are two related methods for achieving competitive advantage: (1) Assets-which are the resource endowments the business has accumulated (e.g., facilities, brand equity), and (2) Capabilities-the glue that brings the assets together (Day 1994). Capabilities differ from assets because they are so deeply embedded in the organizational routines and practices that they cannot be traded or imitated (Dierkx and Cool 1989). Here, again, is support for achieving logistics leverage. Logistics may involve facilities, but it is the position in this paper that it is actually a complex set of internally and externally interwoven processes that create a unique advantage that cannot be easily copied.

According to Day and Wensley (1988), there are two perspectives for achieving competitive advantage in the marketplace: competitor-centered and customer-focused. The competitor-centered approach is based upon direct management comparisons with a small number of competitors. This approach is typically present in industries where the emphasis is on "beating the competition." The key issue is how the company's capabilities and offerings compare with its competitors. Costs are closely monitored and quickly adjusted to match or thwart competitors' moves. Managers keep a close watch on market share and contracts won or lost to detect changes in competitive positions.

The customer-focused approach begins with a detailed analysis of the customer benefits within the end-use segments and works backward from the customer to the company to identify the actions needed to improve performance. The approach, referred to as a "market back" orientation, is found in service industries such as investment banking where new services are easily imitated, funds costs are the same, and entry is easy (Bhide 1986). Managers following this approach pay little attention to competitors' capabilities and performance, and the emphasis is instead placed on the quality of customer relationships. The focus is on customer satisfaction (LaLonde and

Zinszer 1976; LaLonde et al. 1988)) and loyalty, rather than on market share.

An important point to note is that managers following either strategy can achieve competitive advantage in the marketplace through logistics leverage because logistics emphasizes cost reduction and customer satisfaction. In fact, Bowersox and Closs (1996) define logistics competency as the "relative assessment of a firm's capability to provide competitively superior customer service at the lowest possible total cost" (p. 8).

### ***Logistics Leverage***

Logistics leverage can help firms achieve and maintain a positional advantage through both types of competitive advantage conceptualized by Porter (1985): cost and differentiation. Managers following a cost advantage strategy achieve a cost leadership position if they can sustain lower costs. Cost advantage is sustainable if there are entry or mobility barriers that prevent competitors from imitating its sources. The investment in infrastructure required for logistics leverage constitutes such barriers to entry.

Further, Porter cites "linkages" as a driver to sustainability. Linkages are ties "which require coordination across organizational lines or with independent suppliers or channels" (p. 112). The Council of Logistics Management (1998) defines logistics as, "that part of the supply chain process that plans, implements, and controls the efficient flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet customers' requirements." In essence, the flow and storage aspects of Porter's definition of "linkages" is logistics.

The second advantage is differentiation. A firm differentiates itself from its competitors if it can be unique at something that is valuable to buyers (Day 1994). The sustainability of differentiation depends on two things, its continued perceived value to buyers and the lack of competitor ability to imitate. Again, Porter defines a driver of sustainability that is logistics related. The driver entitled, "The sources of differentiation are multiple," is defined as, "The sustainability of a differentiation strategy is usually greatest if differentiation stems from multiple sources, rather than resting on a single factor such as product design" (p. 159). This driver to sustainability is directly related to logistics as defined by the American Marketing Association, "the

structure of intracompany organizational units [sources] and extra-company agents [sources] and dealers, wholesale and retail, through which a commodity, product or service is marketed" (Baker 1990). Again, competitors wanting to copy logistics leverage attained by another firm will find it difficult because it requires unique, experienced, and well-coordinated relationships between multiple parties [sources] in the channel. Thus, a superior logistics channel structure can lead to competitive advantage (Bowersox and Closs 1996), and the infrastructure nature of this superiority makes it difficult to imitate. Therefore, the competitive advantage is sustainable.

Changes in corporate infrastructure are the keys to the sustainability of logistics leverage. For example, strategic corporate relationships can lead to an alliance that the competition cannot readily match. A logistics alliance is an extension of the superior skills of each partner to do value-added activities within the supply chain. For example, McDonald's has outsourced its entire logistics function, allowing it to concentrate on its core business (Ellram and Cooper 1990, 1991). Such an alliance can also lead to innovative new products and processes that become valuable resources in the overall marketing strategy. For example, Robin Transport designed trailers in which auto parts could be loaded and unloaded in places where standard trailers could not go, thus allowing General Motors to set up its production assembly process to benefit from more efficient materials handling (Bowersox 1990).

### ***Performance Outcomes***

Perhaps the most popular indicators of marketing effectiveness and competitive advantage are market share and profitability (Dess and Robinson 1984; Jaworski and Kohli 1993; Kohli and Jaworski 1990; Narver and Slater 1990, 1991; Slater and Narver 1994). Firms that are able to create value for their customers by satisfying their needs and wants generally increase their market share. Logistics, the last point of contact between the firm and its customers (Coyle, Bardi, and Langley 1996), has a direct impact on customer satisfaction and, thus, indirectly impacts market share.

Day (1994) supports this position by stating "what really matters is achieving a defensible cost position" when faced with the challenge of achieving superior performance. Logistics has historically been concerned with cost reduction (Coyle, Bardi, and Langley 1996). The

primary basis for transportation deregulation was to decrease transportation related logistics costs (Krapfel and Mentzer 1982; Mentzer and Krapfel 1981a, 1981b). Thus, achieving logistics success will, at a minimum, involve cost reductions.

Leveraging logistics success can reduce costs and increase customer satisfaction and, therefore, positively influence the firm's profitability. Profitability is a desirable outcome because it creates shareholder value. When consistently and substantially maintained, it ensures the firm's longevity (Groves and Valsamakis 1998).

However, what is the nature of reduced costs and increased customer satisfaction that results from logistics leverage? To answer this question, we turn to the second source of theoretical antecedent justification (Mentzer and Kahn 1995)-observation of the phenomenon through case examples.

### ***CASE EXAMPLES***

To provide further insight into the nature of logistics leverage, as depicted in Figure 1, three case examples are presented.

#### ***Case 1: Commodity Products versus Commodity Businesses***

Company F is in the auto aftermarket, a supply chain that provides replacement parts to auto repair shops through a network of distributors-called warehouse distributors or WDs. Company F held approximately 30 percent market share in this channel, about the same as their two major competitors, with the remaining 10 percent divided among minor competitors.

The product in this supply chain eventually is installed by a mechanic as part of an auto repair. As a result, there is virtually no brand recognition in this process-the owner of the car simply wants the car repaired and seldom asks for a specific brand. In fact, market research revealed that car owners only valued three things in this process:

1. They wanted their car back the same day in which they took their car in for repair,
2. They wanted the problem fixed, i.e., they did not want the replacement part to fail again as long as they owned the car, and
3. They were sensitive to the price of the parts.



This led the auto mechanics to value the same three things:

1. They needed the parts within 24 hours of ordering them from the WD so they could be ready for scheduled repair appointments,
2. They were very concerned about product quality, and
3. The lower their price on the parts, the higher their margin.

This led one Company F executive to describe the industry as a "commodity business"-there is no difference between the competitors in the market with respect to promotional programs, or product quality or features, so the only basis on which to compete is price. However, since the major competitors had identical types of manufacturing plants, identical suppliers, and identical supply chains (the same supplier delivery systems to the plants, and the same WDs to distribute the products to the same auto mechanics), their cost structures were very similar and any reduction in price was immediately matched by the competition.

In other words, Company F faced the typical profit erosion of a "kinked demand curve" from an oligopoly with identical competitive mixes. If any competitor raised their price, the competition would not follow the higher prices and the competitor lost market share. If any competitor lowered their prices, the competition matched the new price and all competitors had the same market share, but with lower profit margins. The industry was a classic example of Porter's (1985) competitor-focused industry.

The road to logistics leverage began when the new CEO of Company F formed a task force to implement his personal vision of the company-to change the corporate vision from the company as a "manufacturer of products in the auto aftermarket" to "a marketer and distributor of products in the auto aftermarket." In other words, to focus the attention of the company not on the product itself, but how it got to the customer.

This profound shift in focus of the company from competitor-focused to customer-centered led to the realization that Company F did, in fact, make a commodity product. The company's customers saw no difference in product quality or features, and the promotional programs were largely ignored by all members of the supply chain. However, this did not mean the company could not come up with marketing and/or logistics services that would differentiate it from the competition. In other words, the CEO realized that having a commodity

product does not mean you have a commodity business—there are always services that can be offered with a product that can differentiate it in the minds of the customer.

The important aspect of this point for logistics leverage is that logistics services offered with the product often hold the key to differentiating a commodity product from its competition. Company F realized this once their entire supply chain was analyzed. Since all the competitors in the industry used the same suppliers and had the same manufacturing processes, the up-stream supply chain was deemed to not hold any sources of logistics leverage. Similarly, market research focused at car owners and auto mechanics revealed little in how to differentiate Company F from the competition. However, Company F found the WDs were the key to logistics leverage. In other words, the WDs were the customers that were most important to Company F in achieving logistics leverage.

At the time of this example, there were 2,000 warehouse distributors in the United States, which meant that virtually every county with an auto repair shop had at least one WD. Their function in the supply chain is to provide ready access to inventory for the auto mechanic, who carries little or no inventory. When a customer would call to schedule an auto repair, the mechanic would assess the likely parts needed to affect the repair, call their local WD to ascertain whether the parts were in stock and, if available, would send someone over to pick up the parts.

The WD operation usually consisted of a reception area with a counter for waiting on pick-up customers and a huge warehouse out back to hold in inventory all the parts any auto mechanic would conceivably order. As a result, WDs were small operations with huge inventory levels. In fact, the average inventory turns ratio for a WD was less than 1.0, resulting in huge inventory carrying costs compared to sales levels. Not surprisingly, most WDs were marginally profitable operations. Here lay the source of logistics leverage for Company F.

Company F embarked upon a three-year plan to develop a wide area network for inventory planning and accompanied this with a plan to stage fast moving inventory at various locations in North America and pull slow movers back to a central distribution center. When these plans were implemented, Company F made the following offer to all WDs: Company F guaranteed that any order placed with them that was not *completely filled* within 24 hours would be free. In other words, if

an order for 160 different parts was placed and only one of those parts was not delivered in 24 hours, there was no charge for the entire order. Further, each WD was given one year to try out the program and, when they were convinced that Company F never missed a 24 hour delivery, Company F would buy back from the WD their excess inventory. This was an offer hard to resist since the WD would be turning a business liability (the cost of carrying excess inventory) into an asset (cash).

The logistics leverage for Company F came from the fact that once a WD sold their excess inventory to Company F, the WD no longer had the ability to buy from the competition. WDs were literally faced with the choice of placing an order with Company F and being guaranteed 24 hour delivery, or ordering from the competition and having the order arrive in 7 to 14 days-all when the WD was now only carrying at most several days of inventory. Over a two-year period, Company F raised their price 15 percent above the competition (an act that would have been unthinkable before their new program) and doubled their market share.

What we learn about logistics leverage from the Company F example is never confuse a commodity product with a commodity business. Company F's new logistics system took several years to develop and implement, but once it was in place the competition could not match the infrastructure changes. This provided sustainable differential advantage for Company F-i.e., logistics leverage-that was not based upon a change in their commodity product. It was based upon how that product was distributed and how hard it was for the competition to match that superior logistics infrastructure once it was implemented.

We also learn that the key to successful logistics leverage often involves asking the question: Who is our customer? Company F conducted considerable market research to identify what the members of their down-stream supply chain-WDs, auto mechanics, and car owners-wanted. They eventually focused on the WDs because therein lay a source for competitive advantage. Auto mechanics and car owners were still important as customers, but did not provide the source from which Company F could differentiate itself from the competition.

### ***Case 2: Exceeding Customer Delivery Time Expectations***

Company L is in the machine tool business, a supply chain where the principal product may cost as much as \$15 million. In fact, the

capital cost of these machines is so large that customers of Company L (manufacturers who use the machine tools in making their products) estimate the costs of machine tool downtime in thousands of dollars per hour. These machines are marketed and distributed by Company L worldwide, so Company L must maintain a down-stream supply chain that can deliver the machines, and replacement parts, anywhere in the world.

Although the machines are expensive, capital items, Company L found (through market research) that the major source of customer dissatisfaction with Company L and its competitors was the delivery of replacement parts (parts that often cost less than \$50). For example, when a customer in Singapore has a broken part on the machine, their satisfaction with the machine and the manufacturer of that machine is largely dependent on how fast they can obtain a replacement part and get the machine back in operation. This satisfaction, in turn, has a significant effect upon repeat sales and word-of-mouth reputation. To keep customer dissatisfaction from becoming a problem, Company L routinely shipped replacement parts to customers by overnight delivery—an international transportation service that often cost more than the actual value of the part.

As a result of this market research insight (and in an effort to turn a customer dissatisfaction problem into a customer satisfaction advantage), Company L embarked upon a four year plan to implement a dramatic new logistics leverage strategy that was embodied in the phrase: "We guarantee we will deliver replacement parts to any customer worldwide *before* they order it." Notice that this zero-delivery-time strategy embodies two key elements of logistics leverage: (1) excellent logistics performance (in this case, the ability to meet this guarantee), and (2) the ability to market this performance to customers (in this case, the dramatic promotional statement that easily conveys the superiority of their performance over the competition).

To accomplish this strategy, Company L began installing cellular phones in every machine they sold (a minor cost compared to the overall purchase price). No matter where the machine is in the world, every day each machine conducts a diagnostic analysis of its performance, calls the Company L home office, and transmits the results of these diagnostics. Company L computers analyze these diagnostics every night, determine whether any parts are beginning to fail and, if they are, issues a shipment order to its distribution center. Within

several days (usually at least a week before the part actually fails), the plant manager of the customer company receives a package from Company L containing the part and with instructions that the part is about to fail and should be replaced in the next regular maintenance session. Thus, the customer receives the replacement part before they ordered it.

Notice that this system eliminates the need for Company L to stage inventory all over the world and employ high-cost expedited modes of transportation. Since the order is no longer a rush order and can, in fact, be sent far enough in advance by slower, less expensive modes of transportation, Company L has been able to substantially lower its inventory and transportation costs, while simultaneously dramatically raising customer satisfaction levels. The higher customer service levels eventually resulted in dramatically increased market share-i.e., customers could buy their machine tools from one of several equally competent manufacturers, but only one of these (Company L) had the logistics system to eliminate their unproductive downtime while waiting for replacement parts.

What we learn about logistics leverage in this case is that excellent logistics performance means nothing if the customer is not aware that it exists. Company L lowered its logistics costs dramatically by implementing the logistics aspect of this strategy. However, the dramatic increases in customer satisfaction and market share only came as a result of properly marketing this performance-a marketing strategy that was built around the dramatic and catchy promotional phrase, "We guarantee we will deliver replacement parts to any customer worldwide *before* they order it."

It is important to also realize that an effective logistics leverage strategy comes from insightful market research. Rather than just asking customers about the product, Company L asked customers questions *the customers* thought should be asked. As a result, Company L discovered a source of positional advantage. Companies can only ask questions customers care about if they first conduct qualitative interviews with customers to determine what satisfies and dissatisfies them and, only then, design customer satisfaction questionnaires. It is precisely this qualitative/quantitative market research approach that Company L followed-an approach that led them to develop a logistics leverage strategy based upon what the customers told them was important.

Finally, notice again that the positional advantage of logistics leverage came from the fact that Company L only announced this strategy after several years of installing cellular phones in their machines (something the competition was not doing) and several years of reconfiguring their logistics inventory, transportation, and information systems to accommodate this strategy (something the competition was also not doing). The result was that once Company L announced its new replacement parts guarantee, the competition was in no position to match it, and were faced with several years of expensive changes in how they manufacture and distribute their product (i.e., their infrastructure) before they could match it.

### ***Case 3: Dell Computers- Virtually Integrating the Value Chain***

In 1984, a University of Texas student who had been selling rebuilt PCs out of his dorm room pondered entering the emerging PC market. Ordinarily, entering a relatively established market would have been a ridiculous idea. It was conventional wisdom that Intel and Microsoft Corporations had taken all the margins out of the PC business and all the products were viewed as commodities. In addition, all the key players in the industry were using the "engineering-centric" view-they were building massive structures to produce everything a computer needed from disk drives to memory chips and applications software. Certainly, a new entrant could not compete.

The young college student, Michael Dell, decided to enter the market and, by doing so, totally revamped the industry. Dell Computers is now a \$12 billion company and industry leader. Dell applied customer focus, supplier partnerships, mass customization, and Just-In-Time delivery to implement the strategy of virtual integration-succinctly, virtual integration leverages logistics to create and sustain customer value.

By selling directly to customers via the web, Dell Computers uses e-commerce to communicate with customers, maintain low costs, and completely customize products according to customer specifications. Dell Computer is driven by the desire to create value for the customer. Michael Dell himself said, "looking for the [customer] value ... is most important" (Magretta 1998).

Dell has mastered virtual integration in the value chain. Through the use of the Internet, Dell's customers gain access to the same

product, service, and catalog information as Dell's employees. Tailor-made Internet sites called Premier Pages give customers direct access to purchasing and technical information about the specific configurations they buy from Dell. Thus, customers can order, configure, and even gather technical advice on-line, thereby turning a commodity product into a totally customized product offering.

For those customers that want or need more personalized assistance, Dell will send out one of more than 10,000 service technicians to their site. However, only a small number are Dell employees. Most are "virtual employees" that dress like Dell employees, talk like Dell employees, and even cater to the customer like Dell employees, but are actually contract employees. According to Michael Dell, this allows Dell's employees to focus on activities that create the most value for customers.

Activities such as coordination with its virtual manufacturing facilities and inventory velocity and reduction are of primary concern for Dell because they result in lower costs to customers. Dell has a virtual manufacturing arrangement with key suppliers such as Sony. Sony employees work in the Dell facility on joint planning and product development. Because of this close relationship, and its reputation for building reliable computer monitors, Dell has decided not to perform quality checks on Sony monitors. Thus, they determined there was no reason to maintain inventory. So, Sony manufactures monitors Just-In-Time for Dell. When needed, Dell instructs UPS or Airborne Express to pick up 10,000 monitors from Sony's plant in Mexico and a corresponding 10,000 computers from Dell's facility in Texas. UPS or Airborne Express match computers with monitors in the delivery process, eliminating the need for Dell to have an expensive distribution center to perform these functions.

Dell strives to implement virtual integration because it allows them to meet customer needs faster and more efficiently than any other PC maker. If customers want, Dell will install company specific software before delivery. They will also put an asset tag with the company's logo on the machine, and keep an electronic register of the customer's assets. This saves the customer the time and expense of having their employees place asset tags on the equipment. Dell also places technicians at major customers' sites. Thus, Dell becomes the customer's virtual IT Department, instead of just a traditional supplier.

Logistics leverage is at the core of Dell's virtual integration strategy. Customer value is created and sustained in this highly competitive industry because no one can duplicate the customization, the logistics infrastructure, the employee infrastructure, and the unique channel partner relationships, all of which have resulted in decreased costs and increased customer service. Even when retailers aligned with Dell's competitors began charging higher rates for servicing and supporting Dell products, customers remained loyal.

Leveraging logistics allows Dell to have long-term special relationships with both suppliers and customers. Unique product offerings and cost reductions have resulted in loyal customers, sustainable position, and high profits. Thus, Dell has used logistics to reduce cost and focus on creating value for customers.

## **CONCLUSIONS**

The purpose of this article has been to further examine the concept of logistics leverage and to develop a definition and theoretical model of this construct for future empirical testing. To do this, the dual sources of antecedent justification for theoretical models-extant literature and observation of the phenomenon (Mentzer and Kahn 1995)-were utilized. This resulted in the model depicted in Figure 1.

Logistics leverage appears to be a viable aspect of marketing strategy. How viable, where it is effective and where it is not, and the nuances of logistics leverage are all questions that can be addressed by deriving testable hypotheses and designing future research to test them. Such a program of research should contribute significantly to what we know about the role of logistics in marketing strategy.

Several managerial conclusions can be derived from this paper. First, the three case examples provide vivid witness to ways of obtaining competitive advantage that do not primarily involve product, promotion, or price based strategies. Even for commodity products, the potential exists to differentiate the product/service offering in the eyes of the customer by leveraging the delivery aspect of the mix. In the Company F example, identifying the crucial customer as further up the channel from the ultimate retailer (the auto repair shop) allowed the achievement of the superior market share and profitability without even affecting the attitudes and satisfaction of the retail customer. The Dell example, as a special type of "direct marketing channel, pro-



vides support for the efficacy of logistics leverage in the final consumer, or retail, channel—an efficacy that for Dell has meant dramatic market share and profitability growth.

Second, the critical aspect of changes in infrastructure as a component of logistics leverage in a successful marketing strategy cannot be over-emphasized. Without the infrastructural changes in the three cases presented, the competition could have easily matched the changes in the marketplace. The infrastructure changes are the key to creating sustainable positional advantage through logistics leverage. The challenge to managers is to identify such infrastructural sources of competitive advantage in their logistics systems.

Finally, none of the case successes presented could have been achieved without a strong coordination and collaboration between marketing and logistics. Much of the logistics leverage plans were driven by insightful market research, and the superior logistics performance would not have had an impact upon the customers without effective marketing communications. Managers striving to achieve positional advantage through logistics leverage must recognize the role logistics can play in marketing strategy and realize that this role involves inextricably intertwining the two functions to achieve a successful marketing strategy, a strategy that has been demonstrated to result in more efficient operations, more satisfied customers, increased market share, and higher profitability.

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