



Logistics Management The Role of Logistics in Advertising

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Abstract

From a channel governance perspective, Supply Chain Management (SCM) is seen as an outcome of the phenomena of Efficient Consumer Response (ECR). Application of Heide's [1] theoretical typology of interfirm governance. There has been a dearth of theoretical justifications for the efficacy of ECR and SCM, despite ECR's growing relevance to retail company practice. An efficient partnership between manufacturers and resellers requires a conceptual understanding of the core structure and operations. This is particularly true when considering the significance of logistics integration into the marketing domain of channel management for the effective implementation of these vital systems. Following an examination of the theoretical foundations, a preliminary case study is offered. This study relies heavily on qualitative research, drawing from primary and secondary sources, that has been compiled from several ECR working groups around Europe, particularly the Austrian ECR initiative.

INTRODUCTION

As we approach the turn of the century, scholars have seen significant shifts in how businesses operate. Powerful, information technology-driven logistics solutions have helped many organizations establish and maintain a competitive edge in their distribution networks. The distribution strategy of Wal-Mart Corporation is a prime illustration of this phenomenon [2]. Streamlining distribution processes to better serve consumers has allowed

Wal-Mart to constantly improve its bottom line. Significantly, the increased profitability for Wal-Mart may be attributed to both the distribution strategy and the customer-centric implementation of that policy throughout the retailer's operations [3]. This is only one of many examples that show why the 1970s and 1980s are called "The Decades of Marketing" and why the 1990s are called the "Decade of Logistics" [4].

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Academics in marketing have been sluggish to integrate logistics research into their studies of channel networks, despite these developments in corporate practice [5]. See the most recent "call to arms" from seasoned channel researchers like Weitz [6] and Nevin and Jambulingam [7] arguing that marketing channel research must include logistics, sometimes referred to as the "physical side of distribution,". To address this need for the integration of channels research and logistics in marketing, a thorough examination of Supply Chain Management (SCM) strategies may be necessary.By analyzing the management of connections between manufacturers resellers as well as the management of transactions required by channel members, this study aims to examine the phenomena of supply chain management. Supply chain management (SCM) is first and foremost the process of integrating business activities across channel participants in order to improve the overall performance of the channel system. Much of the literature on supply chain management has concentrated on its logistical aspects, as noted by Bechtel and Jayaram [8]. The main reason for this is that logistics academics have dominated SCM research. Nevertheless, according to Bechtel and Jayaram, in order to have a complete understanding of SCM, future studies should include not only the transactions but also the connections among the different companies.

Relying on Heide's [1] theoretical typology of interfirm governance, we address this need for integration. Throughout the marketing channel, both market and nonmarket modes of governance are outlined by Heide's framework. Crucially, Heide's view integrates these governing modes with the three primary relationship dimensions—the initiation,

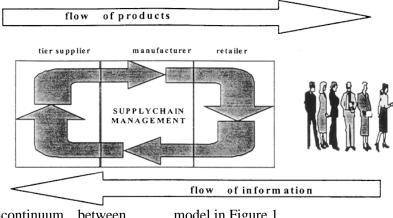
maintenance, and termination of relationships. This makes an integrative investigation of a channel system possible within Heide's paradigm.

Consequently, to put Heide's framework's claims into practice, research into supply chain management at different phases of growth is essential. Under the pretense of Efficient Consumer Response, the grocery business in North America and Europe is now implementing Supply Chain Management advancements, which are the center of this study [9].

Exploratory data analysis lies at the heart of both the original technique and the one presented here. Both secondary data collected by the many ECR working groups and qualitative research, such as descriptive results from an attitude survey, fall under this category. The goal of concentrating on exploratory features first is to have a deeper understanding of the theoretical typology that has been offered. That way, we can work toward a theory that can determine whether a certain style of governance is best for suppliers and resellers. An introduction to Supply Chain Management (SCM) and its uses in different sectors is given in the section that follows. The next section of the article provides some context and analysis of Efficient Consumer Response (ECR), a specific method of supply chain management. The next section delves into theoretical matters, particularly presenting Heide's [1] paradigm for relational governance forms. Next, we provide some background on the Aus-trian ECR effort, the main "site" of our research. This section includes a review of the relevant aspects of Heide's framework. In the end, the article offers directions for further study and discusses the management implications of the early results.

SUPPLY CHAIN MANAGEMENT

Supply Chain Management is a recent movement in lo-gistics research that has been defined in various ways [8]. The Global Supply Chain Forum defines SCM as "the in-tegration of business processes from end-user through original suppliers that provides products, services, and information that add value for customers" ([10], p. 504). Following Cavinato [11], Kotzab and Schnedlitz [12] de-fine SCM as a special form of strategic partnership between retailers and suppliers, with positive effects on the overall performance of the channel. The key element of SCM is activity integration. In fact, Bechtel and Jayaram[8] supply chain activi-ties. They champion the view of SCM as a "seamless de-mand pipeline" with the end-user as the driving force in the entire system ([8], p. 18).Kotzab [13] goes further and places SCM in the "meta-logistical" level of business logistics. The "metalogistical" level includes all possible forms of cooperation be- tween economic organizations [14]. And, according to Ihde [15], this cooperation occurs between institutions of different levels within a channel and can be either short- or long-term in orientation. Inspired by Cooper, Lambert and Pagh [16], Kotzab [13] presents a schematic of an SCM



present an integration-continuum between "pure awareness" and "pure integration" of

model in Figure 1.

FIGURE 1. Basic supply chain management model.

It is important to note that the basic SCM model in Figure 1 suggests the orchestration of activities at the in-ter-organizational level as well as the departmental level. Instead of focusing on the management of interfirm inventory and transportation capacities, SCM aims to inte- grate the activities of an entire set of organizations from procurement of material and product components to de-liver completed products to the final customer [17]. These activities refer to marketing-dominated areas such as new product development, customer relationship man- agement and/or customer service management [16]. Con-sequently, SCM leads to improvements in channel performance among all channel members and not solelywithin the focal firm.

Prominent examples of these positive effects include the supply chains of the Dell Corporation [18], Wal-Mart [19], Digital Equipment Corporation [20], the personal computer supply chain [21], and the Hewlett-PackardCorporation [22]. All of these examples report cost re- ductions with simultaneous improvements in customer service. It is exactly this effect that is seen as a "paradigmshift" in existing logistics thinking, where improvements in customer service would typically have resulted in in- creased cost levels. Keebler, Manrodt, Durtsche, and Ledyard refer to the re-arrangement of the way business is conducted within supply chains, "improving business performance requires improving the way work is done in abusiness

activity" ([23], p. 82). Basically the improvements are due to the following ([24], [25], p. 33; [26];

[27], p. 27 ff.; [28], p. 19 MH; [29]; [30], p. 57): Avoidance of duplication effects by concentrating oncore competencies;

Use of inter-organizational standards like ABC (activ-ity based costing) or EDI (electronic data interchange)

 Elimination of unnecessary inventory levels by postpon-ing customization towards the end o the supply chain.

It is interesting to note that these positive effects

can ap- ply to a variety of industries, as well as direct and indirect resellers. Beyond the definitions and examples discussed above, our perspective on SCM is extended by describing it as a strategy that brings together the application of logistics and its focus on transactions between channel members with that of channel management and its focus on rela- tionships within the channel. One way that the use of supply chain practices has been witnessed is with the re- cent advent of Efficient Consumer Response (ECR) within the grocery industry in the US and Europe.

EFFICIENT CONSUMER RESPONSE

The Grocery Industry in the United States andin Europe

In the late eighties and early nineties a majority of the companies that form the grocery industry (e.g., manufac-turers and supermarket businesses) suffered from "the trade practice wars that had separated manufacturers and distributors" ([31], p. 33). The term "war" seemed to ap- ply given the way business was managed between the partners: they "had squared off against each other over a variety of issues, including slotting allowances, coupon misredemption, forward buying, promotional fees..." ([31], p. 33). This led to a loss of productivity and marketshare.

While the negativity continued, *mass merchant* chainsdeveloped and began to carry more and more grocery items thereby gaining the market share lost by the super-markets. Mass merchants are defined as being "similar to department stores, except product selection is broader and prices are usually lower" ([32], p. 44). Well-known examples of this type of store include Wal-Mart, Target and K-Mart. During the mid-nineties these three companies alone held some 30% of the total mass merchant market, prompting Andersen Consulting to refer to them as the "Big Three" ([33], p. 1).

In 1992, managers representing manufacturers (e.g., The Coca-Cola Company, Campbell Sales Company, Kraft General Foods, Nabisco Food Corp., and The Procter & Gamble Co.) and retailers (e.g. The Vons

Companies Inc., Supervalu Inc., and Safeway Inc.) formed the Joint Industry Project on Efficient Consumer Response in the US. The group's objective was to "ex- amine the grocery supplier/distributor/consumer value- chain to determine the cost and service improvements the industry could achieve through technological and busi- ness practice changes" ([34], p. iv).

In 1994, the Coca-Cola Retailing Research Group transferred these basic ideas to the European market and started its own initiative: the Supplier–Retailer Collabo- ration Study ([27]). Based on these ideas, leading Euro- pean manufacturers (e.g., Unilever, Nestlé) and retailers (e.g. Albert Heijn, Tesco) formed the European ECR- Initiative in 1995. This group presented its interpretation of ECR in January 1996 at the first European ECR Con- ference.

Basic ECR Model and General Effects

ECR is defined as "a grocery industry strategy in which distributors, suppliers and brokers jointly commit to work closely together to bring greater value to the gro-cery consumer" ([34], p. 12). Figure 2 presents the basic ECR model of the US grocery industry. This supply chain management approach aims to meet the goal of bet-ter fulfillment of consumer needs via the implementation of a four-part process: 1) Efficient Replenishment; 2) Efficient Promotion; 3) Efficient Store Assortment; and,

4) Efficient Product Introduction (Table 1 provides more detail).

Given the various interests of each of the channel members, the efficiency criterion requires that strategic supplier partnerships be developed within the grocer channel [35]. It

also requires the use of "enabling technologies" such as information systems and improved business processes [36]. The effect is then one of harmo- nizing the activities among the various channel members (see Figure 3).

A Single ECR Grocery Supply Chain Without Buffers

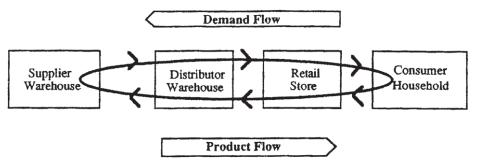


FIGURE 2. U.S. ECR model (source: [34]).

The "focus areas" noted in the boxes at each of the four corners of Figure 3 should be interpreted as interorganizational interdepartmental working groups. In- stead of functioning with different departments, ECR proposes the installation of these "focus areas" within the participating companies. Their implementation suggests the loss of functional and organizational borders within and between firms. The transformation from departmen- tal completion to interorganizational solutions eliminatesfinancial and procedural waste from the channel. This structure encourages team members to work for an in- crease in performance of the entire channel.

Due to these effects there exist many proponents among logistics and marketing researchers who promote ECR as one of the best strategic initiatives within the grocery industry [37, 38]. The savings potential from us-ing ECR principles in the grocery industry are enormous, according to reports from the ECR-US and the ECR- Europe Working Groups. Some estimates place the value at US\$30 billion for the U.S. grocery industry and 50 bil- lion DM for the European grocery industry [34, 39]. Thevalue added for end users results in a price reduction of 10.8% in the U.S. market as well as 5.7% for the Euro- pean market [40].

TABLE 1
The ECR Processes*

ECR Process	Scope
Efficent Store Assortment (ESA)	Providing a complete, easy-to-shop,
	assortment of products wanted by theconsumer
Efficient Replenishment (ER)	Maintaining high in-stock levels of the
	required assortment
Efficient Promotion (EP)	Harmonizing the promotion activities

between manufacturer and retailer bycommunicating benefits and value

Efficient Product Introduction (EPI) Developing and introducing new

products the consumers really want by meeting their ultimate needs.

Selected Results from ECR

The European grocery industry is known for having extremely low average margins for retailers. These mar-gins can range between — 1 and +2.5% [41, 42]. As such, with its assurance of greater efficiency in the channel, theimplementation of ECR practices promises to be a pow- erful tool to improve the business performance within the channel. Below are listed some selected results from aca-demic and

industry publications and events that have encouraged practitioners to look forward to great rewards from ECR:

Fleury [43] reported higher margins (8%), faster cate- gory turnover (27%), and greater retailer market share (12%) effects from the implementation of ECR princi-ples within the laundry detergent category in a Euro- pean country market.

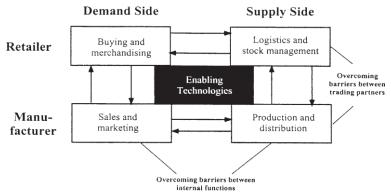


FIGURE 3. ECR harmonization processes by focus areas (source: [36]).

- Partch [44] noted a 50% improvement of distributors' profits by eliminating techniques like forward buying.
- Hven and De Soysa [45] presented results from an ECR partnership between their companies, ICA and Lever-Sweden. Highlights were an increase in turnover of 9%, a reduction in number of SKUs by 20%, a higher market share of 7% and higher profits of be- tween 3% and 16%.
- Johnson & Johnson Company representatives dis- closed two-digit turnover increases in their respective business segments [46].
- Kotzab [47] reported a somewhat obscure ECR exam- ple in his work with the John Menzies Publishing Company. The U.K.-based magazine and newspaper distributor implemented certain ECR principles duringthe 1990's by establishing electronic links between

its distribution centers and the newspaper stands of 20 of its clients. This partnership resulted in increased sales volume of 35%, reduced inventory levels of 10% and increased margins of 2.1%.

To be fair, it should be pointed out that there has criticism heen some about ECR's achievements, or lack thereof. One of the main problems seems to be that therehas been a miss of the "big bang" from ECR, eventhough the basic concepts of ECR have been known since the early nineties and managers and academics could ob- serve some initial examples of successful implementa- tion. Indeed, the headlines of trade journals continue to ask: "What's up with ECR" [48], "Is ECR dead?" or"ECR: More promise performance" [50]. It seems that all parties expected major short-term results, prima-rily

based on the phenomenal savings promised by the original ECR promoters. In fact, many are finding that ECR is a long-term strategy and this is forcing the partic- ipating managers to completely rethink and consequently rearrange the way business has always been done.

Therefore, while greater efficiency from the strategy hasbeen documented, albeit with some misgivings, there stillremain questions as to the conditions that favor an *effective* model. In other words, a thorough framework that predicts the factors leading to a well-implemented and well-man-aged relationship need to be studied. In the next section, we discuss the theoretical foundation that may provide a way to assist channel members with this important issue.

Theoretical Foundation for SCM Strategies

While the greater use of SCM strategies such as ECR is occurring, few theoretical explanations for the effective- ness of these phenomena have been put forth.² One reasonfor the lack of theoretical explanation could be that SCM and ECR have only recently begun to be practiced, so few researchers have had the chance to formulate theories. Perhaps a better reason for the dearth of theory for these strategies is due, primarily, to the complexity involved with supply chain management. Indeed, many researchershave noted that these "hybrid" relationships are difficult to test since they tend to span the wide spectrum of the area

Looking at the existing ECR-results, one might argue that planning is often easier than implementing. After nearly eight years of ECR, Kotzab [38] claims that none of the results have been realized. While this may be true, ECR involved managers can now reply "not yet." In the case of the Austrian market, it could not realistically be expected that managers change their attitude within 1 year, after running their **REFERENCES**

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between purely market or discreet transactions and hierarchical or integrated governance structures [1, 35]. With various actors present in the channel and the many partnerships needed for effective implementation, a broader theoretical basis would seem to be required.

Heide's Typology: The Intersection of Law, Economics, and Organization Theory

One framework that may meet this need is Heide's syn-thesis of resource dependence theory [56], transaction cost theory [53, 54] and relational contracting [57], to help describe market and nonmarket forms of interfirm governance. In Heide's framework, the processes that would be most effective for the type of governance underwhich one would expect to find strategies such as SCM and ECR can be seen. That particular type falls under the heading of "Nonmarket Governance," which includes or-ganizational forms that no longer look to the traditional market for channel members. From the framework, one could then say that when a firm chooses to use a SCM strategy, the firm is removing itself from the market and is committing itself to a closer relationship with other firms in the channel. Given this assumption, Heide's framework should then be able to be applied to the study of supply chain management, and to ECR in particular. Table 2 is an adaptation of Heide's presentation of his framework while more discussion follows in the next section.

CONCLUSION

supply chain in the "old way" formore than 20 years. Kotzab [80] points out that retailing managers, in particular, cannot easily or quickly forget the way they had been treated by vendors in previous de-cades. Therefore, all those who study supply chains, in-cluding academicians and managers alike, cannot and should not expect short-term profits out of ECR.

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