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**ESTABLISHING THE INTERNET CHANNEL:
SHORT-TERM PAIN BUT LONG-TERM GAIN?**

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Short-term pain but long-term gain?**

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ABSTRACT

The emergence of the Internet has pushed many established companies to explore this radically new distribution channel. Like all market discontinuities, the Internet creates opportunities as well as threats – it can be performance-enhancing as readily as it can be performance-destroying. One industry where this certainly holds is the newspaper industry, where several players have rushed to supplement their traditional channels with an Internet channel, in spite of a lingering fear of cannibalizing their existing business. Making use of event-study methodology, we assess the net impact of setting up an additional Internet channel on a firm's stock market return, a measure of the change in expected future cash flows. We find that, on average, Internet channel investments are positive net-present-value investments: the present value of the expected cash inflows is greater than the present value of the anticipated cash outflows. We then identify firm, introduction-strategy, and marketplace characteristics that influence the direction and magnitude of the stock-market reaction. More specifically, our results indicate that powerful firms with fewer direct channels achieve greater gains in financial performance than less powerful firms with a broader direct channel offering. In terms of introduction timing, early followers have a competitive advantage vis-à-vis both innovators and later followers. We also find that firms which provide additional advertising support to their Internet channel introduction achieve greater financial gains. Finally, in terms of marketplace characteristics, firms operating in fast-growing Internet environments benefit more than players operating in less munificent markets.

1. INTRODUCTION

The design and management of marketing channels is a powerful weapon in an increasingly competitive and continually shifting battle for consumers. An important way in which companies use this weapon is by adding new channels to existing ones; for instance, by adding a direct channel to an indirect one. As Frazier (1999, p. 232) recently observed, “the use of multiple channels of distribution is now becoming the rule rather than the exception”. The most recent and radically new distribution channel companies are expanding into is the Internet. Given recent advances in technology, the Internet is rapidly becoming an important new channel to go to market in a range of businesses – much faster than anyone would have predicted a few years ago.

As they add Internet channels to their existing channels, companies hope to increase their performance. However, while expansion into this new channel may increase the firms’ penetration level and decrease their distribution costs, increased consumer price sensitivity and lowered levels of support in the entrenched channels may become liabilities. The *net* effect of these opposing forces is yet unclear, as reflected in the following quotes:

“One aspect of e-commerce that has yet to be addressed in detail is the [...] performance of the new medium. [...] The expectations of profitability of Internet trading vary greatly, from it being perceived as a more profitable medium to the converse.” (Booth, *Management Accounting*, January 2000, p. 21)

“It is difficult for executives at most companies [...] to estimate accurately the returns on any Internet investment they may make.” (Ghosh, *Harvard Business Review*, 1998, p. 126)

In spite of the uncertainty surrounding the performance implications of adding an Internet channel to their channel portfolio, many firms, attracted by the potential access to millions of customers and the relatively low costs of setting up the channel, have rushed to establish an Internet channel. Others, daunted by the fear of a continuing price squeeze and/or an alienation of their entrenched channels, wait for more evidence to accumulate.

In this context, one of the main conclusions of the eBusiness workshop organized by Penn State’s eBusiness Research Center is that academic contributions on the subject are needed, since “without sound research, eBusiness managers are sailing rudderless” (Donath 1999, p. 2). A similar call for more scholarly research is raised by Hoffman

subsequently present data specifics and variable operationalizations. We then present our empirical results, and close with implications for channel management, limitations, and future research opportunities.

2. THE PERFORMANCE-ENHANCING VS. PERFORMANCE-DESTROYING CAPACITY OF AN ADDITIONAL INTERNET CHANNEL

The addition of an Internet channel poses opportunities as well as threats – it can be performance-enhancing as readily as it can be performance-destroying (Kumar 1999). Supplementing existing channels with an Internet channel can enhance a firm's expected performance when demand- and/or supply-side advantages are bestowed on the firm. A demand-side advantage allows to charge a higher price at a given level of demand, or to generate a higher demand at a given price. Supply-side advantages occur when a lower cost structure is incurred. Adding an Internet channel can also harm expected performance, however, through demand- (reduced revenues) and/or supply-side (increased costs) disadvantages. We elaborate on each of these factors, which are summarized in Figure 1.

--- Insert Figure 1 ---

Demand-side advantages. Revenue gains can be obtained through (1) demand expansion, and/or (2) higher prices.

(1) *Demand expansion.* The Internet can increase sales in three ways: market expansion, brand switching, and relationship deepening. *Market expansion* occurs when new (segments of) customers are reached who did not yet buy in the category. Estee Lauder, for example, hopes that Clinique.com will attract customers who avoid buying at a cosmetics counter because they find the experience intimidating (Machlis 1998b). Demand may also expand through *brand switching*, i.e. by winning customers from competitors. After having received numerous e-mails from customers eager to buy direct, Estee Lauder launched its Internet channel, fearing that by failing to do so, its competitors would be able to attract its less loyal customers. One specific way in which new segments can be tapped or customers won from competitors is through expansion of the current market to the global market (Quelch and Klein 1996). Finally, demand may expand through *relationship deepening*, i.e. selling more to existing customers. Barnes and Noble Inc., for example, saw record sales in its real-world stores upon launching its online store, as this increased their customers' interest in books (Machlis

commission costs), and dealing directly with their customers (Benjamin and Wigand 1995). Airlines, e.g., are making headway selling tickets online because their direct sales model eliminates the commission paid to travel agents (Gilbert and Bacheldor 2000).

Demand-side disadvantages. On the demand-side, disadvantages can occur for two reasons: (1) demand reduction, and (2) lower prices.

(1) *Demand reduction.* Adding an Internet channel to an entrenched channel system may involve channel ‘shift’ – customers moving from one channel to another – without channel ‘lift’ – new sales (Alba et al. 1997). Adding an Internet channel may even lead to a decrease in total sales when consumers buy less through the new channel than through their old channel, e.g. when there are less impulse purchases through the Internet (Machlis 1998b), or when disenchanted distributors offer less support to the firm’s products, resulting in more brand switching towards the competitors.

(2) *Lower prices.* For many firms, a major threat posed by the Internet is that profits could be eroded through the intensified price competition that might ensue as consumers’ search costs are lowered (Alba et al. 1997; Lynch and Ariely 2000). The Internet increases the power of the consumer, compared to traditional channels of distribution, as price comparison across suppliers can be performed quickly and easily. As a consequence, prices and margins are expected to be pushed down (Daniel and Storey 1997; see also Degeratu et al. 2000).

Supply-side disadvantages. On the cost side of the equation, expanding into an Internet channel may increase physical-distribution costs as well as transaction costs.

(1) *Higher physical-distribution costs.* The cost of an Internet channel has two components: fixed start-up costs, such as the purchase of computer hardware and software, and the costs of Internet hosting services. Also, higher advertising expenditures may be needed to create awareness for the new channel. Even though Internet channels can vary dramatically in cost, some incremental expenditures are always involved.

(2) *Higher transaction costs.* Existing channels may view the new Internet channel as unwelcome competition. They may fear their sales volume will be reduced if firms reach out directly to their consumers. In addition, the very low physical-distribution costs and easily obtainable economies of scale of Internet channels may

performance is enhanced or destroyed is contingent upon a number of factors. The marketing strategy literature suggests that the performance of a new entry depends on firm/product characteristics, the introduction strategy, and the marketplace or environment (Gatignon et al. 1990). We develop specific hypotheses for each of these three categories (see Figure 2 for a schematic representation).

--- Insert Figure 2 ---

Firm characteristics

Firms are distinctive because they have accumulated different physical and intangible assets, such as capital equipment, financial reserves, employee skills, brand equity, and marketing expertise. These firm-specific resources and capabilities may influence the effectiveness of the firm's new channel introduction (Day 1994; Mata et al. 1995). We consider three specific dimensions of a firm's resources and capabilities: its channel power, direct-channel experience, and size, and formulate hypotheses on how these may moderate the performance implications of an Internet channel addition.

Channel power

Power is a crucial concept in marketing channels research. Channels researchers have often derived their definitions of power from Emerson's (1962) power-dependence theory: a firm's power over a distributor is determined by the latter's motivational investment in the relationship, and his/her availability of alternatives. Motivational investment refers to the value of the resources or outcomes mediated by the firm, and has often been operationalized via the 'sales and profits' approach: the greater the sales and profits a firm accounts for, the greater its power (Frazier et al. 1989). The availability-of-alternatives component refers to the difficulty of replacing the outcomes mediated by the firm because of the lack of alternative partners: the lower the number of available alternatives, the more difficult it is to replace the sales and profits accounted for by the firm, and the greater the firm's power over the distributor (Buchanan 1992).

When a firm establishes an Internet channel, this is likely to lead to a loss of goodwill on the part of the established channels, regardless of whether the firm is low or high in channel power. However, whether or not the entrenched channel will act upon this loss of goodwill depends on channel power. When a firm has little channel power, opportunistic behavior may arise on the part of distributors to take advantage of unspecified or unenforceable elements within the relationship (Anderson 1988),

conversion to direct channels only (Dutta et al. 1995). In response, distributors may provide lower levels of support for the firm's products, pushing competitors' products instead (Frazier 1999). This may cause some of the firm's customers to switch to one of these competitors.

When we total up these effects, our net prediction is that direct-channel experience is negatively related to the performance implications of an additional Internet channel:

H₂: The performance implications of an additional Internet channel are negatively related to direct-channel experience.

Firm size

On the demand-side, small firms typically have more to gain from an Internet channel addition than large firms (Alba et al. 1997). As the Internet greatly extends the geographical reach of small companies, it allows them to secure new customers from around the world in ways formerly restricted to much larger firms (OECD 1999). Therefore, the smaller the firm, the more it can benefit from the geographic market expansion and brand-switching opportunities offered by an additional Internet channel. In contrast, large firms may be better able to command a higher price/margin. In order to feel more secure when dealing over the Internet, consumers may be willing to pay a price premium to purchase a product from a large, well-known firm, as its reputation may signal reliability of delivery, security of information, dependability of return policy, etc. (Smith et al. 1999).

On the supply-side, one could argue that large firms can enjoy economies of scale. The larger the firm, the more efficiently it can fulfill marketing functions in general, and distribution functions in particular, and therefore the lower its physical-distribution costs (Anderson 1985). However, in the context of market discontinuities such as the introduction of Internet channels, costly investments and general marketing expertise built up over the years may become useless, and new skills and assets need to be acquired (Chandy and Tellis 1998; Mitchell 1989). For example, the software systems that serve as the basis for Internet channels require new, specialized expertise to develop and operate (Mata et al. 1995). As a result, the superior resources and capabilities of larger organizations may no longer give them the same physical-distribution cost advantages as in the old economy.

On the pricing dimension, early movers may be able to earn a higher price/margin if switching costs to competing products and channels are sufficiently high. Switching costs are created when customers make investments that are specific to a particular firm, such as the time and effort they have spent in learning the firm's channel interface. As time elapses and the number of players in the market increases, it becomes more difficult to enjoy this kind of price premium (Smith et al. 1999).

Also on the supply-side, early entry may have positive effects on physical-distribution costs. Even though we do not expect major experience-curve effects because of the rapid diffusion rate of the new technology (cf. supra), marketing cost advantages may well accrue to early movers. Later entrants may require more marketing support (more extensive advertising and/or economic inducements) to overcome the barriers-of-entry erected by earlier firms in terms of consumer awareness and preference (Kerin et al. 1992).

Other researchers have advocated early imitation as a profitable alternative to moving first (see e.g. Lee et al. 2000; Teece 1986). Specifically, technological discontinuities may create physical-distribution-cost advantages to later entrants (Yip 1982). When superior technologies are expected to become available, it may be beneficial to postpone the Internet channel introduction, and to immediately incorporate the new technologies once they become available. This may enable later entrants to leapfrog early movers if they stay committed to the older technologies (Dos Santos and Peffers 1995). Also, early firms may make costly mistakes, as there is little precedent from which to learn about the idiosyncrasies of the new channel. In contrast, firms that wait until some competitors have made the move can learn from the latter's experience and do better at a lower cost (Kerin et al. 1992).

In conclusion, the above argumentation suggests that it may be beneficial to wait and learn from the first mover's experience, while still being fast enough to exploit the various demand advantages related to early entry. As such, early followers may reap the greatest benefits and outperform both pioneers and late movers (see Golder and Tellis (1993) for a similar argumentation). To capture this potentially non-monotonic relationship between order of entry and performance, the following hypothesis is proposed:

- H₃:** The relationship between the financial performance implications of an Internet channel addition and order of entry takes the form of an inverted U.

their channel system to satisfy various growing consumer segments. This combined effort may cause further market expansion (cf. Bayus and Putsis 1999). Second, because of the existence of some untapped demand or need, munificent markets may provide both existing channels and the new Internet channel with sales and profit opportunities (Dwyer and Oh 1987), making cannibalization less likely as they don't have to engage in a zero-sum game. Third, in growth markets, consumers' price sensitivity tends to be lower (Aaker and Day 1986).

The supply-side mechanism for the effect of product demand pivots on channel conflict and the corresponding transaction costs (Pfeffer and Salancik 1978). Specifically, "channels in declining markets [are] often associated with intense interchannel rivalry" (Dwyer and Oh 1987, p. 348). In contrast, in rapidly growing markets, the intensity of friction and perceived conflict between the firm and its entrenched channels decrease, because losses in share need not reduce the latter's absolute sales levels. As a net result, we offer the following hypothesis:

H₅: The performance implications of an Internet channel addition are positively related to product demand.

Channel demand

Many scholars have employed a demand-pull perspective towards innovation and change. In this view, the adoption of an important organizational innovation such as the addition of an Internet channel is driven by its revenue-generating potential, which is likely to increase as the Internet community grows (Peterson et al. 1997). This growth may come from both new customers to the category, or involve a switching from traditional channels (company- or competitor-owned).

As for the prices charged, Zettelmeyer (2000) has recently shown analytically that the prices firms set depend on the reach of the Internet. If the Internet is 'small', firms do not find it worthwhile to retaliate when they detect competitive price discounting over the Internet. As a consequence, average prices on the Internet are likely to be lower than in the conventional channel. However, as the Internet 'grows', competitive price cuts over the Internet may hurt a firm more, and retaliation becomes more likely. As firms realize that a spiral of retaliation may end in an aggressive price war, they tend to refrain from competitive price discounting over the Internet. Therefore, as the

market reaction, in contrast, compares investment costs to the expected revenues.

Second, Internet channels are such a new phenomenon that they provide a risky and uncertain setting (Hoffman and Novak 1996). In demonstrating the performance implications of an additional Internet channel, the uncertainty of the outcomes (the risk factor) should be taken into account, which is not done in traditional performance indicators. In contrast, investors' evaluation of the proposed project takes into account the potential risks associated with the expected cash flows.

Third, end-of-the-year accounting numbers may be influenced by a number of factors that took place during the year, of which the Internet channel introduction is just one. The event study methodology advocated in this study (cf. *infra*) allows measuring the impact of a specific event type on daily (i.e., temporally disaggregated) stock returns.

To further complicate the picture, several of the benefits of the Internet are intangible, such as opening a market, keeping a window of opportunity, or blocking a competitor (OECD 1999). Conversely, Internet channel projects may also include 'hidden' costs that devalue intangible assets. For example, intrachannel competition may lead to soured relationships with existing distribution channels and damage channel equity (Kumar 1999). Such intangible or hidden benefits and costs do not appear on the balance sheet, and are therefore not reflected in traditional performance indicators.

Cash flows, in contrast, are increasingly viewed as less susceptible to the aforementioned problems (Day and Fahey 1988; Srivastava et al. 1998). According to financial theory, a company's stock price reflects the market's expectations of the discounted value of all future cash flows expected to accrue to the firm (Rappaport 1987). Market efficiency implies that the stock price accurately reflects *all* available information (including information on long-term, uncertain, and intangible outcomes) relating to the performance of the firm. As new information becomes public, investors update their expectations about long-term future cash flows, reacting immediately by buying or selling stock. As such, information resulting in a positive (negative) change in expected future cash flows will have a positive (negative) effect on stock price. The release of information, or event, we investigate in this study is the announcement of an Internet channel addition.

$$(4) \quad e_t = \sum_{i=1}^N e_{it} / N$$

where N is the number of announcements being studied. To test whether the average abnormal return is different from 0 on the event day $t = 0$ (which falls on different calendar days for different announcements), we use the test statistic which is distributed unit normal for large N :

$$(5) \quad z_0 = \sum_{i=1}^N \varepsilon_{i0} / \sqrt{N}$$

where ε_{i0} is e_{i0}/S_i , and S_i is the standard deviation of the regression residuals that were obtained prior to the event announcement. This test statistic allows us to determine whether, on average, investors perceive the potential performance-enhancing factors to outweigh the corresponding performance-destroying factors.

Thus far, we considered the ideal situation that there is no information leakage prior to the event day, and that all information is completely disseminated during the event day. In practice, these assumptions may be violated (McWilliams and Siegel 1997). As soon as information leaks (e.g., a newspaper article speculating about a potential Internet channel introduction prior to the official announcement), the event period should include one or more days prior to the announcement of the event so that abnormal returns associated with the leakage are also captured. In a similar vein, when information becomes only gradually available to the broad public, an allowance should be made for dissemination effects on the days following the announcement. When leakage (for t_1 periods before the event) and/or dissemination over time (for t_2 time periods after the event) occur, one can use a similar test statistic as in Eq. (5) to compute the significance of the average abnormal return on these days. One can also aggregate the abnormal returns over the 'event period' $[-t_1, t_2]$ into a cumulative abnormal return (*CAR*) in order to draw overall inferences for the event of interest:

$$(6) \quad CAR_i[-t_1, t_2] = \sum_{t=-t_1}^{t_2} e_{it}$$

Because the event study is conducted over multiple events, this *CAR* can be averaged across events into a cumulative average abnormal return (*CAAR*):

$$(7) \quad CAAR[-t_1, t_2] = \sum_{i=1}^N CAR_i[-t_1, t_2] / N$$

will correct for the general over-valuation that might affect this type of firms, if this would indeed be the case.

5. DATA

Sample and data-collection procedure

Our empirical application is situated in the newspaper industry, which offers an interesting setting to apply our framework to. First, it represents a mature, old-economy industry that faces rising costs, falling revenues, and increasing retail power (Molina 1997; Nicholas et al. 1996). As a result, many publishers have taken a closer look at the opportunities offered by direct distribution, and wonder whether the Internet may become a profitable option.

While they share the above characteristics with many other industries, newspapers have the natural advantage that they can be 'delivered' online fairly easily. As a consequence, publishers have taken the lead in exploiting the Internet as a new distribution channel. By the end of 1999, over 2,700 newspaper around the world had online businesses (U.S. Department of Commerce 1998). As such, the publishing industry tends to "act as the pacesetter for the Information Society" (European Commission 1996, p. 1), and is expected to foreshadow trends that will occur more slowly in other industries.

In addition, newspaper executives are confronted with many of the performance-enhancing and -destroying forces identified before, leading them to call the Internet both their prime concern and their most promising source of new revenues (Casale 2000). On the supply-side, newspaper executives do not yet have enough experience to draw firm conclusions on eventual cost structures. On the one hand, online editions require a lower capital investment, and the marginal cost of distributing extra copies is almost negligible. Other sources argue that costs may simply shift from physical printing and distribution to acquiring and maintaining technology, while incurring higher marketing costs (U.S. Department of Commerce 1998). Apart from physical-distribution-cost effects, there is also uncertainty with respect to the transaction costs involved. Some experts argue that online newspapers will not replace the print version. Others fear that their retail distributors may interpret it as a declaration of war (Noack 1993).

announcement may actually occur prior to the date of the actual Internet channel introduction. For the majority of newspapers, they turned out to be the same, and in our subsequent analyses, no significant impact was found when controlling for this joint occurrence.

Operationalization of measures

Financial measures. Daily stock prices of the firms included in our sample and daily market indices of the Amsterdam, Frankfurt, London, and Paris Stock Exchanges (i.e., AEX-24, DAX-30, FTSE-100, and CAC-40) were obtained from the Datastream database. These data were used to calculate, respectively, the firms' daily returns R_{it} , i.e. the percent change in stock price, and the market returns R_{mt} .

Channel power. Following Emerson (1962), we include a measure for both motivational investment and availability of alternatives to capture channel power. The former is measured as the percentage of sales the newspaper accounts for in the total sales of a representative distributor in a specific sales region (median = 4%, range = 0.1%–55%). Availability of alternatives was measured through the number of titles a representative distributor in a specific sales region can use to replace the sales accounted for by the focal newspaper (median = 3, range = 1–19). Since the power of a supplier over a distributor is (1) directly proportional to the supplier's contribution to the distributor's sales, and (2) inversely proportional to the number of alternatives available to the distributor, channel power is measured by the ratio of contribution-to-sales to number-of-alternatives, after standardization of both measures. Data on sales, sales regions, and number of alternative titles were obtained from local branches of the International Federation of Audit Bureaus of Circulations (IFABC).

Direct channel experience. Direct channel experience is operationalized as the number of direct channels established by the firm prior to the current Internet channel addition (median = 3, range = 1–18).⁷

Firm size. We compiled three measures of firm size from Wright Investor's Service: number of employees (median = 6,477, range = 400–19,986), sales (median = € 700 million, range = € 56 million–4,539 million), and the market value of the firm (median = € 2,466 million, range = € 76 million–38,550 million). All three are commonly used measures of firm size (see, e.g., Reddy et al. 1994). After standardization, the three items were averaged into a single scale of firm size.

surrounding the event day, the one from 0 to +1 shows the most significant CAAR, with a value of .98%. This positive value is driven by two factors: positive evaluations occur more frequently (61% of cases on the event day $t = 0$, and 65% of the cases on $t = +1$), and they are, on average, larger than the negative ones (the average positive CAAR over the event window [0,+1] is 1.95%, versus an average negative CAAR value of -1.22%).

Our estimate on the size of the stock-market reaction to Internet channel announcements has the same order of magnitude as CAARs reported in other marketing-related event studies. Horsky and Swyngedouw (1987), for example, report a CAAR[0,0] of .61% for company name changes, while Chaney et al. (1991) and Chaney and Devinney (1992) find a CAAR[-1,+1] of, respectively, .75% and .60% for new product announcements. In the context of celebrity endorsement contracts, Agrawal and Kamakura (1995) report a CAAR[-1,0] of .54%, while Hendricks and Singhal (1997) find a CAAR[0,0] of .50% for the receipt of quality awards. Finally, Houston and Johnson (2000) report CAARs[-1,0] ranging from .20% to 4.56% for buyer-supplier contracts and joint ventures.

Apart from the statistical significance of the CAAR-values obtained, one may want to consider their practical or economic significance. To that extent, we calculated the average change in the market value of a median-sized firm in our sample.¹⁰ A .98% cumulative abnormal return for such a company with a market value of € 2.5 billion results in an increase in market value (adjusted for overall market movements) of € 24.5 million in two days.

In spite of this statistical and economic significance, questions remain as to (1) whether this positive evaluation is just a temporary reaction that is quickly corrected afterwards, and (2) to what extent it is merely an artifact of the general hype surrounding high-tech and e-related stocks. In terms of the first issue, we found that the cumulative average abnormal returns (see Figure 3) stabilized at a higher level after the event, indicating that the positive evaluation is not just a short-term lift that evaporates in the days following the announcement. Put differently, investors continued to evaluate the announcement as positive news on average.

--- Insert Table 2 & Figure 3 ---

In response to the second issue, we used four alternative benchmark portfolios to determine the market and abnormal returns: (1) a market portfolio of stocks (reported in Table 2), which is the daily market index of the exchange the stock is trading on, (2) a

Internet channel are not significantly affected by product demand (H_5 ; $p > .10$), we find that they increase with higher channel demand ($b = .027, p < .05$).

Hence, powerful firms with fewer direct channels achieve greater gains in financial performance than less powerful firms with a broader direct channel offering. Small firms, however, should not recoil from adding an Internet channel to their entrenched channels; firms of any size can successfully play the game. In terms of introduction strategy, early followers have an advantage vis-à-vis both innovators and later followers. We also find that firms that provide advertising support to their Internet-channel introduction achieve greater gains. In terms of the marketplace characteristics, we find that firms operating in fast-growing Internet environments benefit more than players operating in less munificent markets.

We validated these results in two ways. First, we again estimated Eq. (8) using four alternative CARs as dependent variable: based on (1) a standard portfolio of stocks (reported in Table 3), (2) a very broad portfolio of stocks, (3) a portfolio consisting of printing and publishing companies, and (4) a portfolio consisting of information technology companies (cf. supra). With one exception (the coefficient for advertising support becomes insignificant when using the portfolio of printing and publishing stocks), all results remain substantively the same. We therefore conclude that our results are robust to the choice of market portfolio.

Second, even though none of the country dummy variables was significant (see footnote 13), these only allowed for an intercept difference across the different countries. To further assess the appropriateness of pooling the data, we split the sample in two subsamples: U.K.- based Internet additions ($n_1 = 57$) versus non-U.K. entries ($n_2 = 27$). In all instances, the equality of the individual parameters across both samples could not be rejected ($p > .10$).

Using the estimated model to support decision making

Our model can help managers make 'go/no-go' Internet-channel decisions, and help them deal with several trade-offs inherent in introduction-strategy decisions. As an illustration, consider two firms. Firm A operates under the worst possible combination of circumstances: it has already established 11 direct channels, has little channel power (e.g., 1% contribution to the sales of a representative distributor, who has 7 alternatives available), and it operates in a less munificent Internet market (21.7% growth in number

deleterious effects of an additional Internet channel, as reflected in the fact that over 30% of the cases result in negative stock returns. Therefore, it is imperative for management to have knowledge on what drives the success of an Internet channel-addition strategy. It would thereby be particularly useful if factors currently under the firm's control turn out to be pivotal.

Major findings – and guidelines for firms on whether and when they should consider expanding their distribution network to the Internet – are the following:

(1) Do powerful firms fare better when setting up an additional Internet channel?

Powerful firms can get away with far more when supplementing their entrenched channel system with an Internet channel. Although any firm that sets up an Internet channel should expect to lose at least some of the goodwill of its entrenched channels, powerful firms can use their market clout to ensure that their other distributors live up to their agreements.

(2) Does more direct channel experience offer an advantage? Marketers generally view prior experience as an important driver for the success of new entries. In contrast to this view, we find that established firms which already have other direct channels, get financially hurt when adding a new Internet channel to their entrenched channel system. This supports our contention that adding yet another Internet channel is not likely to bring along substantial new category demand, but instead may cause cannibalization. Moreover, it leads companies to increasingly compete against their indirect distributors. This, in turn, is likely to result in the assorted unpleasantnesses of brand-damaging intra-channel conflict.

(3) Is size an important driver of Internet channel success? Small firms should not recoil from adding an Internet channel to their entrenched channel system: firms of any size can successfully enter the playing field. Apparently, the geographical demand expansion opportunities flowing disproportionately to smaller firms compensate for the price premium larger firms may enjoy. In addition, the superior resources and management skills of large firms appear to no longer give them the same physical-distribution cost advantages as in the old economy.

(4) Should firms strive to be first when adopting an Internet channel? Our results indicate that firms should indeed be fast. However, we also find that it may be beneficial to let a few other players enter first. While firms should be fast enough to exploit various demand-side advantages, there is value in letting others experiment with

measures of channel power, we searched for externally observable proxies. Also the nonavailability of more precise data on advertising support is a drawback of our study. Ideally, advertising support is measured as the budgetary support that existed at the time the Internet channel is announced. However, in view of the time that has elapsed since many of the Internet additions studied here, it was not possible to obtain precise data ex post. In spite of these limitations, the results clearly uncovered significant relationships. Since the operationalizations of channel power and advertising support relate in the manner predicted by theory to the cumulative abnormal returns, construct validity is, at least partially, supported (Peter 1981).

Third, the empirical results reflect Internet channel announcements in only one industry within a European setting. Because of potential idiosyncratic industry- and country-related properties of our data, the generalizability of the results needs to be assessed. Testing the hypotheses with data from multiple industries would necessitate a further expansion of the model to recognize sources of variation across industries.

Fourth, we consider the performance implications of Internet-channel announcements at and around the time of the announcement. However, intended strategies may be modified during implementation, and also post-entry implementation decisions will clearly determine the ultimate success of the new channel. It would be helpful for future researchers to track a set of announced decisions, determine the outcome of those decisions, and attempt to assess when and by how much market valuation changed in response to the aforementioned modifications and post-entry actions. Such research would measure the effectiveness of strategy formulation as well as implementation. This issue certainly warrants further study.

In sum, evidence is accumulating that the Internet is here to stay, and that it is rapidly evolving into a real commercial medium. The challenge is to get beyond the hype, and to examine the Internet as a viable distribution channel – one with unique capabilities but also with limitations.

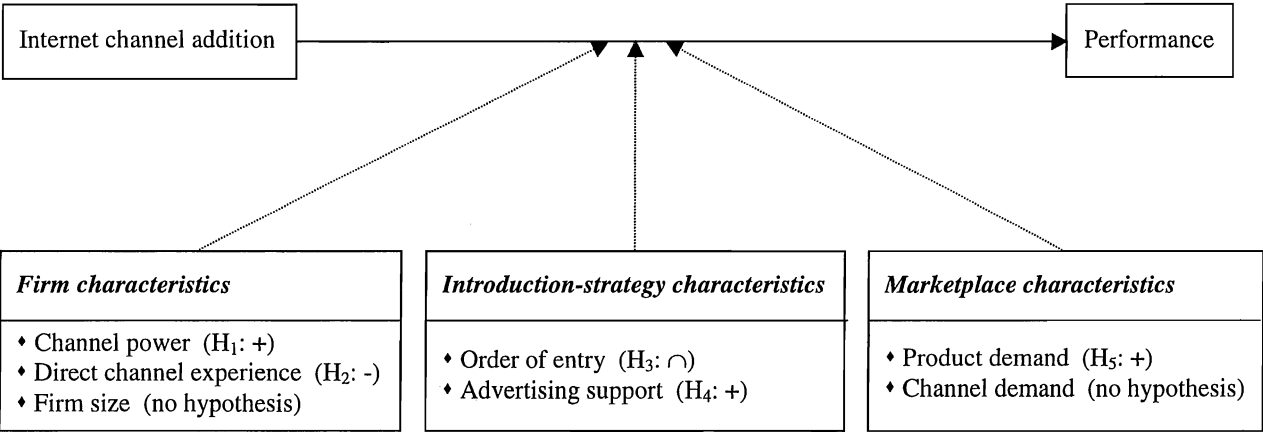
- Day, George and Liam Fahey (1988), "Valuing Market Strategies," *Journal of Marketing*, 52 (July), 45-57.
- Degeratu, Alexandru M., Arvind Rangaswamy, and Jianan Wu (2000), "Consumer Choice Behavior in Online and Traditional Supermarkets: The Effects of Brand Name, Price, and Other Search Attributes," *International Journal of Research in Marketing*, 17 (1), 55-78.
- Dekimpe, Marnik G., Pierre Francois, Srinath Gopalakrishna, Gary L. Lilien and Christophe Van den Bulte (1997), "Generalizing about Trade Show Effectiveness: A Cross-National Comparison," *Journal of Marketing*, 61 (4), 55-64.
- Donath, Bob (1999), "The Quest for eBusiness Frameworks," White Paper, eBusiness Research Center, The Pennsylvania State University.
- Dos Santos, Brian L. and Ken Peppers (1995), "Rewards to Investors in Innovative Information Technology Applications: First Movers and Early Followers in ATMs," *Organization Science*, 6 (3), 241-259.
- Dutta, Shantanu, Mark Bergen, Jan B. Heide, and George John (1995), "Understanding Dual Distribution: The Case of Reps and House Accounts," *Journal of Law, Economics, and Organization*, 11 (1), 189-204.
- Dwyer, F. Robert and Sejo Oh (1987), "Output Sector Munificence Effects on the Internal Political Economy of Marketing Channels," *Journal of Marketing Research*, 24 (November), 347-358.
- Emerson, Richard (1962), "Power-Dependence Relations," *American Sociological Review*, 27 (February), 31-41.
- European Commission (1996), *Strategic Developments for the European Publishing Industry Towards the Year 2000*.
- Fama, Eugene F. (1970), "Efficient Capital Markets: A Review of Theory and Empirical Work," *Journal of Finance*, 25, 383-417.
- Frazier, Gary L. (1999), "Organizing and Managing Channels of Distribution," *Journal of the Academy of Marketing Science*, 27 (2), 226-240.
- Frazier, Gary L., James D. Gill, and Sudhir H. Kale (1989), "Dealer Dependence Levels and Reciprocal Actions in a Channel of Distribution in a Developing Country," *Journal of Marketing*, 53 (January), 50-69.
- Friedman, Lawrence G. and Timothy R. Furey (1999), *The Channel Advantage*, Oxford: Butterworth Heinemann.
- Gatignon, Hubert, Barton Weitz, and Pradeep Bansal (1990), "Brand Introduction Strategies and Competitive Environments," *Journal of Marketing Research*, 27 (November), 390-401.
- Ghosh, Shikhar (1998), "Making Business Sense of the Internet," *Harvard Business Review*, 76 (2), 126-135.
- Gilbert, Alorie and Beth Bacheldor (2000), "The Big Squeeze," *Informationweek*, March 27, 47-56.
- Golder, Peter N. and Gerard J. Tellis (1993), "Pioneer Advantage: Marketing Logic or Marketing Legend," *Journal of Marketing Research*, 30 (May), 158-170.
- Grant, Robert M. (1991), "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation," *California Management Review*, 33 (3), 114-135.
- Hair, Joseph F., Jr., Ralph E. Anderson, Ronald L. Tatham, and William C. Black (1992), *Multivariate Data Analysis*, New York: Maxwell Publishing Company.
- Hamilton, Lawrence C. (1992), *Regression with Graphics: A Second Course in Applied Statistics*, Pacific Grove, CA: Brooks/Cole.

- Lynch, John G., Jr. and Dan Ariely (2000), "Wine Online: Search Costs Affect Competition on Price, Quality, and Distribution," *Marketing Science*, 19 (1), 83-103.
- Machlis, Sharon (1998a), "Channel Conflicts Stall Web Sales," *Computerworld*, 32 (7), 2.
- Machlis, Sharon (1998b), "Estee Lauder Tackles Web, Channel Conflict," *Computerworld*, 32 (27), 79.
- Mata, Francisco J., William L. Fuerst, and Jay B. Barney (1995), "Information Technology and Sustained Competitive Advantage: A Resource-Based Analysis," *MIS Quarterly*, 19 (4), 487-505.
- McWilliams, Abigail and Donald Siegel (1997), "Event Studies in Management Research: Theoretical and Empirical Issues," *Academy of Management Journal*, 40 (3), 626-657.
- Mitchell, Will (1989), "Whether and When? Probability and Timing of Incumbents' Entry into Emerging Technological Subfields," *Administrative Science Quarterly*, 34 (2), 208-230.
- Molina, Alfonso (1997), "Issues and Challenges in the Evolution of Multimedia," *Futures*, 29 (3), 193-212.
- Moriarty, R.T. and U. Moran (1990), "Managing Hybrid Marketing Systems," *Harvard Business Review*, 68 (6), 146-155.
- Narasimhan, Chakravarthi, Scott A. Neslin, and Subrata K. Sen (1996), "Promotional Elasticities and Category Characteristics," *Journal of Marketing*, 60 (April), 17-30.
- Nicholas, D., I. Frossling, H. Martin, and P. Buesing (1996), "(Really) Getting to Grips With the Internet: What It Has to Offer in the Way of Newspapers," *VINE*, 104, 29-34.
- Noack, David (1993), "Interactive Newspapers," *Editor & Publisher*, 126 (20), 57N.
- OECD (1999), *The Economic and Social Impact of Electronic Commerce: Preliminary Findings and Research Agenda*.
- Peter, J. Paul (1981), "Construct Validity: A Review of Basic Issues and Marketing Practices," *Journal of Marketing Research*, 18 (May), 133-145.
- Peterson, Robert A., Sridhar Balasubramanian, and Bart J. Bronnenberg (1997), "Exploring the Implications of the Internet for Consumer Marketing," *Journal of the Academy of Marketing Science*, 25 (4), 329-346.
- Pfeffer, Jeffrey and Gerald R. Salancik (1978), *The External Control of Organizations*, New York: Harper & Row Publishers.
- Picard, Robert G. and Jeffrey H. Brody (1997), *The Newspaper Publishing Industry*, Boston: Allyn and Bacon.
- Quelch, John A. and Lisa R. Klein (1996), "The Internet and International Marketing," *Sloan Management Review*, 37 (3), 60-75.
- Rappaport, Alfred (1987), "Stock Market Signals to Managers," *Harvard Business Review*, 65 (6), 57-62.
- Reddy, Rinivas K., Susan L. Holak, and Subodh Bhat (1994), "To Extend or Not to Extend: Success Determinants of Line Extensions," *Journal of Marketing Research*, 31 (May), 243-262.
- Rindfleisch, Aric and Jan B. Heide (1997), "Transaction Cost Analysis: Past, Present, and Future Applications," *Journal of Marketing*, 61 (October), 30-54.
- Schwartz, Ephraim (2000), "Enabling the Channel for E-Business," *Infoworld*, April 24, 8.
- Shankar, Venkatesh, Arvind Rangaswamy, and Michael Pusateri (1999), "The Online Medium and Customer Price Sensitivity," *Working Paper*.

Figure 1. The performance-enhancing vs. -destroying capacity of an additional Internet channel

	<i>Performance enhancement</i>	<i>Performance destruction</i>
<i>Demand-side</i>	1a. Demand expansion <ul style="list-style-type: none"> •market expansion •brand switching towards firm •relationship deepening 1b. Higher prices	2a. Demand reduction <ul style="list-style-type: none"> •cannibalization •brand switching towards competitors 2b. Lower prices
<i>Supply-side</i>	3a. Lower physical-distribution costs 3b. Lower ex-ante transaction costs	4a. Incremental start-up and advertising costs 4b. Higher ex-post transaction costs

Figure 2. The effect of Internet channel additions on performance moderated by firm, introduction-strategy, and marketplace characteristics



— Main effect
 Moderating effect

Figure 3. Cumulative average abnormal returns over time

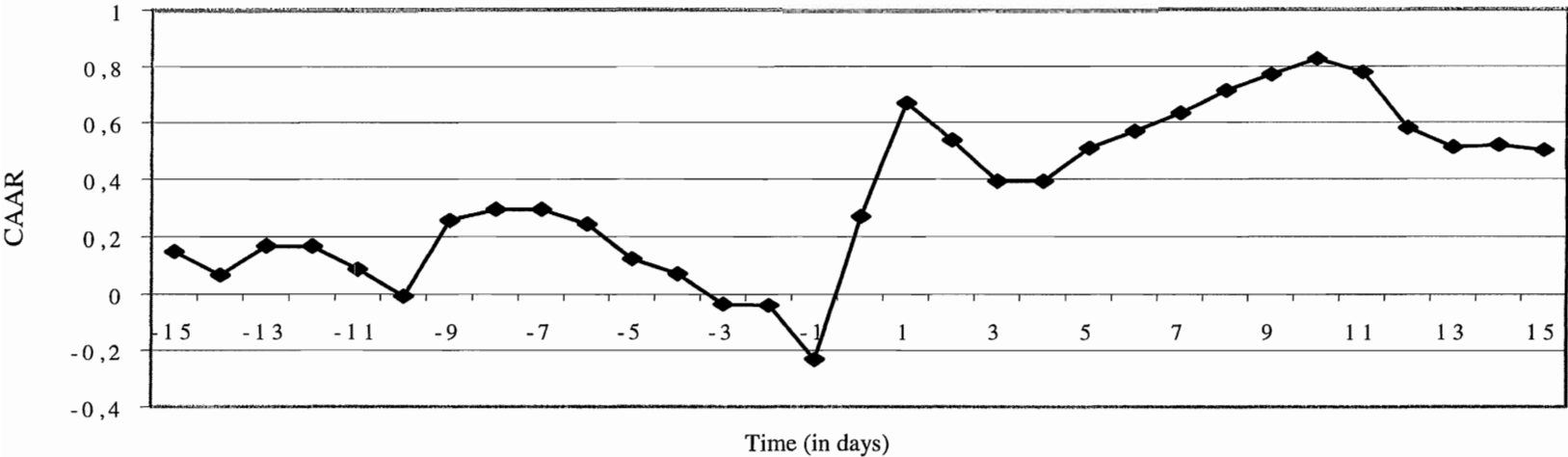


Table 2. Abnormal returns for Internet channel additions

<i>Event Day</i>	<i>Average Abnormal Return (%)</i>	<i>Z-statistic</i>	<i>% of Positive Abnormal Returns^a</i>
-5	-.11	-1.10	46
-4	-.08	-.48	47
-3	-.12	-1.00	39
-2	.13	-.03	41
-1	-.29	-1.78	44
0	.57*	4.64	61
+1	.41*	3.67	65
+2	-.12	-1.20	41
+3	-.19	-1.35	42
+4	-.07	-.69	36
+5	-.01	1.09	47

^a This column presents the percentage of the 84 abnormal returns which are positive for each day. For example, 61% of all cases had a positive abnormal return on the event day.

* $p < .01$



