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Enhancing customer value through click-and-mortar e-commerce: implications for geographical market reach and customer type ☆

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Abstract

Firms continue to focus more attention on how to make use of the Internet for commercial purposes. Traditional firms are integrating their existing market channels and their online presence, into what is often called click-and-mortar e-commerce. In this paper we will discuss how click-and-mortar e-commerce generates synergies and customer value, and what implications it has for the type of customers and the geographical market a firm serves. The analysis of eighteen Dutch firms from a variety of industries has the following results. First of all, click-and-mortar e-commerce is used to strengthen relations with existing customers in geographical markets where firms are already active. Secondly, click-and-mortar firms are able to serve relocating customers and re-establish contact with customers who have moved away. Thirdly, click-and-mortar e-commerce can make it easier and less costly to make a purchase within a firm's existing market, which may have the effect of bringing in new customers in that market. Contrary to the usual expectations for e-commerce, click-and-mortar e-commerce are to a lesser extent used to penetrate new, more distant geographical markets, nationally as well as internationally. The case studies also indicate that the degree of click-and-mortar e-commerce

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integration influences the way in which firms exploit synergies, as well as the possibilities to target different customers and geographical markets.

Keywords: Click-and-mortar e-commerce; Integration; Customer value; Market extension; Case studies

1. Introduction

In recent years the debate on the business relevance of the Internet has shifted from discussions on business models for Web-based firms towards click-and-mortar e-commerce (Frazier, 1999; Schwartz, 1999; Steinfield et al., 2002). Click-and-mortar e-commerce is defined as those traditional firms trying to derive synergies from the integration of a (e-commerce) Website with their physical presence in the market place, such as a retail outlet.

Traditional firms and purely Web-based firms have different competitive advantages. The benefits offered by traditional firms are, for example, face-to-face customer interactions. Traditional firms try to retain existing customers through advertisement and store loyalty programs. New customers and markets may be targeted with advertising, distributing catalogues, setting-up call-centres, or building new stores. The advantages of Web-based firms are the 24/7 ordering capabilities they offer, and possibly a deeper product selection, among other things. Web-based firms often target national markets, defined by the language of the Website. To retain customers, Web-based firms offer, for example, wish lists, product customization, e-mail reminders, electronic suggestion services, etc.

A primary research question addressed in this paper is how traditional firms utilize e-commerce in conjunction with their existing physical assets. One of the strengths of Web-based commerce is the relatively low cost that firms incur to serve customers regardless of location, resulting in a common perception that e-commerce is insensitive to distance (Cairncross, 1997). Retail stores, however, are quite sensitive to distance, and mainly target those potential customers living in a local market. Using a simple additive logic, we might thus expect click and mortar firms to rely on an e-commerce channel for reaching distant markets, while physical outlets focus on serving local markets. However, an alternative expectation can be derived from the notion of complementary assets and more resource-based views of firm strategy (Teece et al., 1997). According to this perspective, click and mortar firms would seek to leverage their existing physical assets rather than simply add e-commerce as an independent new market channel. Hence, it would be equally plausible to find that e-commerce is used as much or more to enhance a click and mortar firm's ability to serve the local markets around its physical outlets as to serve distant markets. Such a view directs our attention not only to the geographical market targeted by click and mortar firms, but also to whether such firms use e-commerce more for customer retention than new customer acquisition. It is likely that the combination of channels affords a variety of potential synergies that can provide benefits both to local and non-local, as well as new and returning customers.

The goal of this paper is to explore how customer value created by click-and-mortar e-commerce influences the geographical market reach of a retail outlet and the extent to which a firm targets new or existing customers. We will explore if a categorization of click-and-mortar cases based on market areas and customer type illustrates different ways to exploit e-commerce. We will explore how click-and-mortar e-commerce influences the ability of traditional firms to acquire new customers, retain existing ones or recover lost ones.

First, we review the relevant literature and present a framework to analyse the effects of click-and-mortar e-commerce on customer value, within four combinations of customer type and geographical market reach. In order to explore the utility of our approach, we describe and analyse several case studies of click-and-mortar firms in the Netherlands. We conclude with a discussion of the implications.

2. Review

Traditional firms can adopt a range of strategies to combine offline (e.g. a physical store) and online (e.g. a Website) market channels to derive synergies (Moriarty and Moran, 1990; Porter, 2001; Steinfield et al., 2002; Venkatesh, 1999). Synergies refer to the idea that the integrated combination of complementary resources, goals and skills yields greater results than a simple sum of the individual parts (Goold and Campbell, 1998; Porter, 1985). Synergies are derived from economies of scope and efficiency gains resulting from shared resources and skills.

Establishing synergies between offline and online market channels can improve operational efficiencies (e.g. reduction of channel costs), enhance market differentiation (e.g. enhance customer value), improve customer relations and extend geographical market reach (Friedman and Furey, 1999; Gulati and Garino, 2000; Moriarty and Moran, 1990; Steinfield et al., 2002). Fig. 1 offers a framework for the analysis of how customer value can be enhanced by click-and-mortar e-commerce and how this can be conceptualized in terms of geographical market reach and customer type.

The framework is related to Ansoff's model on product/market expansion (Ansoff, 1957), theories on market strategy (Ansoff, 1957; Johnston, 2001; Kotler, 1997), the

		Customer type	
		Existing Customers	**New Customers**
Geographical Market Reach	**Existing Areas**	**Status quo markets** and **Over-served markets**	**Under-performing markets**
	New Areas	**Adjacent under-served markets** and **Moving or lost markets**	**Unserved markets**

Fig. 1. Framework to analyse the impacts of click-and-mortar e-commerce.

resource-based view of the firm (Abell, 1980; Hamel and Prahalad, 1994; Penrose, 1959; Porter, 1985), and the integrated marketing approach (Moriarty, 1996; Schultz et al., 1993). Our framework emphasizes the augmented product concept, which refers to elements that help firms to differentiate their core product and service from their competitors (Levitt, 1980; Lovelock, 1995). Focusing on existing and new customers makes sense as the Web is assumed to induce differentiation of the company's product range (Bakos, 2001) and change the nature and availability of augmented service elements, described below as service quality. Our framework does not assume that the geographical markets of particular products are already served at full capacity. As the Internet provides firms and customers with opportunities to reduce transactions costs (e.g. transportation) (Bakos, 1997; Benjamin and Wigand, 1995), click-and-mortar e-commerce can be used to address challenges facing different market settings, which are discussed below. E-commerce applications can achieve strategies in multiple cells of Fig. 1 at the same time. In addition, Web-based applications can both result in improved and new services and change a company's current product assortment.

2.1. Enhancing customer value

Click-and-mortar e-commerce provides synergies that enhance customer value for both existing and new customers in different market areas. Customer value is defined as the relationship between costs and value (Kotler, 1997). Customer value, which is a non-financial performance measure, may lead to an improved financial performance (Rust et al., 1995). In this paper we focus on the non-financial or intangible benefits and costs defining customer value, referring to the fit between an augmented product and the needs of a customer. Customer value is generated when a firm interacts with its customers, characterized by three phases, namely pre-sales, sales and after-sales (Friedman and Furey, 1999; Huizingh, 2002; Moriarty and Moran, 1990). Combining an online presence with a physical store can create customer value, since the added or changed channel capabilities within each selling phase may fit customers' needs better. By providing more added value firms are better able to retain customers.

The Internet influences the following attributes of customer value: service quality, product (quality) attributes, and monetary price (Bucklin, 1966; Kotler, 1997; Stern and Ansary, 1992). First, click-and-mortar e-commerce can enhance service quality, combining as it does the advantage of Web-based selling (e.g. 24-hour availability and deeper selection) with the benefits offered by physical stores (e.g. face-to-face contact and instant gratification). More importantly, blending all customer interactions initiated or performed in multiple integrated market channels enables customers to cross or use channels smoothly and seamlessly within or between the various phases of the sales process (Steinfield et al., 2002). This 'handoff' capability (Lovelock, 1995) can enhance customers' shopping experience, reduce the costs of 'lost' sales (Andersson and Melchiors, 2001) and allow customers online to finalize their purchase in a retail outlet. In addition, click-and-mortar e-commerce helps a firm get a better picture of its markets, thus increasing its responsiveness to customer needs which in turn can increase customer loyalty (Frazier, 1999; Srinivasan et al., 2002; Steinfield et al., 2002). Secondly, e-commerce also affects product (quality) attributes. For example, Web-based applications can enhance the firms' ability to assist clients to customize or even personalize products. Furthermore, digitization of products, such as music, may increase the customer's uses of particular products in ways that better fit his or her needs. Thirdly, click-and-mortar e-commerce may reduce the price of a product, due to the improved operational efficiency (Steinfield et al., 2002).

2.2. New and existing customers

Businesses can use e-commerce to generate revenues by selling more to first time (existing) customers and by attracting new (repeat) customers (Peterson et al., 1997). New customers need to be made aware of a firm and its offerings, and will not have as much familiarity with the brand, resulting in higher costs to establish a sale. E-commerce can be used as a tool to offer added value to existing customers, which helps retain and/or intensify the relationship with these existing customers. By the same token, e-commerce reduces the costs per customer contact compared to traditional channels, and expands awareness and reach into new geographical markets, enabling the firm to attract new customers or to focus on previously marginal customers or recover lost ones (Huizingh, 2002; Steinfield et al., 1999). Therefore, a distinction is made between new and existing customers in our analysis, in order to explore whether click-and-mortar firms target one type over the other.

2.3. Geographical market reach extension

Firms can either 'export' their products to new geographical markets or establish a physical presence within the targeted areas (Dicken, 1992). Geographical market reach extension is a function of the product range and threshold of a store. The product range implies that the willingness to travel by consumers to purchase a product depends on the type of good offered at a retail outlet (Christaller, 1966; Johnston et al., 2000). The threshold of a store is the minimum turnover necessary to operate a single store at a commercially viable level. Small and geographically dispersed markets (Peterson et al., 1997) pose particular challenges for firms. Click-and-mortar e-commerce enhances a firm's ability to develop strategies between the two market expansion strategies, and to combine the advantages of the two different organizational forms (Michael, 1994). As a result, click-and-mortar e-commerce can attract new or infrequent distant customers that normally would not be prepared to travel to the store's location. For example, a Website can be used to highlight store events or to enable customers to check product availability within a single store. Also, a reduction of the shopping costs to the customers can enhance the value of services offered by a store (Ginsburg and Morris, 1999). Finally, e-commerce can increase the total number of customers served, thus reducing a store's threshold.

2.4. Relations between geographical market reach and customer type

There are four basic market settings with six types of relations between customer type and geographical market reach that can be attributed to customer value generated by click-and-mortar e-commerce.

- *Status quo markets* (existing areas and existing customers): These markets consist of urban and suburban areas with a relatively large number of retail outlets. Click-and-mortar e-commerce can consolidate a firm's market share through differentiating the stores' offering from the competition and increasing the retention of existing customers. For example, in-store kiosks can increase the depth and scope of the product range offered at a retail outlet. Secondly, firms can build on their existing customer base by branching out into complementary services offered on the Web. Thirdly, Internet technology can provide stores with cost-effective tools to offer made-to-order products.
- *Over-served markets* (existing areas and existing customers): Firms may have a number of physical outlets in market areas, which is at odds with the number of customers served. These stores may exist for historical, social or cultural reasons. A straightforward reduction of the number of stores can be avoided if outlets can lower their operating cost by replacing routine transactions, traditionally performed in the store, with Web-based applications.
- *Under-performing markets* (existing areas and new customers): People with particular characteristics, such as a relatively high purchasing power or a busy time schedule, may prefer ordering from a store's Website since they value the convenience of home-delivery. Click-and-mortar e-commerce may help change a firm's value propositions to attract these types of new customers.
- '*Lost*' *markets* (new areas and (pre-)existing customers): A store's Website can be used as a tool to keep serving or re-attract former customers who are beyond the reach of existing retail outlets, because they have moved or were lost to competing firms. Furthermore, sharing customer data across a retail chain makes it easier for firms to keep serving customers after they relocate.
- *Adjacent under-served markets* (new areas and existing customers): Geographical markets adjacent to urban areas often lack the market size to reach the threshold of a retail outlet, particularly when it comes to speciality products. People living in such under-served areas face higher purchasing costs (e.g. higher prices or longer travel time) compared to adjacent urban areas. The higher costs may make for a lower or an infrequent demand on the part of these customers compared to people living close to a retail outlet (Dawson, 1980). Click-and-mortar e-commerce can be used to reach these infrequent customers. For instance, in-store networked kiosks can enable customers to order products online that are unavailable in local stores and to collect merchandise locally. Furthermore, online product informa-

		Customer Type	
		Existing Customers	New Customers
Geographical Market Reach	Existing Areas	Maintain or deepen relationships with existing customers by offering greater value with means of complementary services or lower costs *and* Rationalize retail outlets to maintain close physical proximity to customers	Change products and services (quality) to appeal to customers who appreciate convenience or lower costs
	New Areas	Deepen relationships with infrequent customers by reducing the costs of distance *and* Re-establish relations with customers who moved away	Penetrate un-served markets by targeting prospective customers

Fig. 2. Click-and-mortar e-commerce synergies and the effects on customers and markets.

tion can provide distant customers with pre-sales and after-sales services thereby reducing the customers' costs.

- *Unserved markets* (new areas and new customers): Firms can also target unserved markets by establishing a physical presence. This can be a costly operation, due to costs associated with customer acquisition, fulfilment facilities and adaptation to local market characteristics. Instead, firms can target new customers in international markets by using a Website to establish a closer proximity to prospective customers. Localized products or Websites can increase of the attractiveness of the products or services on offer. A third option to enter unserved markets is to establish an alliance with local partners, based on the complementary resources and skills of the partnering firm.

An overview of the relations discussed is shown in Fig. 2. Starting from this framework we analysed data that were collected in a set of case studies of click-and-mortar e-commerce in the Netherlands.

3. Methods

A team of researchers collected data on eighteen Dutch firms. Firms were selected on the basis of their ability to sell goods on the Web, while trying to integrate their online and their offline market channels. We selected a large and small firm in each product segment to add more variability to the possible click-and-mortar e-commerce approaches (see Table 1). The selected firms operate in the business-to-consumer as well as the business-to-business market. Data were collected from March to July 2000, by means of semi-structured interviews based on a common framework. In addition, we performed a literature review and assessed the firms' Websites. Multiple interviews were carried out on-site with e-commerce managers who were responsible for the whole firm or a particular business unit. Our data analysis focussed on the effects of channel integration on customer value, geographical markets and customer type.

Table 1
Summary of case study firms

Type of firm	Number and relative sizes of firms included	Nature of goods or services sold
Network equipment manufacturer	One large firm	Physical goods
Telecom operator consumer outlet	Two large firms, including one dominant	Physical goods
Telecom operator business centre	Two large firms, including one dominant	Physical goods
Office supply	One large firm	Physical goods
Groceries	One large firm, one alliance of two SMEs	Physical, perishable goods
Automobile sales	One large firm, one SME	Physical goods
Bicycle retail	Two SMEs	Physical goods
Music retail	One large firm	Information goods
Financial services/banking	One large firm	Information services
Book retail	Two large firms, one SME	Information goods
Travel planning	One large firm	Information services

SME = small and medium sized enterprise.

4. Case studies

This section provides case study descriptions for those firms which were illustrative for each cell of the framework. Sometimes firms had multiple objectives in mind while implementing their e-commerce strategy. Firms were placed in the cell that best matched the emphasis of the strategies pursued.

4.1. Status quo markets and over-served markets (existing areas and existing customers)

4.1.1. A financial services and banking firm

The firm is a co-operative banking network, sharing a common brand name. The independent branches are owned by their members, who are not shareholders in the traditional sense of the word. Profits are used to sustain and improve customer services and reduce the costs of services. Local banks are actively involved in their regional community, through providing financial aid to regional events, elderly citizens and schools.

Due to the saturated market for banking services in the Netherlands, one of the firm's objectives is to reduce costs without jeopardizing its role within the community. Customers who want to perform standard transactions and routine activities at the branches are directed towards the more cost-effective online channels, such as call-centres or the bank's Website. Employees at the local branches draw their customers' attention to the cost and timesavings and the enhanced services offered online. At the same time, the branches upgrade their personal advice and educational capabilities to provide higher value-added services and products.

For placing stock orders, the firm differentiates prices between its channels, since it passes the cost advantage of online channels on to its customers. The costs of placing a stock order are highest in the physical branches, using a telephone is cheaper, and the lowest transaction costs are charged for ordering via the Web. The firm stopped offering some of the most costly routine services at its physical branches, while continuing to offer them through its online channels at a more competitive rate. Managers noted that this strategy had not affected customer convenience.

Other click-and-mortar applications help to establish a closer local relationship with customers. For example, new customers can start setting up their account online or start processing an application for a new insurance policy, but are directed to the nearest branches to meet with a customer representative to close the actual sale. Furthermore, the firm exchanges customer information between branches in different geographical markets, in order to customize and personalize its services and direct marketing campaigns.

4.1.2. Telecom operator consumer outlets

The firm exploits the primary consumer retail chain of the incumbent telecom operator in the Netherlands. The store concept incorporates two separate but undifferentiated direct channels, namely telephone and the Internet. Synergies between the channels are minimal due to a conflict of interests between the shops (50% are franchised), and the direct channels with regard to sharing turnover and customer interaction costs.

The consumer outlets in the under-served markets have lower profitability rates, due to the small size of the market and a limited market reach. The firm had plans to reduce the size and inventory of such stores to increase its profitability and market reach. The redesigned stores will carry only 20% of the products accounting for about 80% of the turnover. Through networked in-store kiosks customers could still order items that are not available in the local stores.

The firm also tries to build on its existing customer relations. For example, the firm uses SMS, WAP (wireless application protocol) and I-Mode to highlight promotions and persuade people to visit its stores, clear out inventories and increase impulse purchases.

4.2. Under-performing markets (existing areas and new customers)

4.2.1. An office and computer supplies firm

This firm is an international company selling office furniture and office supplies directly to end-users and through dealers. The unit selling office and computer supplies distributes products from warehouses throughout North-Western Europe. The firm has a centralized IT infrastructure, and the Website provides information in various languages. The IT infrastructure and the network of distribution centres enable the office supplier to offer a 24-hour service at low costs in all the countries it serves. The main objectives of the Website were to reduce customer-handling costs, to increase the market reach of the firm and to target SMEs. SMEs were previously too costly to serve through the traditional channel selling approach, which relied heavily on field representatives.

4.2.2. An alliance between small and medium sized health stores and a Web portal

A Web portal firm focussing on organic and health food formed alliances with local grocery stores in a range of geographical markets in the Netherlands. The alliance was beneficial to all parties, because the local stores could keep their own identity and brand, while joining a (online) brand. Orders can be placed by telephone, through the Website or by fax, which enhances customer convenience and reduces the time needed to shop. The stores are used as local inventories and they also arrange for the delivery of products ordered online. Other advantages of this alliance were the low costs and risks of investments in e-commerce applications by the local grocery firms, while the portal firm gained access to local low-cost fulfilment capabilities and marketing power. The alliance had to limit the places where customers can order fresh produce, partly because of the absence of existing physical stores in such markets.

4.3. Mixed case (existing areas, existing and new customers)

4.3.1. A large music retailer

The music retailer is the largest entertainment retailer in the Netherlands. It is a special case, since the firm's click-and-mortar e-commerce strategy focused on existing and new customers in existing market areas. Web-based orders are sent from the central distribution centre directly to customers or to a preferred store for pick-up. A (parallel) central fulfilment ensured faster and higher quality delivery services. Central distribution makes sense, because 80% of its online sales concerns CDs that are not available in one of the general stores (in particular the so-called back catalogue CDs). Online customers are relatively older and more affluent compared to the traditional store clientele.

The Website, with its deeper and wider product selection, still brings customers to the physical stores, due to the pick-up service, payment options, orientation, order or pre-order. Pick-up services of online ordered goods are possible throughout the Netherlands, and their popularity are related to concerns of secure online payments. Also, the CEO believes that the social aspects of shopping ensure a continued role for the physical stores. Customers will always search for distraction, enjoy browsing through the racks for special offers, see and hear a new CD, or simply buy products at an impulse.

Physical stores are also enriched with networked CD burners, which is part of a new store format. Customers are able to select individual songs and have them burned on demand. The objectives are to reduce the stores' physical inventory and increase customer choice. The floor space that becomes available is used for complementary products such as mobile services and consumer electronics. By including new products, the firm's tries to further exploit its existing customer base, brand name and market clout. Furthermore, the firm strengthens its customer relations by offering an online and offline savings programme to stimulate return visits to its outlets.

4.4. 'Lost' markets and adjacent under-served markets (new areas and (pre-)existing customers)

4.4.1. A medium-sized bookstore

This bookstore has built an excellent reputation based on its extensive selection of books on the humanities and its skilled staff. Recently, it launched an e-commerce Website, pushed by Web-based competition, customer demand and the goal to retain the status of the firm. The company pursues a number of cross-promotional activities, such as the possibility to return books that were purchased online to the store, and branding the Website in the store. The retailer introduced in-store pick-up services to enhance customer value since many customers perceived Internet payments as insecure. Opening new stores is not an option, since the store has strong ties with the local community. A significant proportion of the store's online customer base is located abroad and in adjacent under-served markets, and they are mostly people with an interest in the store's selection of Dutch literature and humanities.

The store decided to co-operate with other booksellers regarding its Web activities. The selection of partners was based on complementary specialization and expertise, and the absence of direct geographical competition. Web-based orders are fulfilled through the store that has the book in stock and is nearest to the customer. In this way customers can handle returns more easily and they are tied to a particular local store, which helps strengthen consumer loyalty. The alliance allows the bookstores to save costs, to use a database that goes beyond their own inventory, and to keep their own identity.

4.4.2. A bicycle wholesaler and importer

The bicycle wholesaler sells high-quality sports bicycle frame-sets, bicycle components and related products to bicycle dealers and other (foreign) resellers. At its Website, end-customers can assemble a frame-set according to their own specifications and choose a dealer (one of the firm's resellers) to build the bicycle. The firm sends this form to the dealer by e-mail or fax, and the dealer contacts the customer to finalize the agreement. The dealer also handles after-sales services such as returns and repairs. This is easier and less costly for the wholesaler than if it were interacting directly with its end-users. In addition, it has helped strengthen consumer confidence and it has reduced customer risks.

4.5. Unserved markets (new areas and new customers)

4.5.1. A medium-sized bicycle retailer

This retailer is located close to the border with Belgium and Germany in the south of the Netherlands. The Website allowed the firm to penetrate these markets by offering bicycles at a competitive price and serve its customers by its existing physical infrastructure. The bicycle retailer has developed a new online brand to differentiate prices between its offline and online offerings. To further avoid obvious cannibalization, only offline customers can use the in-store after-sales services.

5. Discussion and conclusion

The developed framework categorizes the implications of synergies derived from click-and-mortar e-commerce within different market settings, summarized in Fig. 3. Overall, the perceived outcomes as reported by managers fit our framework. Since the analysis was qualitative, one should be careful in drawing any quantitative distinctions derived from the categorization presented in Fig. 3. The observations illustrate the following.

A primary focus of click-and-mortar e-commerce is to strengthen existing customer relationships within existing markets. A number of firms substituted offline services with online applications to reduce the operating costs of retail outlets and continue to be present in the local markets. A few firms used click-and-mortar e-commerce to change the value propositions of products and services offered to target new customers in existing markets. Furthermore, the book and music retailers in particular use the Internet to maintain customer relationships and to continue to

Geographical Market Reach	Customer Type: Existing Customers	Customer Type: New Customers
Existing Areas	• The financial services & banking firm and music retailer offer complementary products online trying to deepen and intensify relationships. • Customers can apply for services online, but they are directed to the nearest branch to meet with a customer representative to close the final sale. • The financial firm and telecom operator outlet offloaded store personal by moving routine tasks to the Web, which is addressing the problem of over-served markets. • The telecom operator outlet plans to limit inventory offline by using in-store kiosks instead. The idea is to reduce operating costs of stores in over-served markets. • The music retailer offers in-store pick-up and after-sales services to offer more convenience and trust to enhance relationships and drive in-store foot traffic. • The music retailer offers in-store kiosks to burn CDs on demand. Kiosks offer more customer choice, lower store operating costs, and create more selling space for complementary products.	• The office and computer supplies firm introduced an e-commerce Web site, which was used to lower customer-handling costs. In effect the firm could target SMEs as new customers. • The bicycle wholesaler and importer introduced a built-to-order Web site, which enabled the firm to reach new customers and offer greater customer value. • The music retailer created a low-cost Web channel to target new customers willing to pay for greater convenience and interested in back catalogue CDs, which are not available in stores. • The health Web portal enables time-sensitive customers to order products and groceries online, which are fulfilled through local health stores at low cost.
New Areas	• The bookstore and music retailer set up Web sites to target non-local, former or infrequent patrons who moved away and/or were lost. • The bookstore formed alliances with specialised bookstores to reduce costs of an e-commerce Web site and increase customer appeal in adjacent under-served markets.	• The bicycle retailer sells to cross-border customers based on the geographical market proximity of it's retail outlet to un-served markets, lower cost structure and competitive pricing.

Fig. 3. Observed click and mortar e-commerce synergies and their anticipated outcomes.

serve clients who are living abroad. E-commerce strategies designed to move into unserved markets were considered complicated and costly, due to the necessary scalability of fulfilment processes and a need for in-depth market knowledge. Another limitation to 'going global' is that some of the firms we studied have no desire to compete with well-known Web-based retailers. Lastly, existing regional market segmentation imposed by manufacturers kept some firms, such as the bicycle wholesaler and importer, from expanding into under-served and unserved markets.

5.1. Implications

Our analysis indicates that firms tailor their e-commerce approaches to improve service to existing customers, possibly at lower (channel) costs, rather than pursuing new customers and markets. The Internet seems to be a tool that supports and enhances the interactions with existing customers, resulting in a greater leverage of existing (physical) resources, complementary assets and capabilities. E-commerce may redefine the notions of distance or place in maintaining and establishing customer relations and marketing efforts, but it probably does not render them insignificant.

5.2. Degree of click-and-mortar integration

The observations indicate further that a higher level of click-and-mortar integration provides firms with more opportunities to derive synergies between online and offline channels. In addition, a higher level of integration accompanied by a restructuring exercise may strengthen competitive advantages, complement existing business practices, or redefine markets altogether (Porter, 2001; Rayport and Sviokla, 1995). The cases seem to indicate that a higher degree of click-and-mortar e-commerce integration directed at existing markets may over time provide greater opportunities to target new markets. However, a greater degree of integration is accompanied by higher IT investments and intangible organizational costs, which firms tried to balance against the influence on customer convenience and relationships.

The cases seem to illustrate four degrees of integration. Firstly, a loose connection between online and offline can yield positive as well as negative effects. For example, the telecom operator consumer outlet did not offer local in-store pick-up and return services. These channel policies sometimes confused customers, and in addition the firm missed a valuable opportunity to save on shipping costs for online ordered products. Secondly, we observed that simple click-and-mortar e-commerce approaches, such as cross-promotion among channels, presented a way to establish closer (electronic) interactions with infrequent customers. Thirdly, sophisticated click-and-mortar e-commerce hand-off services, such as in-store pick up services and completing online initiated transactions within a retail outlet, often required a rethinking of traditional business processes and a complete integration of existing IT systems, point-of-sale systems and new Web applications. Finally, we observed integration approaches that are directed at redesigning the processes that support the e-commerce activities, in combination with a partial or total redesigning of data, IT, and organizational structure. This most sophisticated integration phase is illustrated by the observed tendency to centralize the decision-making processes and value-added services from local retail outlets at national corporate headquarters. The music and book retailers, as well as the banking firm, preferred a more centralized approach since bundling procurement, ordering and fulfilment processes resulted in lower costs and offered greater guarantees for maintaining service quality. However, a centralized structure could jeopardise the enhancement of customer value, because individual retail outlets may have less control and lack the capacity to adapt to changing local market conditions.

5.3. Limitations

There are several factors, which limit our interpretation. To begin with, we did not analyse click-and-mortar e-commerce in relation to the type of products sold by the firms we investigated. Such an analysis was complicated by the fact that many firms had a product assortment that includes both standard and specialized products. Secondly, some cases could not be simply divided into existing and new customers and/or markets. For example, the interviewees of the health food case mentioned that online ordering appeals to new customers. However, existing customers might find themselves in a situation where they also prefer online ordering. Thirdly, and closely related, click-and-mortar e-commerce may influence customer value in more than one cell in our framework at the same time. For example, it appears that an improved service to new customers and market areas described in the upper right cell is sometimes derived from the same click-and-mortar e-commerce applications described in the upper left cell. Interestingly, the strategies of firms that generated multiple outcomes or spill-over effects in other cells seem to indicate that the degree of click-and-mortar e-commerce integration influences the versatile character of the applications described.

Fourth, click and mortar e-commerce sometimes posed a trade-off between reduced channel interaction costs and enhancing customer value. Some firms, such as the bank and telecom operator outlet were using channel hand-offs to search for the lowest total customer interaction costs occurring within the different selling phases. However, these firms did not always introduced or enforced the widest range of potential channel hand-offs, since they were aware of the value of making trade-offs between customer convenience on the one hand and costs of IT integration and organizational redesign on the other hand.

5.4. Future research

Our exploratory framework should be validated using formal quantitative methods. Furthermore, the contingencies of the Dutch market make it difficult to produce an international generalization of our findings. Some of the firms we studied plan to use highly integrated click-and-mortar e-commerce approaches as a corner stone of a redesigned store format. The goal is to reduce the required inventory, and in effect lower the threshold of the stores and penetrate adjacent under-served markets. However, such a redesigned store format may extend geographical market reach, but it may also have a detrimental effect on customer value if it brings down the amount of impulse purchases and direct access to products and services. Researchers should therefore study the evolution of click-and-mortar e-commerce integration over time to distinguish short-term advantages from measurable structural synergy benefits.

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