The Use of Electronic Marketing Channels For Disintermediation:
A Historical Examination Of Producers' Behavior

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ABSTRACT

With the existence of the Internet, manufacturers of goods and services can bypass channel intermediaries and sell directly to the final consumer. Since the mid-1990s, the web has continued to play a greater role in channel management strategy. The purpose of this longitudinal study is to document usage of websites in terms of channel member support and vertical competition over time. We examined the websites of 251 *Fortune* 500 companies that produce goods and services in business-to-consumer industries. Data was collected in 1996, 2000, and 2004. The results of the study show goods industries lagged behind services industries in initiating disintermediation. Overtime, however, disintermediation was equally prevalent in both industry segments. In terms of channel member support, both in initiating and over time, firms using their websites to refer and/or connect end-users to intermediaries for product purchase was equally prevalent for both industries. Finally, during the 1996 to 2000 period, the number of firms engaged in disintermediation grew faster than the number of firms providing channel member support.

INTRODUCTION

"[The Internet] will extend the electronic marketplace and make it the ultimate go between, the universal middleman." --Bill Gates

According to traditional economic theory, intermediaries reduce the costs of exchange transactions, making the goods and services provided to consumers cheaper. As indicated by the above quote, however, Mr. Gates believed the Internet, as a form of low cost communication, would allow manufacturers of goods and services to bypass traditional intermediaries and sell directly to buyers at increasingly lower costs (*The Economist*, 1996, p. 72). This 'disintermediation" or movement toward a "friction-free capitalism" in which consumers with modems would locate and purchase any products they wanted directly from their living rooms without the presence of middlemen was widely heralded by Internet experts and academicians alike (Rowsom, 1998; *Stores*, 1998; Peterson, Balasubramanian, & Bronnenberg, 1997; Benjamin & Wigand, 1995; Alba et al., 1997). E-commerce would allow end-users the ability to shop and retrieve information rapidly, "radically transforming the structure of distribution channels" (Segal, 1995, p. 22).

Although traditional intermediaries for decades have performed such basic channel functions as sorting, accumulation, allocation, breaking bulk, and customer contact, antidotal evidence suggested e-commerce was more efficient and possibly even more effective than the use of traditional distribution channels (Hoffman, Novak, & Chatterjee, 1995). In principle, the manufacturer would internalize the transaction tasks typically handled by intermediaries (Peterson, Balasubramanian, & Bronnenberg, 1997). Historically, the existence of "nonstore" retailing with such formats as mail order has always threatened brick-and-mortar retailers (Keep & Hollander, 1992). Today, Yadav and Varadarajan (2005) suggest the growing power of retailers may force more manufacturers to use E-commerce to bypass channel members that devote more resources to private label brands and less shelf space to national brands. Thus, the ownership of end-user loyalty becomes particularly important when manufacturers and retailers engage in vertical competition selling against each other by vying for the same consumer's dollar (Eggert, Henseler, & Hollmann, 2012; Cai, 2010).

Early reports, however, documented sluggish growth of e-commerce with unclear reasons why (*The Economist*, 1997). Cohen (2000) pointed out that companies used the web for information and sales support only, while leaving end-user sales to the retailer. U. S. Census Bureau statistics give the percent of retail sales produced via the web in 1999 as less than 1%, in 2002 just over 1%, and in 2010 between 15 and 20%. Even today, Li (2010) suggests few manufacturers have taken advantage of the Internet's disintermediation function. Were the disappointing numbers due to the lack of online transactions offered by businesses or the reluctance of consumers to purchase via the web? Despite the importance of knowing the types and numbers of manufacturers engaging in "frictionless" distribution at the early stage of inquiry into web behavior, few academic efforts exist that attempted to examine the issue, with one notable exception (i.e., Zhang & Xu, 1996). While Murphy et al. (2003) refer to an emerging body of

knowledge of empirical research involving the Internet and distribution channels (e.g., Gulati, Bristow, & Dou, 2002; Tamilia, Senecal, & Corriveau, 2002), the degree to which manufacturers were bypassing their traditional intermediaries and selling directly to the end-user remained unclear.

The nature of marketing channels and the relationships they contain have been researched, yet there is a limited amount of systematic research on how channels evolve over time and the implications of particular evolutionary paths (Bairstow & Young, 2012). Over the last two decades, manufacturers have been experimenting with their own websites as an alternative direct channel to reach and serve end-users (Chung, Chatterjee, & Sengupta, 2012). The purpose of this current study is to explore this issue from a historical perspective. Results are presented from a longitudinal study examining web behavior involving *Fortune* 500 industries whose members are goods and services producers at the manufacturer level of the channel. Corporate websites were examined in 1996, 2000, and 2004 to determine the prevalence of bypassing or referring to channel intermediaries among selected firms.

BACKGROUND

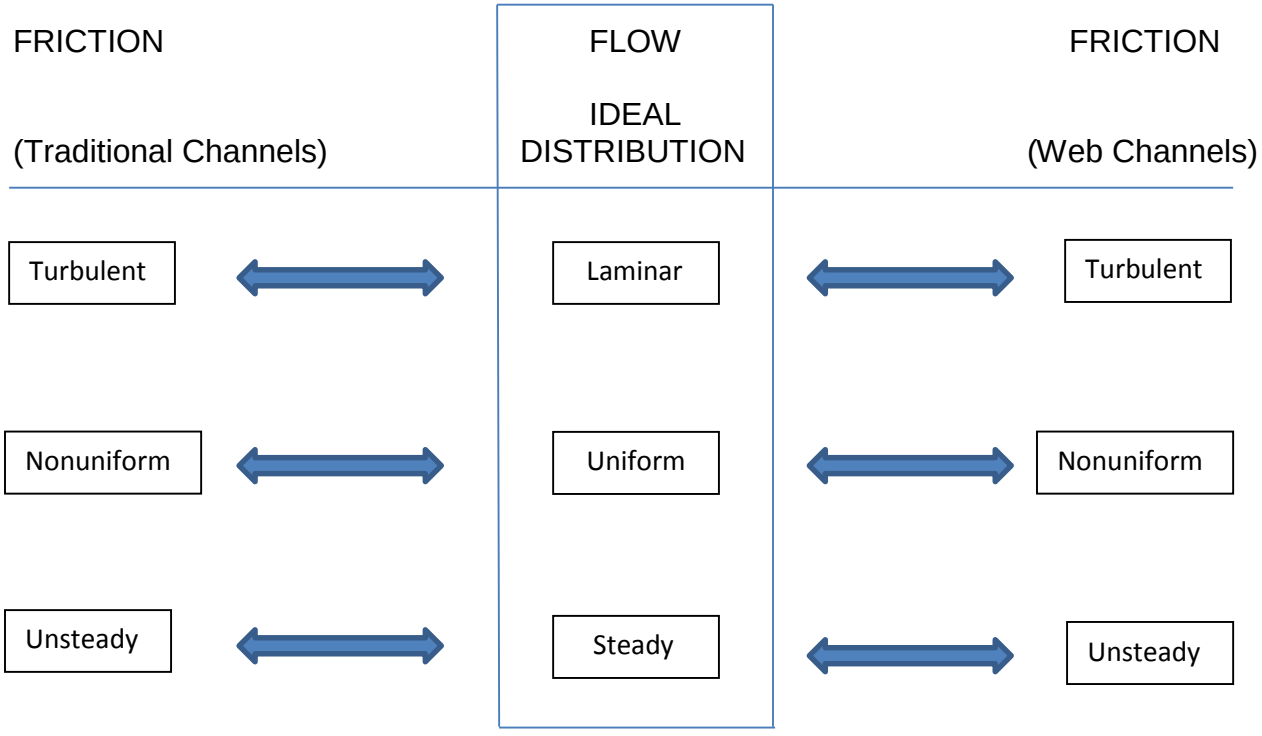
Ideal Distribution

"Friction-free" is a term often used by academicians and practitioners in the late 1990s to describe e-commerce. The absence of friction introduces us to the concept of "flow". Thus, web sales may exhibit flowing characteristics depicted as distribution that is laminar, uniform, and steady. The web is used as a complete marketing channel for products that can be digitized and delivered electronically as compared to tangible goods that require physical delivery (Hoffmann, Novak, & Chatterjee, 1995; Solá, 1996; Webb, 2002; Yan 2011). All flows found in a channel (i.e., ownership, negotiation, information, and promotion) except for tangible product can be completed over the Internet (Parasuraman & Zinkhan, 2002). Thus, "information rich" (Zhang & Xu, 1996) products such as financial services (Ramaswami, Strader, & Brett, 2000/2001), air travel bookings (Reuer & Kearney, 1994), and hotel reservations (Connolly, Olsen, & Moore, 1998) are examples of services well suited for web delivery.

Friction versus flow can describe the continuum on which a manufacturer must struggle in determining its marketing channel structures. To understand, the nature of flow and its implications for e-commerce, we turn to the physics discipline and a discussion of fluid mechanics. When flowing, "the individual particles of a substance move relative to each other as well as to their surroundings" (Parker, 1983, p. 344). Friction, however, serves to disrupt flow by creating resistance that particles must overcome in order to reach their destination. Flow describes "ideal distribution" for a manufacturer as shown in Figure 1 below. Though the physics discipline compares and contrasts flows in numerous ways, three characteristics are of particular relevance to e-commerce: laminar-turbulent, uniform-nonuniform, and steady-unsteady.

Laminar flow describes particles that move in distinct and separate lines. In terms of channel structure, a laminar flow would indicate product distribution that relies on such practices as exclusive territories and resale restrictions at all levels of the design. Individual wholesalers, retailers, and consumers ultimately would become segmented. For any given consumer purchase, the manufacturer would know the exact path the good traveled to reach its end-user destination. In turbulent flow, no distinct lines are found. No two particles follow the same or similar paths. A manufacturer would be uncertain as to the distribution path for any given purchase. Intra-brand and vertical competition would exist at all levels of the design. At a micro level, distribution through any given channel becomes irregular and unpredictable.

FIGURE 1
Characteristics of Ideal Distribution



E-commerce suffers from the turbulent friction of the web. A consumer may select one of any number of web routes to reach a destination. Numerous retailers selling the same good or service, wholesalers competing with retailers for consumer dollars, and manufacturers selling direct, all exist for a given product that is available for purchase online. Far from being "frictionless" the Web may be responsible for generating additional friction in today's markets by providing all intermediaries easier access to end-users. Seemingly exclusive territories are now a "virtual unreality" in terms of the web.

Flow is uniform if at a given instance the velocity of particles is the same in both magnitude and direction at every point in space. In terms of channel design, a uniform flow would indicate the same level of demand across all channel structures and among all intermediaries at any given level of the channel. Non-uniform flow would depict varying levels of demand through the channel design.

Steady flow occurs when the velocity of particles remain constant over a period of time. Within a distribution channel, intermediaries that always order the same quantity at regular intervals is an example of steady flow. Products that are considered staple merchandise often produce steady flows. The merchandise is generally in demand year round with little fluctuation in usage. Buyers whose purchasing behavior is a result of brand loyalty will also provide some degree of steady flow. A manufacturer may also insist on exclusive relationships with its intermediaries to further increase stability. For the manufacturer, distribution is consistent and predictably "ideal" when demand and intermediaries are stable. Unsteady flow would describe channel members that typically vary the frequency and quantity of purchases. A retailer that purchases the same product from a number of suppliers may cause unsteady flow for any given seller. Products that by nature are seasonal or trendy also generate unsteady flows in distribution. At any two given points in time, the rate of flow varies.

E-commerce, however, has not resulted in uniform and steady flow across channel structures. Consumer demand and pricing simply vary across channel stuctures (Geyskens, Gielens, & Dekimpe, 2002) and reflect the nature of the distribution tasks assigned to a given channel member. As much as the concept of "ideal distribution" appeals to the potential marketer, such a state of efficiency and effectiveness does not exist. The web does not provide a friction-free distribution channel. While there may be some evidence that suggests e-commerce is more efficient and possibly even more effective than the use of traditional distribution channels in some instances, definitive conclusions do not exist. Thus, the consequences for existing brick-and-mortar intermediaries, such as having to compete directly with one's vertical partners, must be considered in a manufacturer's overall channel management strategy.

Channel Relationships

The academic literature has yet to develop a broad theory of how channels work together, and empirical evidence of cross-channel synergy has yet to be documented (Avery et al., 2012). Kabadayi, Eyuboglu, & Thomas (2007, p. 205) suggest that "multiple channel systems make their greatest contribution to firm performance when their

structures are properly aligned with their firms' business-level strategies and with environmental conditions." Early on, however, there was a limited amount of information as to the impact of disintermediation on the financial performance of the firm (Khan & Motiwalla, 2002).

The web has created opportunities as well as threats, thus the net effect of the opposing forces relating to e-commerce is unclear (Geyskens, Gielens, & Dekimpe, 2002; Narayandas, Caravella, & Deighton, 2002; Brousseau, 2002). Clarity is lacking on the web's effect on product demand, end-user pricing, physical distribution costs, and transactions costs (Geyskens, Gielens, & Dekimpe, 2002). Rosenbloom (2007) suggests, while integrating online direct sales channels with conventional sales channels to create a "seamless" experience for customer is ideal in theory, it is difficult in practice.

The adoption of e-commerce by a manufacturer is often influenced by its willingness to cannibalize sales in traditional retail channels (Nielsen, Høst, Mols, 2005; Deleersnyder, Geyskens, & Dekimpe, 2002). As such, channel conflict involving brick-and-mortar retailers is perhaps the most serious concern for producers as they move to e-commerce (Webb, 2002; Tsay & Agrawal, 2004). Internet channel conflict is defined as "a conflict that occurs when Internet and traditional brick-and-mortar channels destructively compete against each other when selling to the same markets" (Lee, Lee, & Larsen, 2003, p. 137). Chung, Chatterjee, and Sengupta (2012), have found, however, that market growth opportunities most likely lead manufacturers to increase reliance on intermediaries over time despite their direct web channels.

Hypotheses

Based on the above discussion, we purpose the following hypotheses:

1. Disintermediation will be more prevalent in services industries than in goods industries.

2. Goods industries will lag behind services industries in initiating disintermediation.

3. Channel member support (i.e., referring end users to intermediaries) will be more prevalent in goods industries than in services industries.

4. Services industries will lag behind good industries in initiating channel support.

5. The number of firms providing channel member support will grow faster than the number of firms engaging in disintermediation.

METHODOLOGY

Websites chosen for examination in this study were members of the 1995 *Fortune* 500, listed by industry. The content analysis of corporate websites was the typical research methodology used in e-commerce investigations in the late 1990s and early 2000s (e.g., Hwang, McMillian, & Lee, 2003; Murphy et al., 2003; Ellinger, Lynch, & Hansen, 2003; Zhang & Xu, 1996). Many subsequent studies have utilized data gathered from respondents completing self-administered questionnaires (e.g., Nielsen, Høst, & Mols, 2005; Chung, Chatterjee, & Sengupta, 2012; Eggert, Henseler, & Hollmann, 2012). Content analysis, however, may provide a more historically accurate accounting of behavior rather than information gathered through self-reporting by corporations. Only firms at the manufacturing (producing) level of the channel that used independent intermediaries were selected and the sample included both goods and services producers.[1] Industries were examined regardless of the number of firms contained, with industry groupings based upon *Fortune* Magazine's published classification. To document channel management behavior over time, analysis of websites occurred in 1996 and revisited in 2000 (prior to the dot.com crash) and 2004. While a firm may do business in a variety of industries, only products in the industry depicted by its *Fortune* 500 classification were examined. A total of 253 websites in 26 industries are included in the sample. Upon visitation, each site was classified in one of the following categories:

1. Provided only general information.
2. Provided channel member support by referring end users to intermediaries.
3. Engaged in disintermediation thus bypassing and selling direct.
4. Provided channel member support and engaged in disintermediation.
5. No web presence.

Data gathering in 2000 and 2004 used only brands involved in 1996 and also documented if a firm was no longer in the study for various reasons.

RESULTS AND DISCUSSION

Appendixes A thru D display the frequencies for *Fortune* 500 firms in terms of e-commerce behaviors for non-bypassing industries, services industries, goods industries, and all industries. To determine support for the hypotheses, we used t-tests for proportions based on independent samples (Peterson, 1988) for the statistical analysis. The proportions used in the analysis are shown in Table 1 and Table 2. The results were mixed.

[1] Industries not included in the study are as follows: Advertising, Aerospace, Commercial Banks, Diversified Financials, Electric & Gas Utilities, Engineering Firms, Food & Drug Stores, General Merchandisers, Health Care, Marine Services, Mining-Crude Oil, Pipelines, Railroads, Savings Institutions, Specialist Retailers, Temporary Help, Truck Leasing, Trucking, Waste Management, Wholesalers, Misc.

TABLE 1
Comparison of Channel Management Behavior Across Time (1996 to 2000) and Industry Category

	ALL INDUSTRY					SERVICES INDUSTRIES					GOODS INDUSTRIES				
	1996		2000		Change	1996		2000		Change	1996		2000		Change
Behavior* **	N	%	N	%**	%	N	%	N	%**	%	N	%	N	%**	%
Information	123	49	70	30	-43	22	29	2	3	-91	101	57	68	41	-34
Referral	60	24	115*	50	85	29	39	41*	61	41	33	19	74*	46	127
ByPass	27	11	82*	35	196	16	21	32*	48	100	11	5	50*	31	350

* Some websites offered the visitor the options of both referral and bypass, thus those websites have been added to both the overall referral total as well as the overall bypass total.
** The number of companies no longer in existence has reduced the base by 24 to n = 229 for 2000 proportion calculations.
*** All proportion changes across time for all behaviors are statistically significant at the 0.05 level or less.

TABLE 2
Comparison of Channel Management Behavior Across Time (2000 to 2004) and Industry Category

	ALL INDUSTRY					SERVICES INDUSTRIES					GOODS INDUSTRIES				
	2000		2004		Change	2000		2004		Change	2000		2004		Change
Behavior* **	N	%**	N	%**	%	N	%**	N	%**	%	N	%**	N	%**	%
Information	70	31	42	20	-40	2	3	5	8	150	68	41	37	24	-45
Referral	115*	50	145*	67	26	41*	61	45*	70	10	74*	46	100*	47	35
ByPass	82*	35	77*	36	-04	32*	47	28*	44	-13	50*	31	49*	32	-02

* Some websites offered the visitor the options of both referral and bypass, thus those websites have been added to both the overall referral total as well as the overall bypass total.
** The number of companies no longer in existence has reduced the base by 24 to n = 227 for 2000 proportion calculations and by 37 to n = 214 for 2004 proportion calculations.
*** All proportion changes across time for all behaviors are statistically significant at the 0.05 level or less except for ByPass All Industry and ByPass Product, both were insignificant.

For H1, we examined proportions from the year 2004 to provide the largest interval of opportunity to engage in e-commerce behavior. H1 proposed that disintermediation would be more prevalent in services industries than in goods industries. The t-test (t_{ts}=.91, α>.05) indicated that the result was not statistically significant. While the proportional outcome was in the hypothesized direction with 44% of services industry firms and 32% of goods industry firms engaging in disintermediation, there was not a significant difference between the two industry segments. Of particular note, the number of firms in each segment choosing to sell direct to the end-user via the web was less than 50%. Thus, for both industry segments, the use of channel intermediaries continued to be the dominant channel structure used to reach the final consumer.

For H2, we examined proportions from the year 1996 to provide the initial period of opportunity to engage in e-commerce behavior. H2 proposed that goods industries would lag behind services industries in initiating disintermediation. The t-test (t_{ts}=5.66, α<.05) indicated that the result was statistically significant and in the predicted direction. Only 5% of goods industry firms compared to 21% of services industry firms were engaging in disintermediation in 1996. The result depicts the expected degree of difficulty in e-commerce delivery of goods when compared to services that can actually flow over the Internet for consumption.

For H3, we once again examined proportions from the year 2004 to provide the largest interval of opportunity to engage in e-commerce behavior. H3 proposed that channel member support would be more prevalent in goods industries than in services industries. The t-test (t_{ts}=.38, α>.05) indicated that the result was not statistically significant. In addition, the proportional outcome was not in the hypothesized direction. A greater percentage of services industry firms (70%) than goods industry firms (66%) used the web for channel member support in 2004. Thus, the majority of firms in each segment used their websites to refer and/or connect end users to intermediaries for product purchase. As shown in Appendix B and Appendix C, a small percentage of firms in each segment used both channel member support and disintermediation simultaneously. Thus, the importance of channel member relationships and the avoidance of channel conflict, as well as the distribution functions performed by channel members may play a role in the use of the website as a referral mechanism.

For H4, we once again examined proportions from the year 1996 to provide the initial period of opportunity to engage in e-commerce behavior. H4 proposed that services industries would lag behind goods industries in initiating channel member support. The t-test (t_{ts}=1.80, α>.05) indicated that the result was not statistically significant. In addition, the proportional outcome was not in the hypothesized direction. A greater percentage of services industry firms (39%) than goods industry firms (19%) were using the web to provide channel member support activities in 1996. Even though the delivery of goods cannot flow across the Internet for consumption, surprisingly good industry firms appeared less motivated to use their websites to refer and/or connect end users to intermediaries for product purchase in 1996.

For H5, we examined proportions from the year 2000 to provide an early estimate of growth in terms of e-commerce behavior. H5 proposed that the number of firms

providing channel member support would grow faster than the number of firms engaging in disintermediation. The t-test (t_{ts}=6.79, α<.05) indicated that the result was statistically significant. However, the proportional outcome was not in the hypothesized direction. Over the time span from 1996 to 2000, disintermediation grew at an astounding rate of 196% while channel support activities only grew at a rate of 67%. Firms appeared willing to risk their channel relationships for the promise of direct Internet sales. However, in 2004, the growth in disintermediation stopped. Eighty firms sold direct via the web in 2000 while the number remained constant in 2004, falling just slightly to 77. Also in 2004, channel member support continued its growth. Once again, the trade-off between disintermediation and channel conflict may play a role in the outcome.

Also, in our examination of each industry, we found a single "zone of disintermediation" (Gilbert & Bacheldor, 2000). All airline companies were bypassing their channel members and none were engaging in channel member support. Obviously, the web exposed traditional brick-and-mortar travel agencies as intermediaries that did not add much value to the end-user. The potential absence of intermediaries can place firms in direct price competition with each other. In the long run, the eroding of profit margins may occur.

We also discovered nine industries, as shown in Appendix A, that we would classify as non-bypassing, the vast majority of which were from the goods industries segment. Two of the industries, Beverages and Food Services, have unique channel relationships involving franchise systems, and thus bypassing is not relevant given the exclusive geographic territory afforded most franchisees. Tobacco is unique in its regulatory environment that prohibits direct sales to consumers. Today, brokerage services, found to be non-bypassing in the study, are now actively engaged in disintermediation e-commerce activities.

LIMITATIONS

There are limitations to the findings we provide. Websites were only examined in three out of the nine years that comprised the time span of the investigation. Thus, some firms may have initiated changes and subsequently rescinded the actions during years in which no data was collected. No direct contact was made with channel managers of the *Fortune* 500 companies involved in the study. Thus, the degree to which these firms faced channel conflict as a result of bypassing activities is unknown except for the widely published experience of Levi Strauss & Co., which resulted in the firm ceasing direct sales on its website (Collett, 1999). The Levi Strauss & Co. reaction, however, was captured in our data shown in Appendix A.

The *Fortune* 500 companies in our data set represent just a fraction of the manufacturers doing business in the U.S. Thus, e-commerce behaviors by *Fortune* 500 companies may not be representative of manufacturers as a whole. In addition, the macro level goods versus services comparison in this sample does not capture micro-behavior differences that are driven by factors such as price levels of products sold, search versus experience versus credence type of product offerings, and other product characteristics.

Finally, some readers may question the validity of categorizing the Entertainment and Food Services industries into goods producers and not services producers. During the time span of this study, in both industries, the consumer could shop at a brick-and-mortar retailer and acquire a tangible product for home consumption (e.g. cds and dvds).

CONCLUSION

The choice of a manufacturer to use its website as a direct sales tool is based upon an interaction between industry specific product and market variables and the ability of the web to fulfill traditional and necessary distribution functions. From the results of this historical longitudinal study, there were differences in usage of websites by *Fortune* 500 firms across industries and time. Goods industries lagged behind services industries in initiating disintermediation. Overtime, however, disintermediation was equally prevalent in both industry segments. In terms of channel member support, both in initiating and over time, firms using their websites to refer and/or connect end users to intermediaries for product purchase was equally prevalent for both industries. Finally, during the 1996 to 2000 period, the number of firms engaged in disintermediation grew faster than the number of firms providing channel member support.

Channel conflict has existed for decades and will exist in the future, but the term has gained more prominence in the last few years with the development of e-commerce. To avoid conflict, manufacturers can target online sales efforts to segments of consumers not served by existing intermediaries. The online presence can build brand awareness and generate new sales for intermediaries serving other markets. Manufacturers may also use a variety of activities to diminish channel conflict. For example:

- Use company website to directly link to retailers' websites or brick-and-mortar stores.
- Limit online offerings to items not sold in brick-and-mortar stores.
- Sell products online under a different brand name found in brick-and-mortar stores.
- Initiate sales online, but hand-off to intermediaries for actual purchase and delivery.
- Sell products online, but rely on and reward intermediaries for installation and service.
- Prohibit company website from offering discounts available in brick-and-mortar stores.
- Offer coupons at company website that allow users to collect free samples and discounts at brick-and-mortar stores.
- Prevent dealers encroaching into each other's territories by developing and enforcing formalized Internet policies and procedures.

With the existence of the Internet, manufacturers of goods and services can bypass channel intermediaries and sell directly to the final consumer. The web continues to play a greater role in channel management strategy for most manufacturers. The purpose of this longitudinal study was to document usage of websites in terms of channel

member support and vertical competition across the early years of the web. Only as e-commerce continues to grow will its effect on marketing channels be fully understood. Despite much early speculation of the impending disappearance of middlemen, intermediaries continue to function within the marketplace though their roles and responsibilities have evolved over time.

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Note: Brick and mortar/e-commerce graphic created by Carole E. Scott

APPENDIX A
Channel Management Behavior Involving Websites: Non-Bypassing Industries

		1996				2000						2004					
***FORTUNE 500* INDUSTRY**	**N**	**INFO**	**REF**	**BY PASS**	**NO SITE**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**
Apparel	2	1		1			2						2				
Beverages	4	4				4						4					
Brokerage	5	2	2		1		4		1				4				1
Food Services	3	2			1	1	2						3				
Metals	2	2				2						2					
Petroleum Refining	20	13	4		3	10	6				4	2	11				7
Rubber/Plastic Products	2	1			1	1					1		1				1
Textiles	1	1					1						1				
Tobacco	3	1			2	2					1	2					1
TOTALS	**42**	**27**	**6**	**1**	**8**	**20**	**15**	**0**	**1**	**0**	**6**	**10**	**22**	**0**	**0**	**0**	**10**

***** Some websites offered options of both referral and bypass. These websites have been counted separately and thus this total is not reflected in the referral and bypass columns.

N/A = Reflects the number of companies no longer in existence due to various reasons such as merger, acquisition, extinction.

APPENDIX B
Channel Management Behavior Involving Websites: Services Industries

		1996				2000						2004					
***FORTUNE 500* INDUSTRY**	**N**	**INFO**	**REF**	**BY PASS**	**NO SITE**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**
Airlines	8			8				8						8			
Brokerage	5	2	2		1		4		1				4				1
Computer/Data Service	4	2	1	1			2	2				1	2	1			
Hotels	2		2						2						2		
Insurance: Life/Health	23	8	12		3	2	15	2	2	1	1	4	14		3		2
Insurance: Property/Casualty	16	3	9		4		11	2	2		1		9	2	3		2
Mail, Package Delivery	2	2							2						2		
Telecommunications	15	5	3	7				9			6		2	3	4		6
TOTALS	**75**	**22**	**29**	**16**	**8**	**2**	**32**	**23**	**9**	**1**	**8**	**5**	**31**	**14**	**14**	**0**	**11**

***** Some websites offered options of both referral and bypass. These websites have been counted separately and thus this total is not reflected in the referral and bypass columns.
N/A = Reflects the number of companies no longer in existence due to various reasons such as merger, acquisition, extinction.

APPENDIX C
Channel Management Behavior Involving Websites: Goods Industries

		1996				2000						2004					
***FORTUNE 500* INDUSTRY**	**N**	**INFO**	**REF**	**BY PASS**	**NO SITE**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**
Apparel	2	1		1			2						2				
Beverages	4	4				4						4					
Building Materials	6	4	1		1	2	4					1	4		1		
Chemicals	6	4			2	5	1						4	1			1
Computer/Office Equipment	13	2	7	3	1	2		3	7		1	1	2	3	4		3
Electronics	15	6	7	1	1	2	3	3	6		1	2	6	1	5		1
Entertainment	4	1	1	1	1			1	2		1			2	1		1
Food	19	13	1		5	10	1	5	2		1	11		3	3		2
Food Services	3	2			1	1	2						3				
Forest/Paper Products	17	13	1		3	8	3	1	2		3	4	5		3		5
Industrial/Farm Equipment	11	4	7			2	8		1			3	7		1		
Metal Products	8	2			6	1	2	1	3		1		3	3	1		1
Metals	2	2				2						2					
Motor Vehicles/Parts	13	7	4		2	3	9		1			2	9		2		
Petroleum Refining	20	13	4		3	10	6				4	2	11				7
Pharmaceuticals	10	8			2	7	1	1			1	2	4		2		2
Publishing/Printing	6	2		3	1	2		3			1			1	4		1
Rubber/Plastic Products	2	1			1	1					1		1				1
Scientific/Photo Equip	5	3		1	1	2			3				2		3		
Soaps/Cosmetics	5	4		1		2		1	2			1	1	1	2		
Textiles	1	1					1						1				
Tobacco	3	1			2	2					1	2					1
Toys/Sporting Goods	2	2						1	1				1		1		
Transportation Equipment	1	1					1								1		
TOTALS	**178**	**101**	**33**	**11**	**33**	**68**	**44**	**20**	**30**	**0**	**16**	**37**	**66**	**15**	**34**	**0**	**26**

***** Some websites offered options of both referral and bypass. These websites have been counted separately and thus this total is not reflected in the referral and bypass columns.
N/A = Reflects the number of companies no longer in existence due to various reasons such as merger, acquisition, extinction.

APPENDIX D
Channel Management Behavior Involving Websites: All Industries

		1996				2000						2004					
***FORTUNE 500* INDUSTRY**	**N**	**INFO**	**REF**	**BY PASS**	**NO SITE**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**	**INFO**	**REF**	**BY PASS**	**BOTH***	**NO SITE**	**N/A**
Airlines	8			8				8						8			
Apparel	2	1		1			2						2				
Beverages	4	4				4						4					
Brokerage	5	2	2		1		4		1				4				1
Building Materials	6	4	1		1	2	4					1	4		1		
Chemicals	6	4			2	5	1						4	1			1
Computer/Data Service	4	2	1	1			2	2				1	2	1			
Computer/Office Equipment	13	2	7	3	1	2		3	7		1	1	2	3	4		3
Electronics	15	6	7	1	1	2	3	3	6		1	2	6	1	5		1
Entertainment	4	1	1	1	1			1	2		1			2	1		1
Food	19	13	1		5	10	1	5	2		1	11		3	3		2
Food Services	3	2			1	1	2						3				
Forest/Paper Products	17	13	1		3	8	3	1	2		3	4	5		3		5
Hotels	2		2						2						2		
Industrial/Farm Equipment	11	4	7			2	8		1			3	7		1		
Insurance: Life/Health	23	8	12		3	2	15	2	2	1	1	4	14		3		2
Insurance: Property/Casualty	16	3	9		4		11	2	2		1		9	2	3		2
Mail, Package Delivery	2	2							2						2		
Metal Products	8	2			6	1	2	1	3		1		3	3	1		1
Metals	2	2				2						2					
Motor Vehicles/Parts	13	7	4		2	3	9		1			2	9		2		
Petroleum Refining	20	13	4		3	10	6				4	2	11				7
Pharmaceuticals	10	8			2	7	1	1			1	2	4		2		2
Publishing/Printing	6	2		3	1	2		3			1			1	4		1
Rubber/Plastic Products	2	1			1	1					1		1				1
Scientific/Photo Equip	5	3		1	1	2			3				2		3		
Soaps/Cosmetics	5	4		1		2		1	2			1	1	1	2		
Telecommunications	15	5	3	7				9			6		2	3	4		6
Textiles	1	1					1						1				
Tobacco	3	1			2	2					1	2					1
Toys/Sporting Goods	2	2						1	1				1		1		
Transportation Equipment	1	1					1								1		
TOTALS	**253**	**123**	**62**	**27**	**41**	**70**	**76**	**43**	**39**	**1**	**24**	**42**	**97**	**29**	**48**	**0**	**37**

***** Some websites offered options of both referral and bypass. These websites have been counted separately and thus this total is not reflected in the referral and bypass columns.

N/A = Reflects the number of companies no longer in existence due to various reasons such as merger, acquisition, extinction.


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