

Business-to-Business Electronic Commerce: Disintermediation and Channel Conflict

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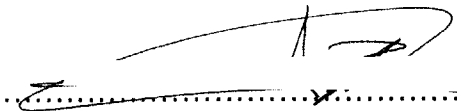
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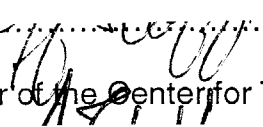
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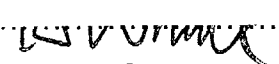
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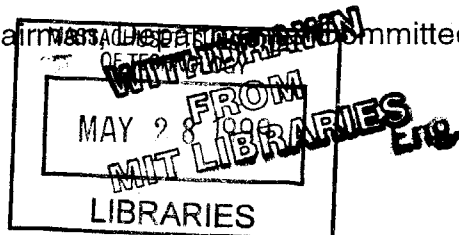
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Abstract

Internet-based electronic commerce has changed the way people do business. Most of the people have been aware of the business applications of the Internet in the consumer market. However, an important part of the Internet electronic commerce applications is being developed in the business-to-business market.

As business between companies becomes more efficient through the Internet, the value intermediaries add to their supply chain is being questioned. Through the Internet, manufacturers / suppliers are starting to see direct sales as a more feasible option. This has raised great concern among channel partners. On the one hand, intermediaries see themselves being driven out of business as manufacturers / suppliers try to bypass them or compete with them. On the other hand, manufacturers / suppliers are afraid of selling direct and jeopardizing their business due to channel conflict with their indirect channel partners.

By illustrating both disintermediation and channel conflict, this thesis presents a framework for manufacturers / suppliers to consider an Internet electronic commerce project.

Thesis Advisor: Yosef Sheffi

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To Claudia

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INTRODUCTION

The wide adoption of Internet electronic commerce in the early 1990's has impacted the way people do business. Companies are becoming more efficient as the Internet enables them to reduce costs, obtain faster and more reliable customer feedback, improve coordination between channel partners, reach more customers, and perform many other functions more efficiently. As Internet electronic commerce makes it possible for manufacturers / suppliers to reach customers more efficiently, some authors argue that the option to reach these customers directly becomes viable.

Some companies are already using the Internet to reach customers without using traditional indirect channels. Some of these companies are traditional direct catalog companies or new companies like Dell Corporation or Gateway 2000. Manufacturers / suppliers that have used indirect channels to conduct a large proportion of their business are starting to question whether the intermediaries they have as channel partners are adding value along their supply chain. These manufacturers / suppliers are being tempted to conduct direct sales through the Internet as they witness the success of companies currently using the Internet to reach customers directly.

Both manufacturers / suppliers and intermediaries are concerned with the changing environment. On the one hand, intermediaries are worried that

manufacturers/ suppliers will bypass them or compete with them and drive them out of business.

On the other hand, manufacturers / suppliers are worried of the direct Internet sales model. Manufacturers / suppliers are not sure whether they can handle direct sales in an efficient way. They are concerned that if they decide to test the direct sales mode, channel conflict with channel partners would arise. This could pose a big threat to their business if the direct sales initiative does not prove to be efficient.

Thesis Organization

In the first chapter the existence of intermediaries is analyzed: why do they exist? What roles do they perform? How have they evolved? It is important to analyze the role intermediaries perform along the supply chain to better understand the impact of Internet electronic commerce. In the second chapter, business-to-business electronic commerce is introduced. In order to understand the impact of Internet electronic commerce on the channel structure, it is important to understand its benefits and obstacles, and what are companies in the business-to-business arena doing. In chapter three, the concept of disintermediation is introduced. A comparison of the arguments in favor and against it is given, as well as how intermediaries have leverage Internet electronic commerce. In chapter four, channel conflict as a result of Internet direct sales is analyzed: why is there a threat? Why companies want to sell direct? How can they avoid

conflict yet get all the benefits from Internet electronic commerce? Finally, chapter five concludes the thesis.

CHAPTER 1

INTERMEDIARIES

The vast majority of producers do not sell their products directly to the final consumer. Instead, firms perform different functions in order to deliver the product or service to the end user; this end user may be a consumer or a business. Such enterprises are called intermediaries.

There exist two basic types of intermediaries: first, firms serving between businesses called “business-to-business intermediaries”. Second, firms acting between businesses and the final consumer, called “business-to-consumer intermediaries”. Wholesale¹ or business-to-business trade in the USA accounted for 4.2 trillion in sales, while the retail² or business-to-consumer trade 2.6 trillion. (US Economic Census, 1997)

¹ The US economic census defines wholesale trade as “the establishments primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

² The US economic census defines retail trade as “establishments primarily engaged in selling merchandise for personal or household consumption and rendering services incidental to the sale of the goods.”

1.1 First Intermediaries

Intermediaries have existed since commerce itself started. Most likely, the first middlemen were the governors or leaders of the different groups or tribes. These persons had language capabilities, the power to establish connection with other towns, and control of transportation to ship goods. (Walters 1982)

As population grew and concentrated in cities, specialty stores appeared. They can be thought as the first form of retailers, buying from the producers and selling to the final consumer.

It is important to notice that although most intermediaries functioned between the producers and the final customer, there were also wholesalers in the early stages of commerce. Wholesalers were established in ports where goods were consolidated.

Throughout history, commerce has gone through different stages. Political, social, technological, economical factors had affected and had been affected by the marketing channel's structure. Introductions of new products, adoption of new technologies, and social and political changes, have an effect on how intermediaries perform. Nowadays, intermediaries such as wholesalers, retailers, agents, and brokers interact and form a vast and complex number of marketing channels.

1.2 Business-to-Business Intermediaries

As stated before, the most general classifications for intermediaries are business-to-business and business-to-consumer. The most notable differences between the two are that business-to-business transactions are larger, relations with their channel partners last longer and there are fewer participants.

“Intermediary firms are most often categorized into two main groups: wholesalers and retailers. Retailers are firms primarily engaged in transactions with ultimate consumers.” (Woodside 1978)

As we can see, wholesalers-distributors can be defined as the most general form of business-to-business intermediaries. As defined by the Committee on Definitions of the American Marketing Association:

“A wholesaler is a business unit which buys and resells merchandise to retailers and other merchants and/or to industrial institutions and commercial users.”
(1960)

It is important to define that the customers of wholesalers-distributors use the products or services only for resale or for business utilization. Wholesalers-distributors' customers can be divided in three major groups: user customers, original equipment manufacturers (OEM), and resellers. (“Wholesalers” Britannica Online 1999)

User customers utilize the goods they buy for the purpose of their business (e.g., machinery). Original equipment manufacturers (OEM) integrate purchased goods to produce a final product (e.g., wheels for the cars in the auto industry). Resellers sell their products to user customers, to OEMs, or even to other intermediaries.

Some authors divide wholesalers into three major groups: merchant wholesalers; brokers and agents; and manufacturers' and retailers' branches and offices ("Wholesalers" Britannica Online 1999). Other authors divide them only into two categories: merchant wholesalers and agents and brokers (Woodside 1978). Merchant wholesalers acquire property of the goods sold and are known also as jobbers, distributors or supply houses. Brokers and agents for the most only facilitate commerce between two parties. Manufacturers' and retailers' branches and offices play a similar role as the brokers and agents but being part of the manufacturers' or retailer's company.

1.3 Wholesaler-Distributor Functions

To better understand the reason of the existence of wholesalers-distributors it is important to analyze the functions they perform along the channel. Even though some of their roles can be classified in more than one category, the following are the most general functions they perform: customer service, trust / risk taking, aggregation and bulk breaking, storage and delivery, marketing, and credit.

1.3.1 Customer service

Customer services include repairs, installation, maintenance, spare parts, warranty issues, and training. These services may be supported or provided by the manufacturer or only by the wholesaler.

1.3.2 Risk taking

Sellers will sell to wholesalers that offer a certain degree of reliability reducing the risk otherwise incurred if selling to a larger number of individual customers. The risk is mainly default of payment.

Customers will trust intermediaries' assessments of suppliers and products quality. Again, customers will reduce the risk they are exposed when buying goods by using wholesalers instead of buying them directly from producers. The risk of not receiving the product, not receiving what was offered, and warranty issues are some of the risks customers are exposed to. Customers will reduce the effort needed to evaluate a producer's reliability when buying through intermediaries.

1.3.3 Aggregation and bulk breaking

Aggregation can be divided in two types: aggregating products and aggregating buyers.

Wholesalers buy different products and brands in large quantities compared to most individual buyers. Aggregating different products reduces the transaction

costs that otherwise the supplier and consumer would have incurred. Consumers will buy from only one (or a few) supplier(s) (intermediary in this case) different goods instead of dealing with many individual-manufacturing suppliers, therefore reducing transaction cost. Consumers will make one order including several products and will arrange one shipment to receive the goods.

Aggregating buyers is another function performed by intermediaries. It can be seen as putting together various orders from different buyers in order to make one big order to the manufacturer. An intermediary buying in bulk provides advantages to both the suppliers and the customers. Wholesalers have the buying power to achieve better prices than individual consumers do. Suppliers will offer better prices to bulk buyers by reducing transaction costs.

1.3.4 Storage and delivery

Another function some wholesalers perform is carrying inventory and being in charge of the distribution of the different products they offer. With inventories close to the customer and with the capacity to fulfill most of the orders promptly, wholesalers perform one of their most important functions: servicing the customers. Wholesalers will pick up the goods from the supplier, store them and then deliver them to the customer in short turn around time.

1.3.5 Marketing

Although we could include trust and aggregation as part of marketing, it is important to highlight the wholesalers' role in advertising and promotion and the relations and knowledge the wholesaler has with the customers. Being close to and familiar with the customer, wholesalers provide information to manufacturers to plan for new customer needs, product patterns, future demand, and advertising needs. Most intermediaries are familiar with local or regional political, social and economic issues. Wholesalers can act as promoters of suppliers' products, managing advertising and promotion.

1.3.6 Credit terms

Many wholesalers provide credit to their customers that otherwise they would not have gotten by going directly to the supplier. Wholesalers that offer extended terms of payment need to have sufficient financial resources, as well as good credit departments to evaluate and manage debts in order to offer these services and facilitate acquisition of the products by the customers. Wholesalers that sell different products can diversify and lower credit risk by selling to more buyers.

As we can see, wholesalers perform several tasks, some of which can fall in one or more of the previous categories. Nevertheless it is important to distinguish which category a specific function lays in to analyze the value it adds to the chain.

Even though we have exposed some of the functions wholesalers perform, there still remains the question why producers choose to sell through wholesalers instead of doing it directly.

1.4 Why are there Intermediaries?

Finished goods not always go directly from the producer to the consumer. Instead they need to pass through one or more businesses to reach the final customer. According to Paul Baier, director of enterprise segment marketing - Open Market³, until the beginning of 1999 between 80 to 90% of manufacturers still sell through distributors (Baier 1999).

We have already analyzed the functions intermediaries perform, but there still is the question why manufacturers / suppliers do not perform those tasks? According to Encyclopedia Britannica, the most important reasons why producers use intermediaries are: (“Wholesalers” Britannica Online 1999)

1. They may lack the financial resources to carry out the intermediary activities themselves.
2. Many producers can earn a superior return on their capital by investing profits back into their core business rather than into the distribution of their products.
3. Intermediaries, or middlemen, offer superior efficiency in making goods and services widely available and accessible to final users.

³ An electronic commerce software company.

Although these are the most probable reasons why producers sell through middlemen, it is questionable whether they hold true nowadays for many industries and firms using intermediaries. The introduction of new products, services and production practices rapidly change the way of doing business. Many times there is lag between the time the rules change and time the players act. For example, the introduction of new technology may have dropped the costs needed to perform some of the wholesalers' tasks, and/or some producers may now have the financial capability to do them. Other industries may now find that there is no other viable place to increase returns over capital but in the distribution of their products. Lastly, some wholesalers may not continue to perform efficient.

1.5 How has the World Changed and affected the marketing channel structure?

As was explained before, intermediaries are a key part of the distribution channel in many industries and have existed since commerce developed. Throughout history, intermediaries have evolved and changed according to the needs of the environment. For example, at the beginning of the century full-service wholesalers were dominant players. But as large-scale retailers started to evolve, full-service wholesalers had to become specialist wholesalers to survive.

In the last decades the world has experienced enormous economic, social and political changes. Many issues have had an effect in the structure of the supply chain; channel partner relations and roles are evolving and changing. Some of the major issues that have had an impact, specially to intermediaries, are the following:

1.5.1 Market expansion and globalization

Globalization has increased the flow of goods between countries. The structure of distribution channels is getting more complex as companies try to serve other countries and regions of the world. Dealing with local governments, different cultures, customs, and tax rates, requires the need of special tasks. Companies are not always capable of dealing with these issues, therefore the need of wholesalers-distributors with experience in international markets.

1.5.2 New products and services such as the development of third-party logistics and more efficient parcel delivery systems

The evolution of these services has changed the way shippers manage their inbound and outbound logistics. Third party logistics are performing logistic tasks that traditionally have been performed by the manufacturer, an intermediary or the customer. For example, FedEx is handling logistics and distribution in some overseas markets for U.S. high-tech companies as Cisco Systems, Compaq Computer, Dell Computer, Hewlett-Packard, and IBM (Wilder 1998). As Todd Wood, global practice director for electronic commerce at Deloitte & Touche

Consulting Group, notes “there is a big potential that distributors who do not add value can get replaced by freight companies.” (cited in Wilder 1998)

1.5.3 Supply Chain Integration

Supply chain management is a hot topic today. Chain partners are trying to reduce redundancies and costs in order to increase efficiencies. Globalization and fierce competition is forcing industry to integration. Companies, which integrate their supply chain, seek to reduce the system of moving product to market. Information technology, activity-based management and other tools are helping to identify and fix inefficiencies. This approach is aimed at keeping in the chain only those functions and partners that add value to the customer. Intermediaries are key partners along the supply chain, and “clearly, intermediaries that do not add value in a value chain, the classic “middlemen” who simply pass product through a channel, will be big losers if they do not change.” (Wilder 1998)

1.5.4 The information technology revolution

Information technology advances have had an important impact on the supply chain structure. Technologies such as EDI and the Internet have enabled channel partners to exchange and manage information more efficiently. The wide adoption of Internet electronic commerce has enabled companies to reduce costs, obtain better customer feedback, shorten product development cycle times, and fulfill orders faster. Certainly, many issues have come out as

electronic commerce evolves, two of which are of particular to intermediaries: disintermediation and channel conflict. Both issues will be analyzed in chapter three and four.

1.6 Conclusion

Intermediaries perform several functions that add value to the supply chain. These functions are not performed by manufacturers / suppliers because either they do not have sufficient resources (e.g., financial resources for customer credit) or because the functions are more suitable for intermediaries (e.g., aggregation of different manufacturers' products). As new technologies as the Internet emerge, together with many other economic, social and political shifts, the value intermediaries add to the supply chain is being questioned. In the following chapter, the business-to-business electronic commerce evolution is discussed in order to build a framework for the discussion of the topics of concern of this thesis: disintermediation and channel conflict.

CHAPTER 2

BUSINESS-TO-BUSINESS ELECTRONIC COMMERCE

The word electronic commerce has been used since the 1970's when electronic data interchange (EDI) was developed. Given the high cost of installation and maintenance that EDI requires, its adoption was limited only to large corporations. Only with the development and wide adoption of the Internet did the concept of electronic commerce become of general use. In this chapter the development of Internet electronic commerce will be analyzed, especially in the business-to-business arena. It is important to understand how the Internet has changed the marketing channel's environment in order to analyze its impact on the channel partners.

2.1 EDI: the First Form of Electronic Commerce

EDI is a standard for compiling and transmitting information between computers. It enables companies to exchange electronic information as standardized business forms, usually over a private data network called Value-Added Network (VAN). In the early 70s companies, mostly large, started to develop private networks to share information with suppliers, buyers and partners. Most large companies still continue to use EDI as of 1999. In 1998 an estimated 95% of Fortune 1,000 companies used EDI (E-Commerce Guide's Ask the Experts 1998). The total bill for goods exchanged using EDI for 1998 was estimated at about \$250 billion. The value of EDI transactions in 1998 was 14 times larger

than business-to-business Internet commerce, but it is expected that within 4 years the two will balance (Reinhardt 1998).

Many corporations have not switched from EDI to the Internet because of their sunk costs and the belief that VANs are more reliable than the Internet. However, both technologies are complementary and now some EDI transactions are running over the Web using extranets. The Gartner Group, an IT research and consulting firm, expects that by 2003, more than 30% of EDI transactions will be referred over the Internet (Reinhardt 1998). Forrester Research claims that in 1998, 57% of Fortune 500 companies had already implemented Internet EDI capabilities (McKendrick 1998).

2.2 Electronic Commerce Definition

Given the dynamic and fast changing environment of the Internet, the definition of electronic commerce evolves at the same time. Different authors define electronic commerce as:

- “the process of two or more parties conducting business transactions via computer and some type of network – e.g. a direct connection or the Internet” (E-Commerce Guide’s Ask the Experts 1998)
- “the buying and selling of products and services over the Internet or other electronic networks” (Open Market 1998)

- “The trade of goods and services in which the final order is placed over the Internet.” (Forrester Research 1998)

Some applications that are considered to be electronic commerce are: providing information about a product or service through the Internet, electronic funds transfer, a Web site catalog, a Web site that enables online order entry, and any application that transfers data from computer to computer to support the sale of a product or service.

An important issue is how to classify a business transaction as an electronic commerce one. Several research firms measure Internet electronic commerce transactions, and even make growth projections into the future. But it is not clear how these research firms classify a transaction as an Internet electronic commerce one. Rob Rodin, CEO of Marshall Industries, in a talk he gave at the Massachusetts Institute of Technology on April, 99 discussed this issue. According to him, some companies would define a transaction as electronic commerce if x out of y steps were done electronically. (Rodin 1999)

2.3 Business-to-Business vs. Business-to-Consumer

Electronic Commerce

Most people think of electronic commerce as online retailing or business-to-consumer electronic commerce: selling products, services and information through the Internet to the consumer. As we will see later, this is only a small part of e-commerce but it is well known given its direct interaction with the millions of individual consumers.

Electronic commerce includes business-to-consumer, business-to-business, and intraorganizational transactions. Business-to-consumer started in the mid 90s with companies as Amazon.com and CDNow that were not traditional retailers. Later on, brick and mortar companies as Barnes and Noble, the Gap and WalMart entered the arena. In general, business-to-consumer electronic commerce runs through the Internet and any consumer has access to the Web sites in this type of commerce. Intraorganizational transactions are run mostly through Intranets. This technology uses also the Internet, but has firewalls (programs used on the perimeter of a network to block unwanted traffic) so that only people inside the company can access the content on the site.

Organizations use Intranets to perform different functions, some of which can be classified as electronic commerce (e.g. departments ordering MRO supplies from other departments). Business-to-business electronic commerce transactions take place through the Internet and also through extranets. An extranet is a private network that uses the Internet to share part of a business' information with

selected suppliers, customers, vendors, or other businesses. An extranet has the same firewalls as an Intranet, but selected partners are allowed inside. Extranets are more than password-protected Web sites where few efforts are made to authenticate the identity of a person. With extranets, security and authentication are very important. The following explains the characteristics of the Internet, intranets and extranets (Cue 1999).

Table 2.1: Internet, Intranet, and Extranet Characteristics

	Internet	Intranet	Extranet
Access	public	private	semi-private
Users	everyone	members of a specific firm	group of closely related firms
Information	fragmented	proprietary	shared in closely trusted held circles

An extranet is more user-friendly than EDI because of its Web interface and since it allows for less regimented and more ad-hoc inquiries. According to the Gartner Group as much as 40% of business-to-business E-commerce applications will be replaced by extranets by 2002 (Reinhardt 1998).

As was mentioned before, while business-to-consumer electronic commerce attracts the attention of most of the people, the business-to-business electronic commerce market is several times larger than the consumer electronic commerce. In mid-1997, Forrester Research's forecast for U.S. Internet business-to-business electronic commerce was \$327 billion for the year 2002.

Given the rapid adoption of business trade through the Internet, by the end of 1998 they adjusted their forecast to \$842 billion by the year 2002 and \$1.3 trillion by 2003 (Forrester Research 1998). Table 2 and figure 1 compared past and future Internet electronic commerce transactions according to Forrester Research

Table 2.2: Business-to-Business vs. Business-to-Consumer Internet Electronic Commerce Transactions

	1997	1998	1999	2000	2001	2002	2003
B2B¹	\$5.6	\$43	\$109	\$251	\$499	\$842	\$1331
B2C¹	\$1.8	\$8	\$18	\$33	\$52	\$76	\$108

¹billions of dollars (Forrester Research Nov.1998)

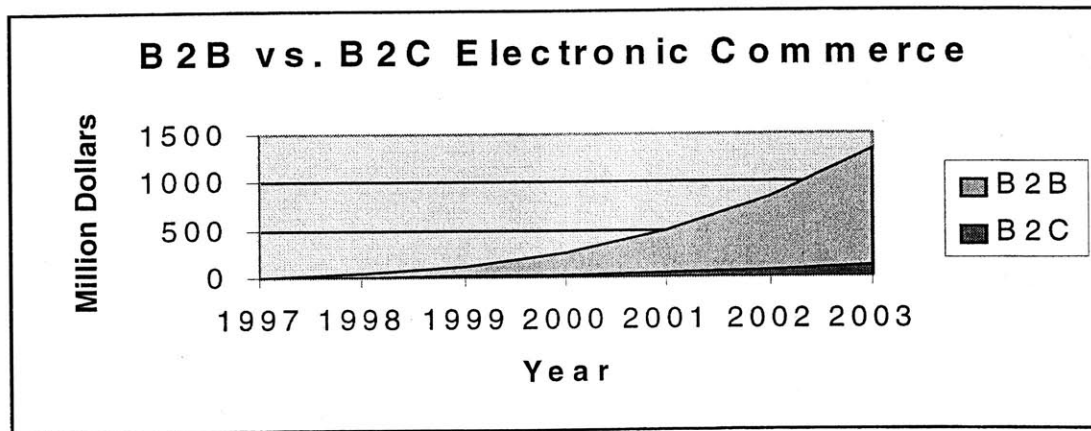


Figure 2.1: Business-to-Business vs. Business-to-Consumer Internet Electronic Commerce Transactions

As it can be seen, the usage of the Internet as a media to conduct business is growing exponentially. By 2002 it is expected to account for 9% of total business-to-business sales in the U.S., this is 50 times larger than the 1997 figure of 0.2% (Reinhardt 1998).

“E-commerce in mainstream industries such as automotive, shipping and petrochemicals will continue to grow and replicate the e-commerce successes realized in the high-tech, finance and retail fields.” (Jones 1998)

2.4 Advantages of Business-to-Business Electronic Commerce

The relatively low cost of Internet electronic commerce and the business advantages it offers have driven its rapid adoption. Many companies have been implementing electronic commerce using the Internet since the beginning of the 1990s. Most of them have achieved large efficiencies throughout the functions where they have implemented Internet capabilities. Most of the advantages Internet electronic commerce offers can be classified as it follows:

2.4.1 Increased Selling Efficiency: reaching more customers

Internet electronic commerce facilitates companies reaching a wider marketplace in a more cost-effective way. Many companies are serving new and in most cases smaller and more wide spread customers with the use of the Internet. Some manufacturers and distributors are using Internet commerce as their only marketing channel or in combination with other indirect and direct marketing

efforts. Companies are also reaching second- and third-shift customers through the Internet given its 24/7 capability.

Hyundai America. (www.hyundaiusa.com) On November of 1998, Hyundai America launched an extranet to sell parts through the Internet. It was looking to broaden the distribution of its replacement parts and generate business for its US auto dealers. "The key to this system is reaching new people," said George Kurth, Hyundai America's national supply manager (cited in Dalton 1999). The site is targeted to serve repair shops and end customers.

Milacron Inc. (www.milpro.com) A \$1.5 billion sales cutting tools, grinding wheels and metalworking fluids manufacturer, Milacron, launched a Web site in January 6, 1999. Considered the first large-scale business-to-business commercial Web site for heavy industry, it is allowing customers to buy through the Internet its 50,000-metalworking products. Milacron is trying to reach 100,000 potential small customers, that it was unable to service effectively before (Milacron Launches E-commerce Web site for 100,000+ Smaller Metalworking Shops 1999). Milacron has had very limited direct contact with shops of 50 or fewer employees, that use a distributor or industrial products catalog. By selling directly to distributors' customers, Milacron knows there is potential for channel conflict. This very important issue will be discussed in chapter four.

2.4.2 Reducing the cost of doing business

One of the most important cost reductions achieved through Internet commerce is due to the use of fewer resources for customer service, sales, and purchasing.

More than 70% of the calls a company receives are about price, product availability, and order status (Open Market 1999). In Europe, Asia and other parts of the world, "800" numbers for customer service calls can cost companies \$1 or more per minute (Procknow 1999). These inquiries can be attended with minimal cost through the Internet, reducing phone calls and fax-back costs. Most companies are experiencing savings on the order of 15% of their current customer service costs and 30% of their current fax-back costs by making this information available over the Internet (Open Market 1999).

Additionally, cost reductions can be obtained by reducing errors in orders and invoices. Open Market, an electronic commerce software company, estimates that 20% of the orders a company receives are inaccurate (Open Market 1999). Further, companies achieve cost reductions by automating purchasing functions. Channel partners have the capability to interact at any time just by having access to an Internet browser. They can easily find the correct part instead of going through a lengthy catalog, check accurately and promptly the availability of a product and the status of an order, access up-to-date information on changes to products and/or services, and other features that facilitate business between buyers and sellers. According to W.W. Grainger Inc., an MRO distributor, most

of the time MRO process costs represent about 60% of the cost of an item (cited in Vigoroso 1998). These costs include searching for an item, selecting a supplier, ordering, resolving errors, and invoicing. Other cost reductions are in the form of marketing cost reductions. (e.g., print less catalogs).

Cisco Systems Inc. (www.cisco.com) The networking solutions company launched its Web site in early 1994. In the beginning the site provided only technical support to their customers. Later it provided access to order status, and in August 1996 Cisco enabled customers to configure, price and place an order through the Internet. At that time, four percent of their sales were placed online, in October 1998 that figure increased to about 70 percent, selling about \$21 million per day (Jordan 1998). They estimate they achieved \$363 million in savings from technical support, marketing, and distribution costs through their Web site in 1997. One third of these savings came from hiring fewer people for customer service (Reinhardt 1998). According to Chris Sinton, director of Cisco Connection Online (CCO), "Our partners estimate they now take approximately 40% of the time it used to place an order" (cited in Jordan 1998). Before the Web, customers would use a book to configure the products, another for pricing, make a purchase order and fax them to Cisco. They estimate this process yielded 30% purchasing order errors, either through incorrect configuration or through incorrect pricing.

Boeing Corporation. (www.boeing.com) On November 1996, Aircraft manufacturer Boeing launched an extranet called "Parts Analysis & Requirements Tracking" (PART). The network links airline customers to Boeing's spare parts business. Boeing Co. sold to the airlines \$100 million in spare parts through its Web site in 1997 and by the beginning of 1999 it was selling about \$2 billion spare parts over the Internet on a yearly basis (Steelmakers Break the Mold 1999). In addition, it is avoiding every day about 600 phone calls to customer service representatives. Furthermore, Managers are fostering about 75 extranet projects that will eventually save the company millions of dollars (US Department of Commerce 1998).

National Semiconductor Corporation. (www.national.com) A developer and manufacturer of semiconductor products for the electronics equipment industry, saved an estimated \$20 million to its distributors in 1998 by making them order online (Reinhardt 1998).

General Electric Corporation. (www.ge.com) The company developed an extranet named Trading Process Network (TPN). The system acts as a web-based noticeboard: suppliers post their catalogues on a master database maintained by TPN. GE developed the first prototype in May 1996. It was first used in GE's lighting division primarily for buying indirect materials and for small items such as screwdrivers and batteries. Just one year later, in 1997, GE made commercial contract negotiations worth \$1.5 billion with about 1,400 suppliers

through eight of its twelve business units using the network (A.T. Kearney). By mid-1998 it does not only include 2,000 suppliers but also a dozen large GE's customers. The company estimates it will save over \$500 million in the first three years of operation by buying through TPN (Reinhardt 1998).

2.4.3 Shorter Cycle Times

It is important to distinguish between ordering / fulfillment cycle times and product development cycle times. The Internet has enabled companies to cut both cycle times by better integrating the value chain. With Internet technology, companies can provide more detailed, and more timely information to strategic partners, such as distributors, retailers, transportation and logistics providers, as well as to strategic manufacturing partners.

Through the Internet, companies can fulfill orders faster and more accurately by automating repeat buys, getting credit approval more rapidly, and fast and accurate stock availability information. In addition, purchasing and sales people are released from the routine of making and processing orders, they have more time to focus on building relations with suppliers and customers.

Adaptec, Incorporation. (www.adaptec.com) A connectivity product supplier, implemented a \$1 million electronic commerce system to interact with its Far East suppliers. The Milpitas, Calif. Company cut manufacturing cycle time from 14-16 weeks to 8 weeks. "The time for processing purchase orders fell from six

days to minutes” (Reinhardt 1998). It not only increased customer satisfaction by delivering more rapidly and gaining flexibility to change manufacturing specs, but it saved an estimated \$10 million a year in inventory costs (McCrory 1998).

Dell Computer Corporation. (www.dell.com) In June of 1998, Dell started to give its corporate and public sector accounts the possibility to order products through an Internet-based purchase order system (Harris 1998). Customers use Dell's Premier Web sites, which are customized and password-protected extranets, to submit an order electronically, check availability, and get financial approval online, without having to fax or mail Dell a hard copy of the order. Some customers are already achieving efficiencies with the new service. Bob Sudin, computer operations manager at Benjamin Moore Paint in Montvale, New Jersey, said he used to spend up to an hour to complete forms and faxing them back and forth to place one order, and now with the new system he spends about four minutes to place one order (Cited in Harris 1998).

Many companies are cutting also development cycle times. Some have built extranets to link with their channel partners in order to facilitate the flow of design information. This is very valuable in an era of shorter product cycle times and high competition. The National Association of Manufacturers in its most recent poll of 1,025 manufacturing plant managers, found that they have automated 42% of transactions between their product design departments and customers

and 33% of transactions between their product design departments and suppliers (cited in Wilder, E-commerce – Old Line Moves Online 1990).

Chrysler Corporation. (www.chrysler.com) It has been one of the pioneers of extranet adoption. Chrysler made internal design information available to its suppliers through the Internet. As a result, Chrysler reduced from four to two years the time it takes to develop a new car when it let suppliers access its internal design information. According to Tim Schmidt, managing partner of Encore Consulting Group Inc. in Florida, “the resulting halving of production time for a new car design was largely the result of that improved information flow” (Sykes 1997).

2.4.4 Improved Customer Service

Through the Internet companies can have a better customer service. Through email they are able to respond in a more cost-effective way to customer inquiries, compared to a customer service call center. Information on upgrades or enhancements can reach the customer with accuracy, lower cost and speed. Moreover, product information, frequently asked questions, and other relevant up-to-date information can be posted on the Web.

Milacron Inc., In addition to selling directly through its Web site, it offers problem-solving capabilities and also includes other services (Milacron News 1999):

1. QuoteHelper™, an interactive application to assist metalworkers in developing and estimating bids to customers.
2. Job Shop Mall™, a free classified directory for metalworking job shops to post their services or for manufacturers to search for job shops for outsourced work.
3. Machinery Flea Market™, another free, searchable database for buying and selling new and used machinery and equipment.

In an article by Shaffer, he noted that Milacron expects its new customer service capabilities to impact their business, “enabling customers to choose any item for a machining operation, find the correct fluids and help them set up the machine on a 24/7 basis is a significant shift” (Shaffer 1999).

2.4.5 Better Customer Information

Companies are using the ease of communication and community-building features of Internet electronic commerce to obtain better customer needs and desires information, product improvement recommendations, and other valuable information. Companies are not only able to decrease their inventory levels through electronic commerce, as was mentioned before, but they can also have a more effective inventory selection. They can either expand or reduce their selection by knowing better what the customers want.

2.5 Issues of Concern

Although the potential of electronic commerce is large and many companies are achieving great efficiencies, it is important to know that implementing Internet

commerce is not an easy task. There are several issues that need to be addressed before launching an electronic commerce application. Some of the issues are:

2.5.1 Investment

The technology of electronic commerce is expensive. According to Forrester Research, the average investment needed for an electronic commerce project in the business-to-business arena is of about one million dollars (Forrester Research 1998). Commerce application servers needed for this type of applications offer companies extensive scalability and integration into other internal systems. Other solutions in the 100,000-dollar neighborhood exist, but are recommended only for business-to-consumer applications. According to Open Market one of the three most common reasons why companies do not use Internet to conduct business is that “companies do not fully understand the cost and resource requirements to implement an Internet Commerce solutions resource” (Open Market 1999)

2.5.2 The need of organizational adaptability, compatibility and integration with existing systems and functions.

Internet electronic commerce not only implies having a Web portal, companies need to integrate their Web sites with their operating systems: inventory management, order processing, financials, and customer service. As John

Fontanella from Skyway⁴ said, “e-commerce empowers the customer to buy anytime, anywhere, their way and now. Fulfilling that customer’s demand requires supply chain planning, integrated systems, accurate and complete information on product availability and substitutions, sophisticated pricing and promotional systems, integrated supplier partnerships and fast and efficient fulfillment and transportation” (Fontanella 1998). Furthermore, Forrester Research explains that a US company can expect 30% of the traffic and 10% of its orders to come from outside the United States. “Yet nearly half of these orders are turned away because companies do not have the processes in place to fill them” (Forrester Research, Instant Globalization and Just-in-Time Localization – Strategies for Success on the Web 1998).

2.5.3 Security

Security is a very important issue, but according to several authors companies are worrying too much on security when starting an electronic commerce project. As Tim Schmidt, managing partner of Encore Consulting Group Inc, says, “Seventy percent of security breaches come from employees. We are focusing on the firewall and who’s coming in, and not on what’s going out, while attention is a must, people need to guard against being distracted by unrealistic visions of espionage” (cited in Sykes 1997)

⁴ Skyway is a third party logistics company.

2.5.4 Be aware of end-users' technological realities

It is important for companies conducting business over the Internet to think about the technology capabilities their partners have. "Extranet implementers must make sure to design for their lowest common technological denominator" (Sykes 1997)

2.6 Conclusion

Electronic commerce is not new for business-to-business commerce. Large corporations have been conducting part of their business electronically using EDI since the 1970s. Since the development of the Internet, however, electronic commerce has evolved. It has not only decreased the cost of electronic commerce but also enhanced its applications and functions. Many companies are taking advantage of all the benefits that the Internet electronic commerce brings: cost reductions, better customer service, reaching more customers, reducing the cycle time to develop a product, and fulfill orders faster. There are also additional indirect benefits from Internet electronic commerce, for example purchasers / sellers become preferred business partners when they use electronic commerce. Although there are some issues of concern like security, cost, and back-end connectivity, there are two main issues that are of the greatest concern to many companies: disintermediation and channel conflict. In the following two chapters both issues will be analyzed.

CHAPTER 3

DISINTERMEDIATION

Electronic commerce enables companies to trade with their channel partners in a more efficient way, but at the same time it raises some concern when manufacturers (or even other intermediaries) decide to bypass intermediaries using electronic commerce. A special concern has been whether Internet electronic commerce will propel the elimination of intermediaries—their disintermediation. This chapter introduces the concept of disintermediation; what are the arguments in favor and against it, as well as what are intermediaries doing to leverage the Internet.

3.1 What is Disintermediation?

According to several authors, the reduction in transaction costs achieved through electronic commerce is the theoretical cause for manufacturers bypassing intermediaries. A study made by Arthur Andersen and the Distribution Research and Education Foundation, "Facing the Forces of Change," mentions that one of four major forces expected to have a serious impact in the wholesale-distribution industry is Internet electronic commerce (Arthur Andersen 1998). The others are strategic alliances, supply chain integration and globalization. The report states that electronic commerce "removes significant geographic, technological, and economic boundaries that have in the past helped to shelter the traditional wholesaler-distributor from competition." Traditional intermediaries are very

concerned with losing their business to buyers, sellers, or even to other new intermediaries who have access to Internet technology (Arthur Andersen 1998).

In the middle of the 1990s a new term emerged, trying to explain what many business gurus started to predict: the elimination of middlemen through the Internet. The term is “Disintermediation.”

“Disintermediation refers to any transaction or exchange of goods or services that bypasses an intermediary organization typically involved in such a transaction” (Fein 1997)

The perspective was that the Internet would result in direct relationships between manufacturers and consumers. The central argument was that the use of the Internet enables manufacturers to internalize tasks performed traditionally by intermediaries.

“In every industry – from retailing to insurance – the key impact of the computer-networking revolution is to remove the middleman.” (Gilder 1994)

“About a third of all jobs will be at risk largely through the process of disintermediation” (Williamson 1995)

“Any player who does not add real tangible value to a channel is running the incredible risk of being eliminated” (Morehouse 1997)

“In theory, at least, any shopper with a Web browser can buy directly from a manufacturer or service provider, completely cutting out distributors, resellers, and even retailers in the supply chain, perhaps for good”. (Wilder, Middlemen Beware? 1997)

“The much wider availability of low-cost real time, or near-real time information in particular, has spurred the process of disintermediation” (Taylor 1998)

“Although they won’t talk about it publicly, auto makers, consumer-electronic companies, and almost all other large manufacturers are looking for ways to shorten their selling chains—even if by doing so they risk alienating partners” says Beth Enslow, Gartner Group analyst. (Cited in Hof 1999)

So far, retail intermediaries have been the most affected middlemen. Many travel agents and insurance agents have been driven out of business: disintermediated. “Some traditional travel agents in the US have reported a 10 to 20 percent decline in business during the past year as customers switch to online ticket purchasing” (Taylor 1998). In June 1998 Michael Smith, a financial services analyst with Mercer Management Consulting Inc., said that the Internet had already lead to a 20% decrease in the number of insurance agents since 1995 (Stepanek 1998). Moreover, at the beginning of 1998 Egghead Software laid off about 800 salespeople when it decided to close its 156 brick-and-mortar stores, changed its name to Egghead.com Inc., and became a Internet only dealer (Stepanek 1998).

It is important to notice that disintermediation does not only occur with external marketing channels. Sales forces and purchasing departments can also be disintermediated, an issue that raises the chances of internal conflict within a company.

3.2 Industries / Markets Easier to Disintermediate

As several authors suggest, various characteristics of each industry influence disintermediation. Barefoot notes that company, product, and market characteristics are relevant for Industrial channel selection (Barefoot 1978). Other authors try to explain channel decision focusing more on market characteristics. McCalley says that “the user has more effect on channel structure than any other channel member” (McCalley 1996). In order to evaluate the type of channel (direct or indirect) a company should embrace, there is the need to analyze several industry characteristics. However, some authors have analyzed the influence specific characteristics have on channel selection. Table 2 shows some market, product and company characteristics suggested in literature. A positive correlation indicates that if the attribute increases, all else remaining equal, there would be an influence towards a direct channel decision. A negative correlation indicates that if the attribute increases, all else remaining equal, there would be an influence towards an indirect channel decision.

Table 3.1: Market Attributes and its Relation towards Direct Sales

Attribute	Relation	Brief Explanation
Size of Order	+	If the order size increases, fixed distribution expenses can be spread over a large number of items. For example, large orders make it possible to use truckloads vs. LTL.
Product Cost	+	In general, the higher the product cost compared with its distribution costs, the easier it would be for a manufacturer to ship the product directly to the retailer or end customer.
Customer concentration	+	The more scattered the market, the greater the tendency to use an indirect channel. For example, if the customers are more dispersed, it will be more costly to send sales agents to serve them.
Number of Customers	- / +	This attribute is very related to customer concentration. There is an influence towards using an indirect channel when the number of customers increases but this customers are more spread out. But if the number of customers increases and the concentration also, the tendency is to use a shorter channel.
Size of Firm	+	A larger firm will have more resources to support the fixed costs of direct sales.
Purchase Frequency	-	The more frequent the orders, the smaller the orders are, thus the higher the fixed costs to ship direct.
Service Needs	-	In general, the larger the service needs of a product the greater the tendency to use indirect channels. Intermediaries can support service for the products of different manufacturers, thus spreading fixed costs between more products.

It is important to notice that the interrelation of all attributes is quite complex and some have more and some less influence towards the direct mode decision.

Some authors try to explain the relationship between different market characteristics and its relation towards a direct sales mode. For example, Deborah Cross from Computer Sciences Corp. says that if the product has a low price and customers buy it frequently and without the need of expert knowledge, the products are more likely to get disintermediated or move towards a more direct mode (Cross 1997).

It is important to mention that there are other factors affecting the channel decision. For example, some authors argue that if a product is consumed by computer-literate consumers, it can be purchased over the Internet more easily. In the business-to-business arena this could mean that companies in the computer industry or with IT expertise will be more likely to purchase over the Internet. In this case what is not clear is if they will buy them directly from the manufacturers or from intermediaries using the Internet.

It is complicated to define and measure the market, product, industry, and company characteristics that define whether a company's product should be sold directly or not. The interrelation between these characteristics is complex. Moreover, it is difficult to measure and predict the impacts the Internet has on the marketing channels companies use. But it is true that the Internet has had, and

will continue to have, an important impact on the channel structure, and on the roles and functions each player throughout the value chain performs.

3.3 Intermediaries vs. Disintermediation

Whether it is disintermediation or not, wholesaler-distributors know that the channel structure and their roles in it are changing through electronic commerce. They argue that the functions they perform are of value to the supply chain. As Stephen Kaufman president of Arrow Electronics, a global electronics and computer products distributor, said:

“Customers need reliable delivery; short lead-times; multiple part numbers; cheap, simple, efficient purchasing practices; and the lowest total cost of ownership. Suppliers need access to OEM customers, logistics capabilities, credit and sales support. Suppliers and customers are saying we want you to do these things, but we do not want to pay for them.” (Kaufman 1998)

Wholesale-distributors say that even though some of these functions are easier to perform through electronic commerce, suppliers and customers do not yet have the capabilities to perform most of them efficiently. For example, Shelley Boxer, CFO for MSC Industrial Supply Co. says that many times procurement costs are as much or sometimes more than the costs of the goods themselves. That is why buyers may prefer to buy everything from one place. (Cited in Srikonda 1999)

“Technophiles predicting the disintermediation of middlemen also overlook an important axiom: people do business with people they can trust.” (Kraisner 1996)

“Manufacturers looking to bypass distributors and sell directly over the Web often overlook a huge piece of the supply chain: logistics. Fruit of the Loom’s business model is to produce mass quantities of clothing for fewer than 60 distributors; selling directly to thousands of mom-and-pop screen printers would amount to a fundamental business change that is not attractive to the company. In the accounts receivable function alone, distributors solve the logistics nightmare for the manufacturer” (Banfield 1997)

“It is not cost-effective for a customer to go to many different suppliers’ Web site, get product and price information, compare it, and revisit one of them to purchase. Nor is it cost-effective for a manufacturer to deal with many small orders from many customers.” (Arthur Andersen 1998)

“Middlemen are not dead. They are just reinventing themselves.” (Saffo cited in Stepanek 1998)

“There’s a role for distributors to serve as a logistics partner. Many companies want to go direct, meaning the customer interface, but it does not mean the logistics” (Rodek 1999)

“Dell would not be nearly as successful if they were not embracing the [indirect] channel. A lot of configurations are done by the channel and a lot of selling is effectively done by the channel. But they have been able to keep a very clean, clear differentiated marketing message that it’s [all] direct even though they don’t

have the service that the channel has, and even though they don't do the configurations and the channel does it for them" (Rodek 1999)

"There's a bunch of blabber out there, but when you ask somebody why [they think] the distributor is going away and then you start pointing to some of the vendors, if not most vendors, that are looking to move more through [distribution], people say, 'I didn't know that.' They just read a headline somewhere. They just look at the sound bites on the news. The equity market right now is a sound byte market." (Rodek 1999)

Finding out which functions intermediaries perform, will suppliers, customers or even new players will try to perform is a difficult task. However, some wholesaler-distributors are starting to recognize that there is a threat to their businesses. They are realizing that first they need to evaluate whether they continue to add value to the supply chain or not.

"Companies [distributors] that in the past have made their profits from simply handling products or brokering services will be in jeopardy from e-commerce-enabled competitors" (Arthur Andersen 1998)

"Clearly, intermediaries that do not add value in a value chain, the classic "middlemen" who simply pass product through a channel, will be big losers if they do not change" (Wilder, Intermediaries Must Meet the Internet Challenge 1998)

"The consensus that emerges across a wide swath of industries is that "pure middlemen"—companies that act as little more than go-betweens and order-

takers—are in serious trouble as a result of the Internet” (Wilder, Middlemen Beware? 1997)

“Now that it’s easier for manufacturers to sell directly to customers, the role of middlemen in the supply chain is being questioned” (Middlemen’s Role in E-Supply Chain 1998)

Concerned about the situation, many distributors are starting to take advantage of Internet electronic commerce. Traditional intermediaries are evolving, launching Web sites and extranets to trade with their channel partners. By adding new value-added services like assembly, consolidation and in-transit inventory merging, intermediaries are trying to become more efficient. For example, distributors as Ingram, are assembling computers for different OEM manufacturers. (Hansell 1998). According to Gartner research, 60 percent of wholesale distributors will earn most of their profits from post-sale services such as information services, delivery, installation, warranty, and training by 2002 (Avery 1997).

“Every industry has to move its focus from buying low and selling high to providing value added services,” says Art Mesher, Gartner research director. (cited in Avery 1997)

“Middlemen who have survived the disintermediation threat have learned to leverage the Internet and its electronic commerce capabilities to provide value-added services that most manufacturers don’t have the time or inclination to

offer. These typically fall into three categories: logistics, information, and service” says Tim Minahan from Aberdeen Group⁵ (Cited in Middlemen’s Role in E-Supply Chain 1998)

“These days, consumers and businesses are more than willing to pay for value, but far less willing to pay a markup for product delivered sans value.” (DeMarzo 1999)

Some of the traditional wholesalers-distributors doing business over the Internet are:

Marshall Industries, (www.marshall.com) a distributor of industrial electronic components and production supplies, was one of the first companies to conduct electronic commerce over the Internet. In 1994 the company launched its first Web site, MarshallNet, to sell products over the Internet. They had to build their own in-house e-commerce solution since at that time there were no off-the-shelf products (Shein 1998). The Web site enables customers to pay by credit card, cyberscash or billed if the customer has an account. Customers can track their shipments through UPS and obtain service 24 hours a day, 7 days a week by phone, fax, E-mail, Internet, electronic data interchange or corporate intranet. Marshall also broadcasts live training Webcasts through a created division called ENEN (Education, News, and Entertainment Network).

⁵ A computer and communications market research and consulting organization.

W.W. Grainger Inc., (www.grainger.com) the largest maintenance, repair, and operating (MRO) supplies distributor, was the first to adopt the strategy for selling MRO items on the Internet. It launched its first Web site in 1995 and a year later it began to take orders online (Avery 1998). In addition to phone and branch sales, customers have access to over 190,000 products online (Brack 1998). The Web site was named one of the best 10 business-to-business Web site in 1997 by both Advertising Age and Business Marketing (Brack 1998).

Office Depot, OfficeMax and Staples. These office supplies retailers serve both the consumer and the business-to-business market and have been very aggressive towards electronic commerce. OfficeMax (www.OfficeMax.com) was the first of the three to sell goods over the Web; it started its online sales in March 1995. Office Depot (www.OfficeDepot.com) started in January 1999 with a big marketing campaign for its Web site Officedepot.com (Warner 1999). In March 1999 Office Depot had 50,000 users ordering through the Internet (Ciancarelli 1999). Their goal is to triple online sales in 1999 and make its project profitable. The company has business-to-business private Web site for corporate customers. According to Monica Luechtfeld, vice president contract management and sales administrator for Office Depot, "eighteen percent of the orders from corporate customers come to us electronically [March 1999]; our objective is to get that to 30% by the end of this year [1999]" (Cited in Ciancarelli 1999). Finally, Staples (www.Staples.com) is planning to invest \$10 million

during 1999 in its online sales project. Staples is also creating and operating individual “virtual stores” for its corporate customers to purchase Staples products over the Internet. Each “virtual store” is tailored to the requirements of the corporate customer so every time it browses through the store, pre-negotiated prices, product availability, shipping and billing addresses are automatically shown. According to Chris Long, director of e-commerce at Staples, “Now that the system is in place, a new store, complete with over 30,000 items and customized for a particular corporate customer, can be automatically generated quickly and easily.” (Cited in Nicholls 1998)

3.4 Reintermediation: New Intermediaries

Reintermediation refers to the emergence of new intermediaries in electronic marketing channels. The so-called informediaries or cybermediaries are leveraging Internet electronic commerce. Virtual trading communities, customer information resellers, electronic auctions enablers, marketplace aggregators, marketplace concentrators, and electronic agents are just some of the new types of intermediaries that have emerged from electronic commerce.

An interesting type of new intermediary is the one gathering together other intermediaries. NetBuy (www.netbuy.com) and OrderZone.com (www.OrderZone.com) are two example of this type of intermediaries.

NetBuy.com claims it has gathered 338,000 electronic parts from 56 franchised distributors that represent 1863 manufacturers. It is announced as the world's largest source of electronic components with over \$2 billion worth of inventory and with all products available for purchase and immediate delivery (Vigoroso, Lots of Interest, Little Action 1999). After logging onto the NetBuy site and registering, buyers can submit a query about parts using manufacturer part numbers or a description, and quantity. The system responds with availability and prices without showing the distributor's name. After placing an order, the system releases a NetBuy purchase order to the distributor, who then supplies the parts. Customers can use a corporate credit card or establish credit.

OrderZone.com, a project started by W.W. Grainger, a \$4.3 billion distributor of MRO supplies, brings together six manufacturers and suppliers of a wide variety of products and services. The other companies that have joined are Marshall Industries, a large global distributor of industrial electronic components and production supplies; VWR Scientific Products, distributor of laboratory supplies, chemicals and equipment to life science, educational and industrial organizations; Lab Safety Supply, Inc., a direct marketer of safety and industrial products; Cintas Corporation, a manufacturer and provider of uniform programs and ancillary services; and Corporate Express Inc., a distributor of non-production goods and services. Currently the Web site is being tested with selected customers, but it is expected to open for business in the second quarter of 1999. The Web site is promoted as a one-stop online business service, where

customers just need one registration, one search engine, one order form, and also one invoice when buying different products from several suppliers. Customers save on ordering processing costs from these Web site when placing one order for several products.

Other cybermediaries in the business-to-business arena are imitating the success of companies like amazon.com. These intermediaries carry no inventory, relying on wholesalers and third party logistics to fulfill their sales. New comers like Works.com (www.works.com) and AtYourOffice.com (www.AtYourOffice.com) have entered the office supply market. These companies are making investments in order to compete with the three big supply office companies, Office Depot, OfficeMax, and Staples. And previous catalog companies such as Peny Wise that have also entered the electronic commerce arena.

AtYourOffice.com, a start-up company that launched its Web site in July 1998, declares itself as the world's largest online office products store. It offers 26,000 products and free next business-day delivery for orders of \$25 or more. In contrast to the OfficeMax, Staples and Office Depot that deliver free for invoices of \$50 or more (Nicholls 1998).

Works.com is another start-up company. The company plans to offer an online purchasing system that will link to two office-supply wholesalers (Nicholls 1998).

Peny Wise. Once a regional chain with stores in the Northeast and mid-Atlantic states, it closed its stores as competition from the office superstores increased and focused on catalog sales. The company launched its Web site in the summer of 1998 and plans to spend between \$2 and \$5 million in 1999 to market its Web site (Warner 1999).

New intermediaries in more traditional industries as chemical and steel are also emerging.

e-chemicals, (www.e-chemicals.com) an Ann Arbor, Mich. based upstart distributor, launched its Web site in October 1998. The company is focusing in smaller, knowledgeable customers and offers them competitive prices, order from multiple suppliers on a single purchase order and shipment tracking. The company says suppliers benefit from e-Chemicals because it allows them to extend their reach while reducing their cost of servicing customers (E-Chemicals Leads the Way as Emerging Distributors Harness the Internet 1998).

In the steel market, two groups launched two marketplaces to sell steel online: MetalSite and e-Steel.

MetalSite. (www.metalsite.net) In 1998 two steel producers, Weirton Steel and LTV Steel, launched MetalSite. The Web site has an auction-based system that

in the beginning of 1999 processed transactions for 60,000 tons of steel per month. But there are plans to do fixed-price trades in the future (Messmer 1999). Currently, all of the steel supply comes from the founding companies, but the idea is to attract more steel manufacturers in the future.

e-Steel. (www.esteel.com) Planned to open its online trading “floor” in late spring of 1999. It claims to have 12 North American steel producers and processors and that it will have both online auctions and a way to perform one-to-one trades right from the start (Messmer 1999). e-Steel promotes its marketplace as a neutral because it is not owned by any of the producers, and it is not affiliated with any industry participant, while MetalSite is owned by two steel manufacturers that actually trade in the marketplace. Further, e-steel will charge an online transaction fee of less than 1% to the seller; while MetalSite charges at the beginning of 1999 the seller between 0.25% and 2% (Messmer 1999)

3.5 Conclusion

As can be seen, intermediaries are evolving, trying new business models and new technologies. The environment is changing very fast and it is difficult to foresee what will happen. Whether disintermediation will happen or not is difficult to predict. Some argue that manufacturers are always looking to shorten the path between them and their customers since they want to gain all the profits. Others think that manufacturers need to have fences between them and their customers--they need business facilitators. As Paul Saffo, a director at the

Institute for the Future, says: "Rather than getting blindly closer, you want to get farther away from the customer in the right way. You want to interpose intermediaries who can help you reach customers." (Cited in New Rule of Thumbs 1998)

Until now, it is difficult to predict what degree of disintermediation will occur in the business-to-business market. There is not enough evidence to argue in favor or against. But it is true that change is happening; business-to-business intermediaries are evolving and leveraging the Internet to conduct business and enhance their offerings. Moreover, the business-to-business market has been more cautious to adopt Internet electronic commerce in comparison with the business-to-consumer market. This makes it even more difficult to forecast the impact of disintermediation in the business-to-business arena. Very related to this slow move towards direct Internet electronic commerce in the business-to-business market is the awareness manufacturers/ suppliers have towards bypassing their next channel partner. A threat disintermediation (at least partial) poses to the channel members is the possibility of channel conflict. It is very important for companies to take into account the threat channel conflict poses to their business as they start analyzing the adoption of Internet as a new marketing channel. In the following chapter, channel conflict as a result of direct sales over the Internet is addressed.

CHAPTER 4

CHANNEL CONFLICT

Manufacturers use different channels in order to market their products. Some companies use either direct or indirect marketing channels whereas other companies have been marketing products through both direct and indirect channels. In addition, some manufacturers decide to sell directly to large accounts and reach smaller customers through distributors / resellers. Channel decision may also be a function of geography--a direct channel may be effective for certain regions and indirect channels may be for other regions.

The purpose of having an array of marketing channels is to reach the highest number of potential customers. Sometimes these channels overlap and start competing for the same buyers. Although some overlapping is a good sign that channels are being effective, the chances of a potential channel conflict arise.

With the development of the Internet, manufacturers are finding it easier to reach end customers. Some companies have started to sell directly and others are just enhancing their existing direct channels. All of this has increased the potential for channel conflict between manufacturers and distributors, and also between distributors. Manufacturers / suppliers are very concerned with the potential consequences of channel conflict. On the one hand, manufacturers / suppliers who market a large share of their products through indirect channels are aware

of that conflict with these channels is of high risk to their businesses. On the other, they do not want to let competition take advantage of the Internet sales potential.

This chapter builds a framework to understand what channel conflict is, how to identify it, and what are some strategies that have been applied by companies or suggested by literature to minimize its effect while at the same time leveraging Internet electronic commerce as a new marketing channel.

4.1 What is Channel Conflict?

Channel conflict can be defined as the disagreement between two or more members of a marketing channel. Different authors define it as:

“The opposition of goals, ideas, or performance behavior that occurs among the management of institutions that make up the marketing channel team” (Stern and Brown 1969)

“As any scenario in which two different channels compete for the same sale with the same brand” (Cullotta 1997)

It is important to notice that in order to have conflict between marketing channels there needs not to be a verbal or written confrontation. This type of conflict is defined as “latent or passive conflict.” The other type of conflict, “active or manifest conflict”, is the one most individuals think of a channel conflict (Brown

1969). In this case some sort of action has been taken by at least one of the channel members involved.

Channel conflict is divided in two major categories: horizontal and vertical (Brown 1969). Horizontal conflict matches with the concept of competition. As shown in figure 2, it involves members in the same level (manufacturers in this case).

Vertical channel conflict occurs when channel members at different levels hold stakes in the conflict. For example, as shown in figure 2, vertical channel conflict can arise between manufacturers and distributors.

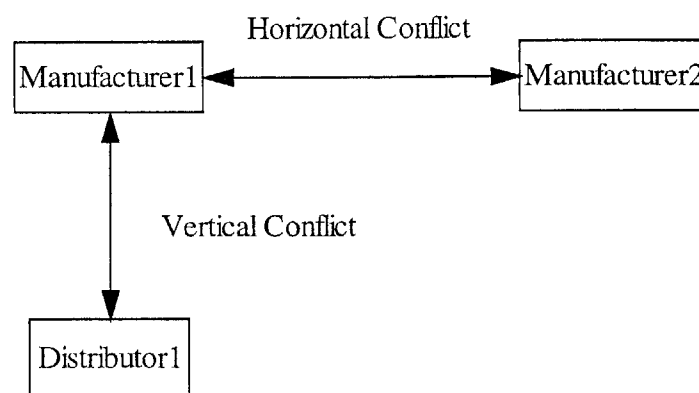


Figure 4.1: Horizontal and Vertical Channel Conflict

The thesis focuses exclusively on vertical channel conflict. As was mentioned before, we are interested in analyzing channel conflict between business-to-business channel players. Specially the situation when a channel player tries to bypass totally or partially the next player / players.

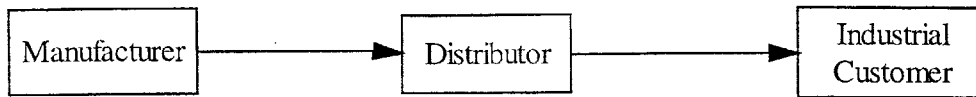


Figure 4.2: Current Situation = No Potential Channel Conflict

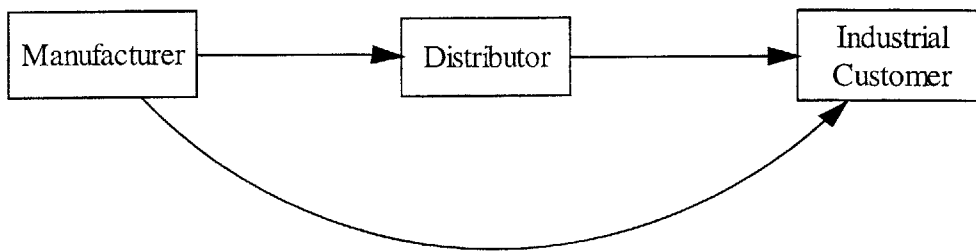


Figure 4.3: Manufacturer Competes w/Distributor = Potential Channel Conflict

There are several sources of vertical channel conflict, some of the most important are: (Assael 1968)

Table 4.1: Some Sources of Vertical Channel Conflict

Source	Description
Bypassing a wholesaler or retailer	In this case, channel conflict arises when a manufacturer / supplier bypasses a channel partner and starts to compete with it
Private vs. national brands	There is potential conflict when manufacturers market private brands together with their own national brands using different channels. For example, a manufacturer starts selling a private brand to a national brand distributor's customer.
Price discrimination	When manufacturers / suppliers offer different prices depending on who is the customer, there is potential conflict. Especially in the case where two customers have the same buying pattern (quantity, frequency) and get different prices.

As mentioned before, a certain degree of channel conflict can be a sign that the marketing channels are being effective--reaching most of the potential customers. The degree of channel conflict can measure the alignment and coordination between channel partners and it may also indicate that problems exist between partners, so corrective actions have to be taken. In addition, as Bucklin, Thomas-Graham, and Webster suggest, through channel conflict the manufacturer can propel uneconomic channel partners to adapt or end business (Bucklin, Thomas-Graham, and Webster 1997)

However, sometimes conflict can be harmful. Generally, when a marketing channel starts cannibalizing an important share of an existing channel, conflict becomes destructive. In most cases, as Carl Cullotta from Frank Lynn &

Associates mentions, channels will tend to react when overlapping customers represent 15-25% of that channel's total business with a manufacturer's products (Cullotta 1997). The marketing channel at risk of losing more market share may take some sort of retaliation or simply stop selling the manufacturer's product. Even if the manufacturer's objective was to stop doing business with the channel partner in the long run, losing a market channel abruptly may jeopardize its overall market share position. Consequently, competitors may take advantage of the opportunity by having access to unsatisfied demand left; manufacturer's inventories may go up and revenue down. An example of this situation was described in a McKinsey Quarterly article:

"In the auto market, ATK, the dominant seller of replacement engines for Japanese cars, lost its virtual monopoly when it attempted to undercut distributors and sell direct to individual mechanics and installers" (Bucklin, Thomas-Graham, and Webster 1997)

4.2 How to Identify Channel Conflict that poses a Threat?

Most of the times it is not simple to identify if a conflict in the marketing channels poses a threat for the members. Although there is no general methodology to identify harmful channel conflict, several authors propose different ways that help identify it.

Carl Cullotta from Frank Lynn & Associates suggests that "changes in the level or intensity of conflict are potential indicators of destructive conflict" (Cullotta 1997).

He mentions that a given level of conflict always exists, but when noise starts to increase above normal levels, attention is required.

Bucklin, Thomas-Graham and Webster from McKinsey & Co. propose a set of four questions to identify if a perceived conflict is a threatening one: (1997)

1. Are the channels really attempting to serve the same end users?

Many times, the supposedly at risk marketing channel cannot realize that the threatening channel indeed targets a different market.

2. Do channels mistakenly believe they are competing when in fact they are benefiting from each other's actions?

Some time new channels open new opportunities for the older ones.

Some new market channels can help increase the overall market of the manufacturer's products. Old channels do not lose market to the new channel, but increase their sales.

3. Is the deteriorating profitability of a griping player genuinely the result of another channel's encroachment?

Operational problems, not conflict, are many times the real problems behind a channel's declining competitiveness.

4. Will a channel's decline necessarily harm a manufacturer's profits?

In some cases, the decrease of a channel's market share is the result of an economic shift and changes in consumer buying preferences.

4.3 Electronic Commerce and Channel Conflict

Direct selling over the Internet may bring some cost reductions and indeed more profits. It may also result in higher costs for the company, reducing profits. It all depends on the situation, product, industry and many other factors. No doubt, a very important reason that is pushing some manufacturers to rethink their position regarding direct selling over the Internet is what Ralph Wilson from Web Commerce Today names the manufacturers' dilemma: (Wilson 1998)

- "If you don't sell your products directly over the Internet, people will go to your competitors who do."
- "If you do sell your products directly, your distributors and dealers will desert you and only carry products from manufacturers who do not compete with them."

Manufacturers are afraid to lose the opportunity to be the first to sell over the Internet. Whilst, they are afraid of jeopardizing the business with their network of distributors and dealers they have made business with for decades.

"Not every company is a Dell, with no distribution apparatus to upset when it moves to selling over the Internet" (Hertzberg 1997)

"No matter how attractive the margins, this option [Direct sales] is currently attractive only to very small manufacturers with little or no distribution chain to risk." (Wilson 1997)

“Industries from automotive to financial services and even insurance are wrestling with how to respond to the increasing popularity of Web commerce without wrecking existing, profitable sales channels.” (Machlis 1998)

“A company cut loose by its distributor could find itself in tatters if its largely untested direct-delivery system fails to get its products to clients in a timely fashion. But a company that waits too long to make the transition could find itself undercut by competitors that have already eliminated the middleman.” (Wood cited in Miller 1999)

According to Paul Baier, director of enterprise segment marketing for Open Market, five Open Market projects have gone down because the electronic commerce team was not sensitive to sales channel conflict (Baier 1999). In some cases, he argued that a simply call from the CEO of a large distributor to the CEO of a manufacturing company with an Internet commerce initiative would be enough to stop the project.

4.4 How to Balance Internet Electronic Commerce and Channel Conflict

Thus the question is what can manufacturers / suppliers that still manage to sell a large proportion of their products through indirect channels do in order to not lose the benefits of Internet electronic commerce and at the same time minimize the risk of having channel conflict with their distributors?

Several authors and companies recommend various strategies to achieve what Open Market calls “channel friendly Internet commerce initiatives.” The following are some of the strategies that either have been put into practice or are recommended (Wilson 1998) to avoid channel conflict and at the same time leverage the Internet as a new sales channel. It is important to notice that Internet electronic commerce projects between channel partners (e.g., a manufacturer and a distributor) are not taken into consideration in the following strategies. The following points are relevant to Internet electronic commerce initiatives directed at the final customer of a manufacturer / supplier.

- 1. Display product, company, industry, and other relevant information on the Internet but without selling directly over the Web. Instead, have the option to help customers find the closest or most familiar dealer.**

Many companies are opting to stay away from selling direct to the final customer through the Internet. Even if the manufacturer / supplier had enough resources and capability to start a direct Internet electronic commerce effort, the fear to endanger the relations with its distributors and dealers is a major concern. Furthermore, for most manufacturers still a vast majority of sales go through indirect channels. The risk of losing sales through the indirect channel is just too high to take. However, by launching a Web page to display company and in some cases distributors' information, they start leveraging some of the Internet benefits. According to Todd Woods, global practice director for electronic

commerce at Deloitte & Touche Consulting Group, many manufacturers “are moving tentatively putting up Web sites over which they sell not their products, but company T-shirts and caps. It is an effort to set the stage for direct sales without alarming distributors” (Miller 1999). By offering product information, industry news, and some other services, they can start building a community, that in case the environment changes would make it easier for them to sell through their Web site. The following are some companies that follow this strategy:

AMP. (www.amp.com) is a \$5.5 billion supplier of electrical and electronic connection devices that has facilities in 53 countries serving customers in the automotive, computer, communications, consumer, industrial and power industries. The company’s Web site offers product information in eight languages on over 95,000 AMP products. Its online catalog, called AMP Connect, won a CommerceNet Very Innovative Practice Award for “Best Implementation of Technology” (Hawkins 1999). In order to avoid channel conflict, AMP does not sell directly through its Web site, but offers a distributor search engine where customers can find a distributor depending on the region and product needed. Customers get the distributors’ name and contact information: address, phones, and/or Web site.

Colgate-Palmolive’s (www.colgate.com) Web site offers product, investors, and company history information, as well as a service to find answers to oral care

questions and a special part focused for children where they can learn healthy oral care habits. The Web site does not provide distributor or retailer information. The company has kept its Internet electronic commerce efforts focused on the supply side. It is making inventory and production schedules available to its suppliers on the Internet to reach more efficient delivery times (Dalton 1998). The company is very concerned with channel conflict; it does not want to upset relationships with its distributors and retailers.

2. Sell products directly over the Web but not at any discount, having the option to direct customers to the company's distributors.

Some companies are taking a small step forward. By selling directly to customers but charging the same or in most cases above the price their own distributors offer, manufacturers can indeed reduce the risk of channel conflict with their channel partners. Moreover, they offer their customers a new buying option, especially to those who want to buy electronically. In some cases, manufacturers / suppliers can reach new customers that other channels were unable to serve.

The Fonda Group Incorporation. (www.FondaGroup.com) A billion-dollar manufacturer of disposable tableware in Thornwood, NY, started to sell directly through the Internet in the first quarter of 1997 (Wilder, Distribution Dilemma 1997). As part of its strategy, the Fonda Group began direct Internet sales in one of its three divisions, the Hoffmaster division. At the beginning of 1999 the other

two divisions remained with no Internet sales capability, but offered product and sales representative contact information. The company adopted strategy one, explained before, for these two divisions,.

The Hoffmaster division (www.Hoffmaster.com) has been selling its disposable placemats, napkins, and tablecloths to restaurants, hospitals, and other institutional food servers through distributors and directly through Internet since 1997. Hoffmasters' Web site allows it to present its distributors with wholesale pricing, and their direct consumers with retail pricing. As of April 1999, the site continues to offer direct sales transactions and also an 800 number to obtain distributor's information.

Milacron Inc. (www.milpro.com) As it was shown previously, a \$1.5 billion sales cutting tools, grinding wheels and metalworking fluids manufacturer launched a Web site in January 6, 1999. The company is trying to reach 100,000 small potential customers that previously could not be reached effectively through its distributors or industrial products catalog. A step that some distributors view as a threat to their business. (Brack 1999)

As a response to avoid channel conflict with its distributors, Milacron announced it was going to add a distributor search engine in March of 1999 to locate distributorships by product name, state and zip code, in addition to provide links to the distributors' Web sites. As of April 3, 1999 the site offered this service.

Moreover, Milacron is paying full commissions to their direct sales reps for online sales made in their territory. This is an additional strategy to avoid channel conflict that will be discussed latter.

Because Milacron had a direct channel in use before launching the Web site that competed with its distributors, Milacron insists that the Web site is not a threat to distributors. As Alan Shaffer, VP for industrial products, says: “How you like to buy it – that is up to you as it always has been, but we make it very easy for any of our customers to determine which product they need and go ahead and place the order” (Cited in Brack 1999). He also thinks that in addition to serving a broader customer’s base, its online problem solving capabilities will increase total sales—even distributors’ sales.

In March 29th, 1999, Network World distinguished Milacron Inc. with the magazine’s “E-comm Innovator of the Year Award” for MILPRO.COM.

Microsoft Corporation. (<http://shop.microsoft.com>) On February 1999, Microsoft launched its first online store (Mills 1999). The Web site enables customers in the US to buy Microsoft products from one of four resellers or directly from Microsoft. The resellers participating are Beyond.com, CDW, CompUSA and Insight, but Microsoft planed to add more by the end of 1999 (Lash 1999).

After a customer has selected a product(s) and is ready to order, she/he needs to choose a reseller to buy from, and their “shopping basket” is transferred to that reseller’s Web site for processing. If buyers decide to buy directly from Microsoft, they will pay an estimated retail price, which is generally 10% to 25% higher than the “street price” offered by resellers (Mills 1999).

3. Sell products directly over the Web, but award commissions to salespeople or distributors for products sold to their customers or in their territories.

To avoid channel conflict, some manufacturers are paying commissions to their distributors for Internet direct sales made in their territories or to previous distributors’ customers. An issue of concern, specially for distributors, is how to identify a distributor’s customer when it places a direct order over the Internet.

Compaq Computer Corporation. (www.compaq.com) The computer corporation adopted this strategy to sell computers to the small and medium business (SMB) market over the Internet and avoid channel conflict. This strategy, together with other steps Compaq is taking under its direct sales initiative called PartnerDirect, will be analyzed in more detail later in the thesis. In summary, Compaq will give its resellers an agent’s fee of 6% for every product sold (10% for servers) through Compaq’s Web site if the customer is a reseller’s client (Wilcox 1998). Orders can be placed either by the consumer or by the

reseller on behalf of the consumer. Nevertheless, the details of how to identify reseller's customers when ordering direct from Compaq have not been given.

4. Sell different products over the Internet.

A strategy some companies are adopting to avoid channel conflict is to sell different products to those they sell through indirect channels. This not only means selling products that are physically or functionally different, but also bundling products in ways that do not compete with indirect channels as Paul Baier from Open Market suggests (Baier 1999). Furthermore, he advised manufacturers that want to sell over the Internet to consider the option to sell only low-margin products. Finally, he said that "channel partners benefit because they are able to focus their people on high-margin activities" (Baier 1999).

Although the following examples show companies with a majority of sales in the business-to-consumer market, both examples illustrate how companies are implementing this strategy to avoid channel conflict with their traditional channel partners.

Pioneer Electronics, (www.pioneerelectronics.com) with almost \$900 million yearly sales through 1,200 dealers and 15,000 stores, is concerned with the channel conflict arising from selling its products directly. In order to avoid it, Pioneer started to sell through its Web site products that the company does not offer through its network of distributors and stores. Mark Smith, vice president of

strategic planning at Pioneer, explains that “it seems that the risk [of having channel conflict with its distributors] the company is taking is worth, our competitors are set up to be able to do this” (Machlis 1998).

The Acer Group, a large PC manufacturer, launched on November, 1998 a web store called www.ShopAcer.com. The web store enables consumers to purchase home computers, notebooks, peripherals and accessories through the Internet. According to Paul Baier of Open Market, Acer’s e-commerce solution partner, in order to avoid channel conflict with distributors and retailers, the Web store sells bundled products (Baier 1999). When customers buy bundled products through Acer’s Web store, they cannot compare prices with other stores that do not sell bundled products. “It is one very effective way to handle channel conflict within the traditional channels,” says Paul Baier (1999). However, in an analysis of their Web store, made in May of 1999, it was found that their strategy does not remain “pure.” The Web store offers also unbundled products that are sold through distributors. For example, it was found that the same notebook, the Extensa 712E model, was sold at the same time in CompUSA and Acer’s Web store.

5. Sell products over the Internet to customers in a different geographical region

Attempting to reach different geographical markets than those served by indirect channels is a strategy some companies are adopting for Internet direct sales. In

order to ease channel conflict, manufacturers / suppliers decide which geographical markets to serve through indirect channels and which through direct. Under this strategy, competition between indirect and direct channels is avoided and manufacturers / suppliers have the opportunity to serve new markets.

Oracle Corporation, the world's second largest software company, announced on October 1998 that it was going to stop serving part of its customers through its direct-sales and tele-sales forces. As an effort to end channel conflict, Oracle launched a pilot program to cancel direct sales to its General Business space customers⁶ in four metropolitan areas: New England, the Washington, D.C. area, Denver and Dallas. Oracle's direct sales and tele-sales were prohibited from booking a deal and were required to enable a partner to do it (Shawn 1998). According to Oracle, if the project succeeds, it will be expanded across the US after June 1, 1999.

6. Provide the information technology infrastructure to enable channel partners to sell via the Internet

This strategy was suggested by Open Market (Baier 1999). Under this model a manufacturer or a master distributor⁷ provides the IT infrastructure to enable channel partners to sell via the Internet. The Web site may be co-branded with

⁶ Companies with revenue of less than \$500 million.

⁷ In an industry with two-step distribution, "two-tier distribution."

the manufacturer or branded only for the channel partner, but the manufacturer runs the Web site. In most cases, the manufacturer or master distributor fulfills the orders directly to their partner clients, even labeling the boxes with the partner's logo. Some of the benefits are that the customer gets the product in less time, the channel partner gets an Internet sales channel for little or no investment, and inventory levels are reduced. In addition, the manufacturer increases channel loyalty, gathers valuable consumer data, and leverages Internet sales.

Ingram Micro (www.ingrammicro.com), one of the largest computer distributors, provides storefront capabilities to 2,000 small size computer resellers.

Customers order from the reseller's Web page, and Ingram or the reseller fulfills it. In this model the manufacturer or distributor does not bypass its partners, but increases its partners loyalty and leverages the advantages that Internet commerce provides.

Hyundai America. As was mentioned before in chapter two, on November of 1998, Hyundai America launched an extranet to sell parts through the Internet. The site is targeted at repair shops and end customers. In order to manage channel conflict, a local dealer fulfills the purchases made through the Web site. When a repair shop registers at the Web site, it chooses the Hyundai distributor it wants to fulfill its orders. If the registration is authorized, the repair shop

representative can log on and get wholesaler prices, shop through the Hyundai Web site and receive the parts through the local dealer chosen.

Fruit of the Loom Inc., (www.fruit.com) a large manufacturer of basic family apparel, launched an extranet called Activewear Online to provide online support for its distributors. Instead of bypassing its distributors, Fruit of the Loom is building Web sites for its distributors to help them market to their end customers (Wilder, Middlemen Beware? 1997). "We recognized that the middlemen do add value," said Dan Abell, VP of IT at Fruit of the Loom (Dalton, Their Own Brand of Supply-side Economics 1998). As was mentioned before, Fruit of the Loom focuses on producing large quantities of clothing for about 60 distributors and they do not want to deal directly with the thousands of small companies that their distributors' service.

7. Sell over the internet and fulfill orders through distributors

This strategy, also suggested by Open Market, is very similar to a model previously seen where manufacturers offer product information and the option to buy the products at their site directly from them or from a distributor. However, in this case only a distributor whom the customer chooses fulfills the order. The strategy is more channel friendly as the manufacturer / supplier never fulfills the order. It is important to note that in this model, given the fact that price information is not available, competition between distributors is eliminated.

Channel conflict is avoided by keeping channel partners as the primary delivery and service provider for consumers.

Unannounced Open Market Customer. A \$1 billion instrumentation manufacturer enabled its customers to order through their Web site. The manufacturer then fulfills the order through one of their local distributors.

8. Sell products directly over the Internet and partner with intermediaries so they provide after sales service

This is a strategy that computer manufacturers seem to be leaning toward to. In this case, a manufacturer sells directly over the Internet and /or through its indirect channels. In order to avoid channel conflict, the manufacturer leaves all after sale service to the distributors. The manufacturer focuses on selling and fulfilling orders and the distributors focus on after sales service (e.g., maintenance, warranty service, etc). Although no examples were found, some manufacturers are arguing that direct sales through the Internet will indeed increase the distributor's a after sales business (Afzalli 1999).

9. Sell direct over the Internet but through a new company

Finally, an option some manufacturers have is to start a new company to market products directly. Bob Cherrie, manager of electronic commerce for IBMs small/medium business group, admitted "to knowing several manufacturers who

are experimenting with selling direct – under a different company name” (Cited in Johnson 1998).

These strategies are some of the measures that manufacturers / suppliers are taking to avoid channel conflict while leveraging the Internet. Companies are adopting variations and combinations of these strategies and even implementing new ones.

An industry that has been quite concerned with channel conflict and disintermediation is the computer industry. Even though some of the largest computer manufacturers that have traditionally used indirect channels have already implemented direct sales strategies in the early 1990s, these initiatives have been focused principally for large corporations or government sales. Only at the end of 1998 and the beginning of 1999 have traditional companies as Compaq Computer Corporation, Hewlett Packard Corporation (computer division), and IBM, decided to adopt the direct sales model for smaller accounts including the SMB⁸, SoHo⁹, and consumer market. The next part of this chapter analyzes how these large computer manufacturers have addressed these new direct sales initiatives and its channel relations to avoid conflict.

⁸ Small and medium business

⁹ Small office and home office

4.5 The Computer Industry

The computer industry has been characterized by a two-tier distribution model. In general manufacturers sell to not more than ten large distributors, the latter distribute to thousands of small resellers, which then reach the final customer. Since Dell launched its direct sales model, the industry's sales channels have experienced severe changes. Consequently, some manufacturers have attempted to match Dells model while others have tried hybrid strategies with both direct and indirect sales.

As a result, companies as Compaq, HP and IBM have been struggling with the previously discussed manufacturers' dilemma: if they do not sell direct, Dell or Gateway will continue to grab market share, but if they sell direct, they will be jeopardizing their relations with their channel partners. Compaq, HP and IBM have been witnessing direct sales computer corporations Dell Computer and Gateway 2000 growing to become powerful competitors. For example, in the summer of 1996, Dell Computer and Gateway 2000 passed IBM in the U.S. corporate desktop market (Moschella 1997). In the small-medium business Dell had already taken about 20% market share by 1999, while Compaq, IBM and HP and its channel partners hold the other 80% (Kindley 1999).

After several years competing against the direct sales vendors in the SMB, SoHo and consumer market, Compaq, HP, and IBM are taking for the first time direct

sales initiatives targeted at these markets.¹⁰ The following is an analysis of what each company is doing to address channel conflict for the new direct sales program.

Compaq Computer Corporation

Compaq Computer Corporation is the second largest computer corporation and the largest supplier of personal computers. It has both business and consumer customers and has traditionally used a two tier distribution system to reach them.

On November of 1998, Compaq launched a new line of Prosignia desktops, notebooks, servers, and online services directed at small-medium businesses (SMB). Compaq plan was to sell these new products through VARs¹¹ and directly through a new program. This direct program was launched by Compaq after a year of dialogue with its channel partners; it was an enhancement of its 6-year-old DirectPlus program that was previously targeted at large corporations. The direct initiative consisted of direct phone and Web sales to its small-medium business U.S. customers-- A strategy that seek to "match the prices and configuration options that rivals such as Dell Computer Corp. and Gateway have been able to deliver by selling directly to customers" (Vijayan 1998).

¹⁰ Some of these large companies have already direct sales programs for large corporations and government clients.

¹¹ A reseller that usually is not a storefront operation and that typically acts as a consultant to clients.

In order to maintain its good relations with resellers, Compaq offered them a 6% agent fee for any sales through DirectPlus of notebooks, desktops, and/or options and 10% for servers (Wilcox 1998). In addition, Compaq announced that it was going to offer incentives for pass-along sales leads and opportunities for resellers to get more involved in assembling computers.

In this new strategy, customers had the option to buy from a VAR or direct through DirectPlus. VARs had the option to use DirectPlus to buy directly from Compaq or to continue to buy from distributors. The fact that VARs could buy direct from Compaq and bypass distributors was an issue of concern for VARs. Compaq was going to be competing with its own distributors for some sales. Another important issue for VARs was how could Compaq identify if one of their customers decided to buy direct from Compaq. The VARs were also concerned about ordering directly from Compaq because under this scenario Compaq would get information of the VARs customers.

Clearly, the strategy started with a certain level of channel conflict. Compaq had to redesign the direct sales initiative for the SMB market. Thus in March 1999, five months after the launch of the first initiative, Compaq started a second direct program named PartnerDirect. According to Bob Fernander, Vice-President of commercial business for Compaq, when their first direct sales program for the SMB market was launched on November 1998 it focused too much on selling

direct to end users and it was considered offensive by some of their resellers (Fernander 1999). According to Fernander, PartnerDirect is more of a collaborative process among VARs, distributors and Compaq (Fernander 1999).

A key part of the new program is the co-location of computer distributors Ingram Micro Inc. and Tech Data Corp. at Compaq's manufacturing facilities to perform some light assembly. Under this new model there are four options to fulfill an order: (Franse 1999)

1. An end user contacts Compaq directly, buys the product and Compaq assembles, configures and ships the product. A reseller gets an agent's fee if the customer is identified as its client.
2. A reseller on behalf of a customer orders a product directly from Compaq. Compaq assembles, configures and ships the product either to the end user or the reseller. The reseller receives an agent's fee.
3. The reseller buys the product from a distributor without going through Compaq and sells it to the end customer. This is the traditional way.
4. The reseller orders a product for a customer directly from Compaq, but actually the order is received by one of Compaq's PartnerDirect partners, Ingram Micro or Tech Data. The distributor takes the order, assembles the product, ships it, and bills it. The distributor never owns the product; it is consigned inventory from Compaq. Both the co-location partner and the reseller get an agent's fee for the transaction.

It is important to notice that under scenario four, resellers do not have to provide Compaq with their customer's information, an issue of concern to resellers as was previously mentioned. Compaq also sees the future possibility that its co-location partners will fulfill orders coming directly by end users. Until April of 1999 the co-location partners could fulfill only orders that came from the 700 resellers that had signed up with Compaq for the agent program. No doubt, this is a complicated model and at its early stages, therefore it is difficult to evaluate its long run benefits. However, it demonstrates the concern Compaq has for maintaining good relationships with the channel. Whilst, Compaq is reducing inventory and cycle time, and selling to customers that want to buy direct. As for the first results, Compaq thinks the hybrid model is succeeding. "Seventy percent of the company's Prosignia sales come from new business—almost half of which has been switched from purchasing Dell or Gateway products," said Eckhard Pfeiffer, Compaq's chief executive officer (Cited in Myron 1999).

Hewlett Packard Corporation

In February 1999, Hewlett Packard announced a new channels program called Channels 2000 for its computing business. The new program seeks to bring VARs closer to the company by providing them with information and resources available to HP's direct sales team. Channels 2000 strategy consists of two models: demand creating and demand fulfillment. On the one hand, HP plans to focus its direct sales force and VARs on creating demand. On the other hand,

distributors will be in charge of demand fulfillment, independent of whether the sale was direct or indirect. Although the details of the program have not been explained, HP says that VARs will be compensated when their customers order online. Further, HP wants every partner to participate doing what they do best. "HP, for instance, might focus on bringing together the raw materials to develop components, while distributors focus on shipping, credit and collection" (Stafford 1999). HP expects to fully deploy its plan by the end of 1999. In the meantime VARs wonder if HP can implement a system that is fair in attributing ownership of customers who order online (Stafford 1999).

IBM Corporation

On April 9, 1999, IBM announced its plans to sell its entire product line over the Internet (Afzalli 1999). The company seeks to target Dell Computer Corporation, Gateway Inc., and Compaq Corp. Although IBM already has Web sales of around \$38 million a day, most of the sales come from high-end servers and other equipment for corporate customers. The new project called Project Odyssey will focus on small businesses and consumers. Regarding channel conflict with its resellers, IBM says that they will actually benefit because the increase in sales will increase the resellers installation and service contracts business. Until May of 1999, the details of the direct sales project have not been announced.

4.6 Conclusion

Clearly, companies need to manage channel conflict in their marketing channels to be efficient; high degrees of conflict result harmful for channel partners.

However, we know that companies are made up of human beings, and conflict is a natural characteristic of human relations, so a certain degree of conflict will always exist. Therefore, keeping conflict at a certain level that results beneficial for the channel partners is an issue of concern for all channel players.

Further, the development of the Internet and its rapid adoption for electronic commerce has broken many barriers that prevented manufacturers / suppliers to even thinking of selling directly to their final customer. Through Web sites, manufacturers / suppliers can reach their customers more efficiently.

Manufacturers / suppliers are evaluating their channel marketing strategy and evaluating how to leverage the Internet and not fall behind the competition. As was explained, channel conflict is one of the major obstacles facing manufacturers / suppliers when deciding to adopt Internet electronic commerce to sell directly. Most of them have been using indirect channels to market the majority of their products for several decades.

Therefore, adopting an Internet electronic commerce strategy that jeopardizes these indirect channels is a significant concern for manufacturers / suppliers. As a result, several strategies are being recommended and adopted by

manufacturers / suppliers to balance the benefits of Internet electronic commerce and the threat of channel conflict.

CHAPTER 5

CONCLUSION

The Internet allows companies to manage their supply chains more efficiently. The Internet bridges the gap of time and distance between channel partners by allowing efficient transfer of information. The Internet also allows players to efficiently perform functions, thus reducing the need for other channel members (e.g., the necessity of brick and mortar facilities is no longer a major driver for business success.) Two issues of great concern for the supply chain members have arisen as Internet electronic commerce is adopted and new business models emerge: disintermediation and channel conflict.

5.1 Disintermediation

From the analysis in the thesis, we can see that wholesalers, distributors, and / or retailers will get disintermediated if they do not add value to their supply chain. The functions that really add value along the supply chain will always be needed. As the well-accepted maxim in marketing notes: "You can eliminate the middle men, but you can't eliminate their functions." The Internet together with other variables has probably propelled a change of roles along the supply chain. As James C. Sheperd, Vice-President of research at Advanced Manufacturing Research Inc. (AMR) in Boston, puts it: "Who is a materials supplier, a final-

product manufacturer, a distributor, a transportation vendor, or a retailer? The roles are getting very blurry” (Gross 1998).

This thesis will help manufacturers / suppliers and intermediaries understand the value they add to the supply chain, how these roles can be redefined, and build a framework to analyze Internet electronic commerce initiatives.

5.2 Channel Conflict

Channel conflict is a major issue for manufacturers / suppliers considering alternative market, sales, and distribution channels. Most of them still move most of their products through traditional indirect channels. A few are willing to risk the business they have established through indirect channels and embrace the not-yet-proven Internet direct sales model. Although some strategies have been analyzed to avoid channel conflict resulting from the implementation of an Internet sales channel, it is too early to evaluate their effectiveness. This thesis presented a framework that companies can use to understand the downfalls of channel conflict as well as some Internet e-commerce channel-friendly strategies to help them design an Internet strategy.

5.3 Further Research

The thesis shows what some authors and companies suggest to avoiding channel conflict while implementing an Internet sales channel. An area for further research might be a deeper analysis of what most business-to-business

companies are doing to serve end-customers with Internet electronic commerce and avoid channel conflict. It would be important to find a relation between industry, company, and product characteristics and the strategy adopted to avoid channel conflict. This could help companies decide which strategy is more suitable given these characteristics.

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