The Impact of Hybrid Channel Structures on the Customer Purchase Process: A Research Outline

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Abstract

Hybrid channel structures enable companies to interact with prospective as well as actual customers using both electronic and conventional channels. These multiple opportunities of contact with customers increase the scope for differentiation and may lead to higher customer retention rates. This paper argues that a combination of electronic and conventional channels allows the provision of value to the customer beyond the 'core' product. It discusses how the customer purchase process might be used to identify components of the enhanced value proposition and how these components are affected by hybrid channel structures. It also presents research questions that need to be addressed in order to understand the competitive and strategic implications of hybrid channel structures.

Keywords: electronic retailing, purchase process, electronic commerce, hybrid channels

1. Introduction

Surveys on the use of electronic channels such as Web stores indicate a high growth of electronic commerce. Conventional channels, on the other hand, still account for the vast majority of retailing. According to the U.S. trade ministry, electronic retailing accounted for less than 1% of 821 billion US$ retailing revenues in the forth quarter 1999 (ECIN, March 6, 2000). Electronic commerce pundits often view electronic retailing as a threat to conventional retailing (e.g. disintermediating conventional intermediaries). Indeed, Jupiter communications estimates the rate of cannibalization by electronic commerce to be 94% (ECIN, September 1, 1999). Nevertheless, it is myopic to consider electronic and conventional channels only as alternatives. In this paper, I argue that complementarities and synergies between both channel types enable companies to substantially enhance the value they deliver to customers.

Using combinations of different channel types to improve marketing and sales efforts has already been common wisdom before the advent of the Internet. Swartz (1995), for example, describes the effectiveness of combining different selling channels and marketing communications methods (e.g. direct mail, telemarketing and field sales). Moriarty and Moran (1990) find that hybrid marketing channels are even becoming the dominant design. It is only a

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small step to consider electronic channels as an additional component in a hybrid channel structure.

The goal of my research is to understand the issues in the design and management of hybrid channel structures (combining electronic and conventional channels) and their competitive implications. I concentrate on physical consumer products, although some conclusions will probably also be applicable for business-to-business commerce. My research is motivated by two reasons. Firstly, much of the extant electronic commerce literature focuses on the differences and conflicts between electronic and conventional channels and the areas where electronic channels are likely to supersede conventional ones (Benjamin & Wigand, 1995; Bakos 1998; Sarkar et al. 1995 and 1998). While this research makes valuable contributions, it does not thoroughly address the issues that arise when conventional and electronic channels are employed in combination. Only few attempts (known to the author) have been made to investigate hybrid approaches (e.g., Petersen et al., 1997; Steinfield et al. 1999; Steinfield and Whitten 1999). These papers mention possible areas of synergy or complementarity between electronic and physical channels. However, they do not present an operationalized framework or testable hypotheses. Neither do they sufficiently address the competitive implications from a theoretical perspective – a gap that my research attempts to fill.

Secondly, the increasing information intensity of modern companies has significant implications for firm strategy and competition. Most importantly, it leads to a redefinition of the basis of competition. Rather than the 'core' product, companies now increasingly compete on the overall value they offer to the customer (Glazer, 1991). I term this overall value the *value proposition*. This includes the ease with which prospective customers find an optimal product and the provision of supplementary products and services that enhance the value of the core product.

Information is an important component of the value proposition and the underlying business processes. I differentiate between type A information (the information a customer acquires about sellers, products etc. during the purchase process) and type B information (which a seller obtains about customer activities, preferences etc.) Due to their very nature, electronic channels are particularly suitable for the collection, processing and dissemination of information. Nevertheless, they alone do not suffice for the provision of an optimized value proposition. Physical presence is the major advantage of conventional channels that cannot be substituted by electronic channels.

My research is intended to provide insights valuable both for the research community as well as for practitioners. Practitioners should be able to derive value from the analysis of the competitive implications of different channel designs. This refers to parameters such as possible scope of differentiation, costs and difficulties associated with different channel structures, and the impact on the customer retention rate. On the more theoretical level, the research will contribute to three scientific debates in the area of strategic management: substitution of old "rules of business" by the "new economy", disintermediation of conventional intermediaries, and global vs. local approaches to electronic commerce.

This paper represents an initial step in this research. Its prime objective is to understand the components of the value proposition from the customer point of view and how they are addressed by hybrid channel structures. In the next section, I will clarify the concepts used in this paper, that is, channels, channel functions, the value proposition, and the difference between conventional and electronic channels. In section three, I will introduce the customer purchase process as a framework to identify components of the value proposition. In the fourth section, I will exemplify how electronic and conventional channels address these components, paying particular attention to synergies and complementarities between channel types. Finally, section five will present and discuss the research questions that arise and outline a research framework. Figure 1 sketches the conceptual structure of the paper.

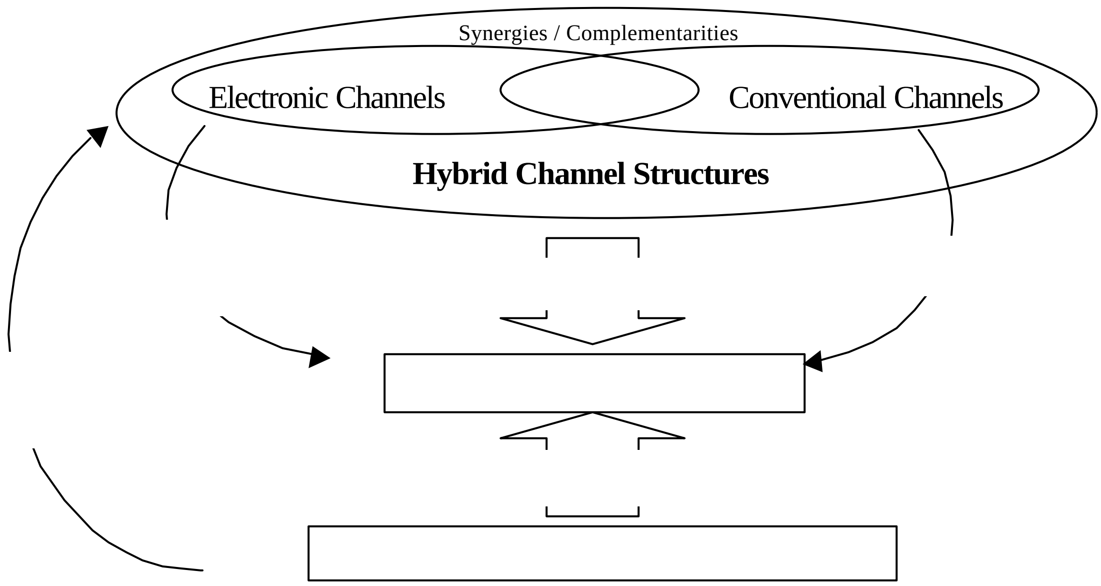

Figure 1: Conceptual Structure

2. Concepts

2.1 Conventional and Electronic Channels

The term *channel* denotes a business structure in which all functions necessary to accomplish the exchange of a good or a service (product) for some form of payment or remuneration between a manufacturer, marketer, or retailer of a product (seller) and an customer can be performed.

Channel *functions* can be divided into three major categories: communication, transaction, and distribution (cf. Peterson et al., 1997). Communication includes advertising and dissemination of product and price information to prospective buyers as well as negotiation between customers and sellers to determine the price and conditions of the exchange. Transaction comprises conclusion of the contract, product order and payment. Distribution refers to the actual delivery of tangible or intangible products. This includes issues of logistics within the channel as well as the method through which the end user obtains the product.

Channels need to be differentiated from marketing communication media (solely used for advertising or to disseminate product information without offering ordering capabilities) and distribution methods (e.g. mail delivery). Marketing communication media and distribution methods do not in itself constitute channels in the sense used here, but may very well be part of a channel structure.

Electronic channels, as opposed to conventional channels, rely on advanced information and communication technology (ICT), i.e. essentially computer networks, to fulfill channel functions. The simple use of phone or fax does not suffice. Examples of electronic channels are the Internet and proprietary networks such as the French Minitel or the German T-Online. Electronic channels can be used for all three types of channel functions. Firstly, computer networks provide a new means of communication (e.g. WWW, e-mail). Hoffman and Novak (1996) differentiate between one-to-many, interpersonal and many-to-many communication. They point out that the Internet and particularly the WWW enables a many-to-many communication model unparalleled by any other communication medium. This model is characterized by interactivity - either with the medium (e.g. provision of content) or through the medium (interaction with other people) – and virtualness, i.e. the presence in a simulated environment. Traditional mass media, on the other hand, incorporate a one-to-many communication model in which firms disseminate information to prospective customers. This model lacks both interactivity and virtualness. Interpersonal communication can occur both in conventional as well as in electronic channels. However, only conventional channels can enable an unmediated face-to-face communication (e.g. between sales representative and customer), while electronic channels are by definition computer-mediated.

Secondly, a variety of technologies (e.g. electronic payment systems and digital signatures) enable the electronic performance of transaction-related functions. In principle, there are four variants of electronic payments: credit cards, electronic cash, electronic checks and smart cards. Credit cards are by far the most commonly used among them. Digital signatures are a means of ensuring authenticity of the participants in an electronic transaction. It is most of all their transaction-capability that has led to the significance of electronic channels as an alternative medium for commerce. However, transaction-related functions are also the area where electronic channels suffer the strongest problems. Governments world wide are currently in the process of legally accepting digital signatures. This will be a great breakthrough for electronic commerce. The usage of electronic payments at the consumer level, however, is still burdened with problems such as credit card fraud, incompatible standards, customer fear etc.

Thirdly, electronic channels can be used as a medium for the distribution of digital products such as software and electronic newspapers. In this paper, I focus more on physical products. In this case, electronic channels need to rely on conventional means of distribution. Nevertheless, the distribution-capability of electronic channels is relevant also for physical products in the respect that value-adding and supplementary information-based products can be delivered electronically.

2.2 The Value Proposition

I use the term *value proposition* to refer to the overall value a customer receives with a product, that is, the benefits of the product and its ability to satisfy the need or wish of the customer measured against the pecuniary and non-pecuniary costs the customer incurs. The value proposition thus includes the value of the core offering (product or product solution), the value of supplementary products, which enhance the value of the core offering, and the value of the support less the difficulties the customer encounters during the purchase process. The *purchase process* itself comprises all actions a customer has to perform in order to satisfy his need. These actions range from initial awareness of a need to the actual transaction to product usage. For the purposes here, the purchase process needs to be defined in the broadest possible way, including the consumption or use of the product. I will elaborate on the purchase process in the next section. The activities a customer performs in the purchase process are directly related to the channel functions, which serve both as the interface between customer and firm and facilitator of the customer's activities.

In this paper, I assume the core offering (product or products) as given. However companies have a scope in changing certain features of the product(s), in choosing which supplementary goods and services to offer, and how to perform channel functions. Thus companies possess a large number of options to influence the value proposition and thereby differentiate themselves from competitors. This may prove particularly valuable for commodity products. Incidentally, in most cases companies will not be able to offer all components of a value proposition equally well. Therefore they are forced to co-operate and engage in strategic alliances.

The concept of the value proposition is not at all a new one. The reason why it is used as the central fundament of my argument is the increasing information intensity of business. Glazer (1991) defines the *information intensity*[1] of a firm as the share of the value of the firm, which is created by collecting, processing, and applying transaction-based information to later transactions or by selling this information. Electronic channels and electronic components in conventional channels (e.g. POS scanners) are the tools with which companies could increase their information intensity. This in turn enables companies to learn about customer needs and preferences and adjust their value proposition accordingly. Thus the value proposition rather than only the core product becomes the focus of competition. Glazer also notes that the value of information increases the more of it companies possess (information economies-of-scale). In other words, companies will derive more value from information the more transactions they perform and thus the more information they collect. That leads to the result that a large market share and a differentiation strategy favor each other rather than being alternatives. This implies also that Porter’s (1985) framework of generic strategies cannot be applied to an information-intensive industry.

One key attribute of the information-intensive value proposition is personalization. Personalization occurs in three forms: personalized marketing, personalized services, and customized products. Personalized marketing is often also referred to as one-to-one marketing, which denotes a marketing strategy based on the individual as unit of segmentation. One-to-one marketing is facilitated considerably by electronic channels[2]. Personalized services support the activities of a particular customer during the purchase process. This includes decision-making support, software agents that perform price or product comparisons, and the presentation of information (e.g. on past transactions) that provide value to the customer. Finally, information on customer preferences enables companies to adjust features of their products suiting the needs and wishes of individual customers. This capability is also enabled by the usage of flexible manufacturing technologies, which retain economies-of-scale even with differing product designs.

3. The Customer Purchase Process

This section introduces the customer purchase process as a framework that allows to identify the components of the value proposition. Some of the facts presented here may appear obvious

[1] This refers to type B information.

[2] One-to-one marketing should not be confused with the many-to-many communication model employed in electronic channels.

to the reader. However, the purpose of this section is to lay the foundation for section 4. I will dissect the purchase process into steps that correspond to the activities a customer typically performs in order to satisfy a need. Different versions of the purchase process can be found in marketing text books and other marketing-related literature. Kalakota and Whinston (1997) talk about mercantile models that formalize the interaction between consumers and merchants. A model of a purchase process is regarded as a mercantile model from the customer perspective. Kalakota and Whinston divide the activities into pre-purchase interaction, purchase consummation, and post-purchase interaction. Although the last phase already stretches beyond the purchase into product consumption or usage, it should be considered as an essential part of the value proposition. Even after the actual purchase, firms have considerable scope to augment the value a customer derives from a product. Moreover, in this phase customers also begin to form an opinion about repeat purchases.

MacMillan and McGrath (1997) term the sequence of activities of customers along the purchase process the *consumption chain*. They similarly point out that the customers' entire experience with a product constitutes multiple opportunities for differentiation. They also pay considerable attention to the post-purchase interaction, addressing questions such as what a customer really uses a product for, and how he installs, stores, or moves it. Figure 2 gives an overview of the 9 steps I consider relevant in a customer purchase process. The arrows indicate that the purchase process not necessarily needs to occur in a linear sequence. At each step, there are certain critical (type B) information firms should strive to collect from customers (see Table 1). This information may then be used to improve the value proposition.

The purchase process begins with the **recognition of a need or wish**. MacMillan and McGrath (1997) point out that firms should already address the customer at this early stage. They should learn how customers become aware of a need and inform them about the firm's products, which could satisfy this need. Firms may even stimulate the recognition of a need or wish as for example with impulse purchases. Information about customer preferences allows firms at this stage to personalize their advertising efforts.

Once a customer is aware of a need, he begins to **search information** on suitable products. The search includes features of available products, pricing information as well as information on brands and merchants. Depending on the type of product, type of purchase (e.g. initial vs. repeat purchase), and their habits, customers choose different types of search methods. In any case, customers incur search costs greater than zero to decide on which product to buy from where. In order to finally determine which product to buy, customers **evaluate available solutions** and **make a choice** and thereby incur further costs. Both search and evaluation costs are usually not pecuniary and may be approximated by customer's opportunity costs of time. To increase the value to the customer, firms should strive to minimize these costs. However, Bakos (1997) demonstrates that reduced search costs may lead to a stronger price competition between companies. The reason is that customers need to know when to stop searching and to begin evaluating products. Bakos assumes that customers begin to evaluate when costs of continuing the search are higher than the expected benefits of finding a better product. Lower search costs thus lead to a prolonged search with more products in the evaluation set. Product vendors therefore prefer to retain a certain level of search costs and also strive to exhibit products and other features of their offering to differentiate it from competitors. On the other hand, intermediaries that sell comparable products from competing vendors will aim at lowering search costs for products and thereby to increase their value contribution.

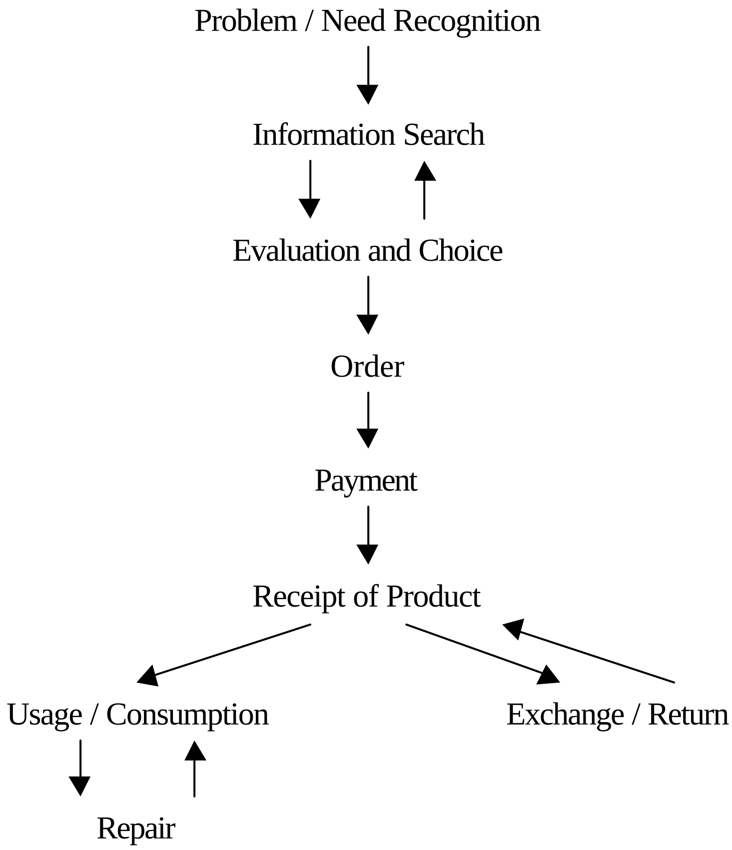

Figure 2: The Customer Purchase Process

After the customer has decided on brand, product and merchant, the customer will conclude a purchase contract with the seller. This may be preceded by a negotiation on terms of the agreement including the price. If the negotiation is not successful the customer may return to the previous step or even engage in further information search. For many consumer products, however there is little scope for negotiation so that the product decision is followed directly by the **placement of the order**. The legal and regulatory environment as well as trust between involved parties are highly important throughout the purchase process, but particularly at the placement of the order.

If the order is made, the customer typically **pays** for the product and **receives** it. These steps may also occur in the reversed order. If the customer discovers defects or other insufficiencies in the product, he might depending on the contract **return** the product or **exchange** it for an alternative product of the same or another type. Otherwise the product will either be **consumed** or **used**. MacMillan and McGrath (1991) correctly observe that products are often used for other purposes than originally intended by the firm. Firms should pay attention because they may change product features to enhance the value of the product for the respective use. Complementary products or services may further augment the product value during usage. In this regard, firms should also attend to how products are installed, stored, or moved around. In case of product failure, customers may also demand repair or support for self-repair.

For many of these activities (order, payment, receipt, exchange and repair), customer have preferences regarding the location to perform them in. With regard to the Internet, this means for example that customers will have preferences whether to order online or offline. Companies should strive to learn about these preferences as much as about product preferences and address them accordingly.

Table 1: Critical Information during the Purchase Process

Customer Activity	Critical Information
Need Recognition	How does a customer become aware of a need? What are the customer's preferences?
Information Search	How and where does the customer search? For which information does the customer search (price, product features, etc.)?
Evaluation & Choice	Which parameters determine the customer's choice?
Order	Where does the customer prefer to order a product?
Payment	Which payments methods does the customer prefer?
Receipt of Product	Which delivery or pick-up method does the customer prefer?
Exchange / Return	How important is it for the customer to be able to exchange or return a product? Where does the customer prefer to exchange or return the product?
Usage / Consumption	What is the product really used for? How is the product installed, stored, moved around? Which supplementary products or services may enhance the value the customer receives from a product?
Repair	Does the customer prefer to repair the product himself or to have it repaired? Where does the customer prefer to have his product repaired?

4. Hybrid Channel Structures and the Purchase Process

With the purchase process as analytical basis, it is now easier to understand the implications of hybrid channel structures for the value proposition. In this section, I will exemplify how the channel functions performed in electronic and conventional channels can be combined to deliver a superior value proposition compared to conventional-only and electronic-only channel structures. I will concentrate on physical store-fronts as conventional channels and the Internet as electronic channel and ignore other types of conventional and electronic channels or communication media. This is only to avoid confusion and does not affect the central argument. Further research, however, needs to address other channel types, as well.

I differentiate between a complementary and a synergetic combination of two channel types with respect to a particular purchase activity. Web sites and physical stores are *complementary* when customers can choose between both channels to perform a particular purchase activity. This enhances their choice and thus creates value. Different customers may then choose channels according to their needs and preferences. Thus firms should also be able to address a wider range of customers. An important issue is that customers may choose the channel for each individual function and not for the complete purchase process, that is, a customer may search online, but order in the store or vice versa. The customer may also purchase online, but return the product to a physical outlet in case of deficiencies.

This complementarity may also stretch across several purchases. In this case, it becomes particularly important that companies enable the performance of all purchase activities in both channel types. For example, Lids offers a free hat once a customer buys six hats from the company – regardless in which store online or offline (CIO, March 15, 2000).

The two channels are *synergetic* if they enhance the value a customer receives during a specific purchase activity. In this case the customer uses both channels to perform the activity and the created value is higher than the sum of value created by using both channels individually.

Friedman et al. (1998) differentiate between channel mix and channel integration (from a company's point of view). In the former case, all channel functions would be performed in both channels more or less independently. Once a customer decides for a channel he would have to stay with it. In the case of channel integration, a customer is served by a single hybrid channel that consists of elements of both channel types. In both cases, there are no complementarities or synergies in the sense above. These will only be attained in a combination of channel mix and integration.

Apart from delivering a superior value to the customer, the combination of electronic and conventional channels also enhances the capabilities of firms to collect type B information about customers (summarized in Table 1). Conventional channels are often supported by IT to enhance their information collection and processing capabilities. Firms with a hybrid channel structure should monitor the behavior of their customers in both channel types (which channel they use and for what purpose) and incorporate the knowledge into their future channel design. Table 2 summarizes the findings of this section.

1. Need Recognition

As mentioned above, firms should both stimulate the development of a need and make customers aware that they offer an appropriate product. At this stage, conventional and electronic channels are complementary and synergetic. They are complementary, because they may reach different customer groups. Technology-savvy customers may spend more time online and are thus more likely to respond to Internet advertising, while others may be more influenced by traditional means of advertising. Impulse purchases are better stimulated by the physical exhibition of products (e.g. groceries), while repeat purchases (particularly of regularly bought products) can be stimulated by targeted reminders in electronic channels (e.g. email notification, recommender systems). However, one-to-one marketing (for example, in form of recommendations á la Amazon's "Customers who bought ..") may also stimulate electronic impulse purchases. Naturally, advertising in both traditional and electronic media also enhances the likelihood that prospective customers learn about a firm's product.

The channels may also be synergetic as customers that receive advertisements online and offline may easier remember the product and also become more interested in it. Firms may adjust their advertising methods accordingly. For example, they may present general product features in traditional mass media and more detailed in electronic media. In this respect, many firms use mass media to advertise their Web site. Physical presence may be another means to this end. For example, Gateway, a computer manufacturer, uses direct marketing strategies to sell their products. Two years ago, the company also opened physical outlets, which serve among other purposes to drive traffic to their Web site (Computer Reseller News, May 4, 1998). The powerful argument behind such a strategy is that for electronic-only players it will be increasingly difficult to drive traffic to their Web sites on an Internet where a large number of seemingly highly similar competitors are presenting themselves. The only likely survivors are those with an already established brand name.

Companies may further stimulate purchases using coupons that allow customer to buy products for a discount. Some firms (e.g. Estee Lauder) have now begun to electronically offer coupons for in-store purchases and vice versa. Web sites may also point out local events in a store and thus drive traffic to physical channels.

2. Information[3] Search

In this area, physical and electronic channels may again be complementary and synergetic. Klein (1998) discusses how electronic channels can transform experience goods into search goods, thus facilitating the search across a wider range of similar products. On the other hand, physical channels can provide both personal (human) advice and physical product exhibition communicating the richest set of product information. Thus customers may choose the channel they prefer for information search.

The combination of both channel types becomes synergetic when customers use both types during their information search. Different phases of the search process may be better supported by different channel types. Physical channels may be more appropriate to aid the customer in finding the right category of product and important parameters to consider. Electronic channels, on the other hand, serve better as a means to search across a large selection of products using a given set of search parameters and to determine a small set of possible items. Physical channels can then provide the opportunity for a detailed observation and testing of products to determine the final item. This is just one example of a possible search process. Peterson et al. (1997) describe several search paths for customers, which use both the Internet and physical stores for information search, also depending on whether the customer searches for a brand, a merchant to buy from, or the actual product.

Electronic channels may provide powerful search support tools. They may, for example, aid the customer in finding the right product parameters. VFCorporation provides the Lee fitFinder[4], a tool that helps women to find the perfect pair of jeans (even though women might buy these jeans offline). A further step is to offer customers the opportunity to customize products according to a set of parameters. Levi's offered this capability on their Web site.[5] Many companies chose not only to offer product information but also information about where to obtain products. Using so-called dealer locators, customers may easily find a physical outlet where to test or buy the actual product.

An important issue for companies is to retain customers regardless whether on their site or in the store – an argument for the provision of ordering capabilities on Web sites. Providing information may otherwise give free rider advantages for rivals. Nevertheless some companies seem to fare well with the strategy of providing information both on and offline. Sears reports that customers had printed out information about certain products from the Web site and then wished to buy these products in the store. This speeds up the sales process considerably. Accordingly some companies began to offer in-store access to the Internet (so called information kiosks) where customers can search online once they are in the store. (CIO, March 15, 2000).

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[3] This refers to type A information.

[4] http://www.leefit.com/

[5] Although highly successful, Levi's has closed its Web site in fall 1999 under somewhat mysterious circumstances.

3. Evaluation & Choice

Conventional channels may support the evaluation and choice with personal advice while electronic channels may offer automated decision support using software agents and similar technology. Both can again be combined either by the customer or through the use of information kiosks (in-store computers providing access to the Internet or proprietary databases). Some companies now also attempt to simulate the personal advice of a sales agent on Web sites using so-called avatars. These are computer-simulated humans that convey the impression of having a personality and thus enhance the electronic shopping experience. At present however, it seems that only the personal contact and face-to-face communication can create a strong customer loyalty (cf. Steinfield and Whitten, 1999; InfoWorld, April 17, 2000), while most of the electronic-only retailers suffer from a lack of customer retention, forcing them to substantial marketing expenditures.

4. Order

Once a decision is made, the order can be placed. Customers may be more likely to make the order in the channel, in which they reached the final decision. In this respect, both channel types are complementary. On the other hand, companies that do not offer convenient order capabilities in the respective channel substantially increase the risk of losing the customer to a competitor that offers a similar (or in case of a retailer even the same) product. However, in-store access to electronic channels can augment the value of physical stores if certain products are not available. The customer or a sales assistant may use in-house access to the Internet to order the product electronically. The advantage of electronic channels in this respect is that it allows the offer of a much wider product range than physical stores, which are often highly limited in space. On the other hand, electronic channels suffer to date from security and trust problems. Customers that are aware of the physical store are likely to have more trust in a Web site, particularly if they order from within a store (Steinfield et al., 1999).

5. Payment

At this stage, electronic and conventional channels are complementary, offering together a wider range of payment methods. Customers may use cash only in physical channels. Electronic cash systems are being developed, however have not achieved widespread acceptance yet. Moreover, electronic and conventional cash do not have exactly the same properties in terms of security, authenticity, and anonymity. On the other hand, electronic payment methods (specifically using innovative payment schemes such as pay-per-view) are confined to electronic channels. Some payment methods (e.g. credit cards) are available both on and offline.

6. Receipt of Product

Delivery of physical products must necessarily occur physically. Electronic players suffer often from the fact that home delivery may be quite inconvenient for the customer. Physical stores, on the other hand, often only offer customers to pick-up the products. Hybrid channel structures may offer the customer to choose between product pick-up at a certain location or home delivery, which adds considerably to the convenience of the purchase process.

7. Exchange / Return

Customers, which have the ability to return or exchange online purchased products at retail outlets are likely to have more trust in electronic channels as well as may appreciate the convenience. The Gap, for example, reports that customers buying clothing online highly appreciate the possibility to return them at a physical store (InternetWorld, November 15, 1999).

8. Product Usage or Consumption

While in the previous two stages hybrid channel structures possessed advantages mostly over electronic-only channels, at this stage hybrid channel structures are superior to physical-only channels. The reason is that electronic channels may be used to provide a large variety of value-adding services or information-based products, which can enhance the value of a physical product (which may have been purchased offline).

Gibson for example provides notes, strings and other products and services for its guitars (that for the time being can only be purchased offline) (CIO February 1, 1998).

Virtual communities facilitated by electronic channels may provide a platform in which customers of a certain product category may exchange questions and ideas to enhance their product experience. Product vendors, which facilitate the emergence of a virtual community for their product are likely not only to increase the rate of customer retention but also to learn more about customer preferences (Armstrong and Hagel, 1996).

9. Repair

Similarly to stage 7, electronic and conventional channels are complementary in the respect that the customer may choose whether to turn to a physical outlet to have the product repaired, to send it via mail back to the producer, or to obtain help to repair the product himself.

Table 2: Complementarities and Synergies of Hybrid Channel Structures

Customer Activity	Advantages of Hybrid Channel Structures
Need Recognition	- complementary: addressing different customer segments; addressing first vs. repeat purchase; - synergetic: cross-advertising; e-channels can use IT to announce personalized offering
Information Search	- complementary and synergetic: customer has multiple search options
Evaluation & Choice	- complementary and synergetic: e-channels may provide automated decision support tools and c-channels personal advise
Order	- complementary: customer may use preferred channel to order - synergetic: physical presence may increase trust in electronic channels; in-store information kiosk may provide access to wider product range
Payment	- complementary: customer may choose preferred payment method
Receipt of Product	- complementary: customer may choose between pick-up or home delivery
Exchange / Return	- complementary: customer may use preferred channel
Usage / Consumption	- synergetic: electronic channels may provide supplementary services and products
Repair	- complementary: customer may use preferred method of repair

5. Research Questions

In this section, the research questions, which arise from the emergence of hybrid channel structures are discussed. The research needs to be carried out from three perspectives. Firstly, it needs to address the customer perspective. This means that the qualitative evidence provided here needs to be studied in more quantitative terms in order to obtain generalized statements. Secondly, research also needs to address the company perspective. This comprises all issues relating to how companies can design and manage hybrid channel structures. A final perspective needs to address the competitive effects of hybrid channel structures and the resulting implications for firm strategy.

5.1 Customer Perspective

Future research needs to validate the suggestions regarding complementarities and synergies made in this paper in relation to different product attributes. Particularly, the following hypotheses should be addressed:

1. Hybrid channel structures enable firms to reach a wider range of customers and also to increase the effectiveness of advertising efforts.
2. Hybrid channel structures lead to a higher rate of customer retention.
3. Physical presence enhances the trust of customers in electronic channels.
4. Customers prefer to order in the channel, where they conduct the final evaluation of products and are otherwise more likely to purchase from a competitor.

Among the stages of the purchase process, the information search presents the most complex interaction of electronic and conventional channels. Further research needs to identify different search paths and the parameters that determine the path.

Finally, research should address to what extent new technologies (avatars, 3D technology etc.) might substitute the value provided in conventional channels and thus diminish the added value of hybrid channel structures.

5.2 Firm Perspective

Firms, which strive to enhance the value proposition need both to collect type B information about customers and to design a hybrid channel structure, which addresses customer preferences accordingly. Collecting and processing customer information may, however, create severe challenges for firms. Customer may fear that their privacy is invaded and would therefore be reluctant to offer information. Firms collecting information secretly run the danger of obtaining a bad reputation in public.[6] Moreover, firms need to ensure a seamless transfer of information across channels. Firms may also have difficulties in analyzing the data they collect and transforming it into a superior channel design and management.

When designing the channel structure, firms need to be conscious about which channel they use for what purpose. For example, the electronic channel may only be used for repeat purchases while conventional channels facilitate customer acquisition. Companies will also encounter a number of difficulties in the design and management of hybrid channel structures:

1. Hybrid channel structures may require substantial additional expenditures, which need to be balanced with the enhanced value proposition.
2. Channel conflicts may harm the relationship with business partners.
3. Pricing between channels needs to be coordinated. The advantage of electronic channels for flexible pricing may thus be forgone.
4. A consistent company image should be preserved across channels. Selling a brand product at low price on the Internet may undermine a firm’s brand. Sloppy Web sites may cause customer confusion and damage a company’s image.
5. When handling the customer flow across channels, companies should be careful about retaining the customer within their own channel structure. A physical show room may otherwise easily drive customers to a competitors Web site.

These issues may be best studied in form of case studies, since quantitative studies will not only suffer from difficulties in obtaining reliable and sufficient data, but will also not be able to capture the idiosyncrasies and complexities of an individual firm’s channel structure.

5.3 Competitive Implications

Hybrid channel structures are likely to have a strong impact on the way companies cooperate and compete. Generally, hybrid channel structure enable a larger scope for differentiation thus reducing price-based competition. On the other hand, hybrid channel structures may become sine-qua-non for successful competition. Successful differentiation may then depend on a large information base, thus favoring bigger players. Companies will therefore fight more for market share.

Furthermore, it is unlikely that a single company can provide all aspects of the value proposition by itself. It can therefore be hypothesized that hybrid channel structures lead to even

[6] A recent example is DoubleClick, a case, which has extensively been discussed in the Internet press.

more cooperation between companies that specialize on certain aspects of the value proposition. We are therefore likely to witness a strong specialization of intermediaries (cf. Sarkar et al., 1998).

A physical presence is usually considerably more expensive than an electronic one. Electronic merchants may thus free-ride on the physical presence of competitors. Electronic sales of cars are an example in point. Customers can rather easily test drive cars at dealer sites and then purchase a cheaper version of the car online. Companies will have to find counter-measures to such problems.

A further implication of a hybrid channel strategy is a possibly more localized approach, where electronic channels are used to support an existing physical presence. Some research however indicates that established SMEs often use the Internet rather to reach far-away markets (Steinfield and Whitten, 1999). The emergence of hybrid players will nevertheless fuel the discussion of global vs. local approaches to e-commerce.

Another interesting area is the co-opetition[7] between intermediaries and product manufacturers. Intermediaries selling products from different vendors increase their value to the customer the more unbiased information they present on a selection of products, thereby effectively reducing search and evaluation costs and increasing price competition between vendors. Vendors, on the other hand, may use electronic channels to sell around intermediaries with channel conflicts as the result.

Finally, it is interesting to understand whether established companies, which leverage their brand name and competencies into the Web, or Internet companies, which begin establishing a physical presence will benefit more from hybrid channel structures. Intuitively, an established conventional brand name will be easier to leverage into electronic channels than vice versa.

I intend to investigate these questions and hypotheses on a more theoretical level. One goal is to assess the applicability of previous research on competition and strategic management to the “new economy”. I deem empirical studies as insufficient for the time being due to immaturity of e-commerce. Although a number of signals indicate that a shake-out will occur throughout the next 2-3 years, we do not yet know whether this will lead to more stable business models.

6. Conclusion

As this paper has shown, companies using hybrid channels have multifarious opportunities to enhance the value proposition considerably. More and more companies seem to embrace these opportunities. Egghead.com has just a few years ago closed all its physical operations to engage solely in electronic commerce. Now the company has re-established its physical presence (although differently from the original model). Similarly, the direct-seller Gateway established physical presence using show rooms to demonstrate customers their PCs, thus driving traffic to their Web site.

This paper uses the customer purchase process to identify important components of the value proposition and then discusses the complementarities and synergies between conventional and electronic channels using these components. However, the evidence presented is only

[7] simultaneous competition and co-operation (the term “co-opetition” was coined by Ray Noorda, founder of the networking software company Novell)

qualitative and needs to be validated in quantitative studies. This paper therefore outlines directions for further research and presents research hypotheses and questions.

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