Association for Information Systems
AIS Electronic Library (AISeL)

AMCIS 2001 Proceedings

Americas Conference on Information Systems (AMCIS)

December 2001

Clicks and Mortar: Redefining Brick and Mortar Business through Auxiliary E-Commerce

David Bahn
Metropolitan State University of Minnesota

Patrick Fischer
American Express

CLICKS AND MORTAR: REDEFINING BRICK AND MORTAR BUSINESS THROUGH AUXILIARY E-COMMERCE

David L. Bahn
Metropolitan State University of Minnesota
David.Bahn@metrostate.edu

Patrick P. Fischer
American Express
fisch081@umn.edu

Abstract

Balancing business strategy and operations between electronic commerce and brick and mortar channels is an ongoing challenge for many businesses. A series of case studies were conducted on traditional brick and mortar firms to examine how they balance strategy-setting and operational issues between online and conventional business channels. The case studies supported the notion that there is no simple formula for how electronic commerce should be used in business-to-consumer operations. Instead there are at least six distinct approaches to achieving this balance whose appropriateness is dependent upon several factors including:

- *The features of the product being sold and their transactional complexity*
- *The need for firms to deliver a differentiated value-added experience as part of the product transaction*
- *The need for firms to provide support and reassurance to their retail networks*

Keywords: Strategic information systems, electronic commerce, strategic impact of information systems

Introduction

With the recent winnowing of "pure-play" business-to-consumer electronic commerce, it increasingly appears that the future of E-commerce is bound up with 'Clicks and Mortar' the balancing of traditional 'brick-and-mortar' with complimentary online business operations. However, there is no generic recipe for a business strategy that balances the operations of these alternate channels. The practitioner literature is, of course, replete with calls for firms to embrace electronic commerce alongside their traditional 'brick and mortar' operations, but offer little in the way of methodological guidance on how to accomplish this remarkable transformation.

Some recent studies have begun to explore the fit of electronic commerce within conventional business strategy as well as what are the appropriate uses of electronic channels by traditional firms. Gulati & Garino (2000) have argued that the degree of integration between brick and mortar operations and online operations is the key issue for electronic commerce success. They identified several strategies for electronic commerce along a continuum of the degree of integration of business operations and product branding. Greater integration of brand and business operations between the online and traditional channels can yield cost savings, but it may dull the degree of focus for each business channel, particularly the flexibility and creativity needed for a new online venture.

A more recent study by de Figueiredo (2000) contends that success with electronic commerce is dependent on a continuum of product characteristics: both the ease of customer assessment of a product's quality and the prototypical variability of quality for the product. He contends that ease of quality assessment for commodity or quasi-commodity products leads to unusually low switching costs in the online venue that render sustainable profitability a virtually unattainable goal. Conversely, 'Look and Feel' goods (with either standard or variable quality) provide the greatest potential for differentiation by electronic retailers. Nevertheless, such products that must be directed experienced by the customer prior to purchase are also those whose sales are most often driven by the brand identity that is predominantly held by brick and mortar vendors. Thus de Figueiredo concludes that (a) traditional vendors of 'look and feel' products that extend their operations into electronic commerce have a significant competitive advantage over firms engaging only in electronic retailing and (b) pure electronic commerce retailers are faced with an unpalatable choice between creating a brand identity for their products from scratch or becoming resellers for the branded merchandise of traditional firms.

However, these studies have essentially examined the issue of 'Clicks & Mortar' from the prescriptive standpoint of how to find success with electronic commerce. The implicit assumption appears to be that conventional business operations are only of secondary interest. This assumption is rather strange, particularly when one considers that as expectations for revolutionary change by electronic commerce have diminished, the likelihood increases that in many or most businesses 'brick and mortar' operations will remain around for a long time, undergoing a process of *evolutionary* change. In that sense, an ostensible goal for research on electronic commerce strategy should be to explore how to optimize the mix between conventional business operations and electronic commerce.

Given a research goal of discovering an optimal balance of 'clicks and mortar', a number of interesting strategic issues are raised:

- How can synergy be achieved between brick and mortar and electronic commerce in way that optimizes the costs and benefits of each channel?
- How can the growth of business volume in each channel be managed without unnecessarily harming the other?
- What is the appropriate balance for investment in each channel?

Framed in this manner, these issues highlight another fundamental question: in a mix between electronic commerce and conventional business operations, to what extent are brick and mortar facilities still needed? To put this even more precisely, what kinds of brick and mortar operations will be required even more to compliment the electronic commerce channels and what kinds of business operations are no longer a good investment of capital? Even more provocatively, will new or altered forms of 'brick and mortar' operations required for businesses in the future? In a sense, the most interesting aspect of electronic commerce may not be what are its intrinsic key success factors, but rather how it influences and redefines the non-virtual 'brick and mortar' space.

Methodology and Research Questions

A series of 25 case studies were conducted to investigate manufacturing and retail firms that were predominantly conventional business operations with supplemental electronic commerce operations. Firms selected for study belonged to a variety of industry sectors: healthcare/pharmaceutical, automotive, fashion retail, lawn/yard equipment, real estate. For each firm the general business strategy and 'brick and mortar' operations were investigated alongside the emergent strategy for electronic commerce and the operations of that channel. In respect to the assessment of business strategy, the following questions were posed:

- Was the firm formulating any kind of coherent business strategy in respect to electronic commerce?
- Was the firm pursing its strategy for electronic commerce in tandem with or independent of its general business strategy?

Porter's (1985) value chain model was used as the basis for assessing the business operations of each channel. The following research questions were formulated in respect to examining the business operations:

- What kinds of transactions/activities could be performed online and which seem to require a 'high-touch' direct interaction with the customer?
- Which activities were performed online and which were only performed through brick and mortar channels?
- How were the conventional channels to the firm's customers being re-shaped by the availability of e-commerce?
- Did e-commerce enhance disintermediation of retailers in the firm's industry?
- Did e-commerce enhance cooperation or 'coopetition' (Brandenburger & Nalebuff, 1997) between different entities in the firm's industry?

Business-to-business e-commerce was only studied in so far as firm capabilities or constraints in this area influenced business-to-consumer initiatives. Moreover, retail firms that operated primarily through catalogue sales were also excluded from the study.

General Findings

In examining the results of the case studies according to the research questions that were posed, it become apparent that most of the firms studied were consciously following a particular approach to balancing the strategy and operations for brick and mortar channels with electronic commerce. Typically, the approach taken by a given firm to achieve the channel balance was governed by strategic and operational considerations of the brick and mortar channels.

Overall, six distinct approaches were observed for balancing electronic commerce strategy with a firm's general business strategy (see Table 1 below). The variance among these approaches was more than just a function of the degree of integration between conventional and electronic channels. There were also underlying considerations in respect to:

- Preserving a differentiated value-added experience for customers in the brick and mortar arena
- Coping with the transactional complexity of certain kinds of goods that limited the firm's potential involvement in electronic commerce and
- Providing reassurance and enhancing the support for dealer/retailer networks that carried the firm's products.

Table 1. Six Approaches to Balancing E-commerce with Brick and Mortar

Direct Integration	Integration of the brick and mortar and online channels to the greatest possible extent
Parallel Lines	Utilizing electronic commerce as an independent, full fledged but subordinate business to consumer channel alongside the brick and mortar channel
Gradual Contraction	Employing electronic commerce to gradually contract and shift business operations away from the brick and mortar channel
Unbundle Burdensome Transactions	Utilizing electronic commerce as a support channel to expedite process components that have been traditionally inexpedient or burdensome within brick and mortar transactions s
Maximize Product Profile	Using electronic commerce only to promote and provide post-sales service for the firm's products to consumers, but not as a channel for product sales
Front Lobby	Creating a broad online listing for the firm and its products, when product features and/or supply chain issues constrain any significant use of e-commerce even for product support and marketing activities.

Direct Integration

In this approach not only are all primary business-to-consumer value chain activities (sales, marketing, & post-sales service activities) performed in both the online and brick and mortar channels, but the online channel is also offered in-store through internet-linked kiosks. As a further effort to integrate the channels, each one is used to cross-promote the other and so create a sense of a ubiquitous multi-channel brand identity. For example, a firm's web address is listed on all packaging materials, while the products purchased on the firm's web site can be returned in the stores if found to be unsatisfactory.

The firms observed to be following the direct integration approach were retailers of branded or partially branded apparel that specialized by market demographics or by recreational functions. The breadth of inventory offered online typically equaled or exceeded that offered in the brick and mortar venue. It was also observed that the firms following this strategy were continuing to expand brick and mortar retail facilities, albeit at a perhaps slower pace than they might be doing in the absence of electronic commerce. Nevertheless, blending the channels enables the brick and mortar stores to offer a much greater degree of depth and breadth in inventory availability than would typically be provided by the same amount of retail store space.

Although direct integration is perhaps the most commonly comprehended approach to clicks and mortar balance it also appears to be the least practiced. This is perhaps not unsurprising given that it is the most expensive to execute. Moreover, it can entail significant operational risks given a typical retail workforce that is unmotivated and/or insufficiently skilled to engage customers in the potential benefits of the online channel.

Parallel Lines

In this approach, firms were observed to be using electronic commerce as a limited-purpose complement to the traditional brick and mortar channel. All primary business-to-consumer value chain activities (sales, marketing, & post-sales service activities) are performed in both the online and brick and mortar channels, but the breadth of inventory offered online is a subset of the product array offered within the brick and mortar venue. Regardless of whether or not firms following this approach provide cross-channel sales returns and service, to the extent that there is any cross-promotion of channels it is the online channel that is used to promote the brick and mortar channel. Indeed, firms following the parallel lines approach strategize the growth and size of their brick and mortar operations without significant consideration of electronic commerce.

Several distinct considerations that underlie the adoption of electronic commerce seem appear to delineate different variations of the parallel lines approach. For retailers whose business strategy is predicated on delivering to customers through a unique value-adding in-store experience (see Pine, 1998) the electronic commerce channel is intended to be deliberately subordinate to that experience. A web site is thus seen as a means to directly or indirectly spur additional in-store foot traffic, a key success factor for such retailers. For retailers that seek to demonstrate convenience to their customers through multi-channel transactional access, electronic commerce is simply one more means of providing access. An example of this would be a drug store chain that offers prescription refills online as well as by phone or fax, with the pharmaceutical goods being a "loss-leader" subset of the total inventory array of the firm that typically includes many convenience goods. For firms that also seek to guard against cannibalization of brick and mortar sales of their products, the electronic commerce channel can be utilized to sell unique product assortments geared for particular event-based needs of customers who may or may not match the profile of those who purchase the firm's products individually in the brick and mortar venue. For example, a vendor of party and entertainment supplies may sell a broad array of products individually in its stores, but still offer a limited set of theme-based product assortments online to more upscale customers. Alternatively, a manufacturer of consumer goods may be justifiably leery of cutting into the sales of its preferred retailers and thus offer online only gift baskets or individual products that have insufficiently broad consumer appeal to be marketed successfully through brick and mortar channels.

Within each of these variations on the parallel lines approach, firms reap additional strategic and operational benefits. Since the inventory array offered online is deliberately narrower than that offered through brick and mortar, outsourcing both the interfacial and order fulfillment components of the online channel is one potential implementation option that can help conserve the limited cognitive resources of firm management. In as much as the electronic commerce channel is adjunct to the brick and mortar, not only does managerial focus on the imperatives of general business strategy remain largely undiminished, but the skill level and motivation of the retail staff in respect to electronic commerce are also not of significant consequence. Of course, the deliberately limited role of electronic commerce may also limit either potential opportunities for increased revenues through online sales or potential cost savings through greater replacement of brick and mortar sales with online transactions.

Gradual Contraction

In this approach all primary business-to-consumer value chain activities (sales, marketing, & post-sales service activities) are performed in both the online and brick and mortar channels, but there is a strategic and gradual retreat from brick and mortar operations as the primary sales channel for profit growth. Brick and mortar retail space is reduced or redefined as sales growth opportunities in the online channel draw greater focus. Moreover, the online channel is extensively promoted through the brick and mortar channel as the firm attempts to transfer some of its brand identity to the electronic commerce arena. The breadth and depth of the inventory available online is greater than that available in the brick and mortar facilities. Nevertheless the reduction in brick and mortar space is gradual and limited since it is through that channel that the firm's brand identity and the visibility of its products are primarily maintained.

The contraction of brick and mortar observed in firms following this approach was manifest in two distinct ways. In the instance of an upscale sportswear retail chain, there was an actual contraction in the number of brick and mortar locations, with sales growth driven towards the online and catalog channels. In the instance of a video rental store chain, it was manifest as a reduction in the amount of retail space used in each store, even though the number of separate locations still grew moderately. The latter instance of brick and mortar contraction was quite interesting in that it also was indicative of a general business strategy to redefine stores into kiosk-like locations that were (a) well located and expedient for customer transactions and (b) easier to open and close more rapidly in a trial and error search for the best locations. In that sense, the augmentation of brick and mortar facilities with a very full service electronic commerce channel may have been helpful but it is unclear to what degree it was essential to the execution of that strategy.

Firms pursuing the gradual contraction approach are not deeply interested in creating a value-added customer experience in the brick and mortar facilities except in so far as assuring customers of a reliably expedient transaction. A significant question for further research on this approach is just how much brick and mortar space or how many locations are necessary to minimally maintain consumer awareness of the brand identity of the vendor while transaction volume is maximized through electronic commerce. If the primary function of a brick and mortar site evolves into a kiosk for the promotion of greater volume in online transactions, then what kind or size of a kiosk is needed to accomplish this purpose?

Unbundle Burdensome Transactions

In this approach to balancing brick and mortar strategy with electronic commerce strategy, the online channel is used primarily to support pre and post sales activities that are fairly burdensome for the customer when performed conventionally in the brick and mortar venue. Firms taking this approach are often involved with high priced items that are almost exclusively sold through traditional brick and mortar operations due to specialized transactional requirements on the product. Such transactional requirements may include certification of ownership, price negotiation, risk bearing, financing or insurance (Westland & Clark, 1999). Although firms following this approach may perform sales transactions through electronic commerce, this channel is not really intended to function as a significant source for sales growth.

The firms studied who followed this approach were involved with auto or residential real estate transactions. Electronic commerce provides customers with a way to facilitate product search or set up required insurance and financing prior to implementing the purchase transaction in a brick and mortar. By carrying out much of these related activities online, the succeeding brick and mortar transaction is greatly expedited and customer loyalty is thus strengthened. Even post-sales activities such as warranty service or product customization (such as home furnishings) have been offered through the electronic commerce channel. This too served to use the electronic commerce channel as a means to cross-promote the brick and mortar channel by presenting an image of firm expertise in all aspects of dealing with the product.

One particular problem observed of firms engaged in this approach to balancing brick and mortar operations with electronic commerce is the often central role of a dealer or agent in the executing the sales transaction. Theoretically, the capability of electronic commerce to handle burdensome and time consuming aspects of the transaction should free the dealer or agent to better concentrate on the relationship with the customer and on providing quality service in the transaction. Nevertheless, many dealers and agents have been resistant to the redefinition of their roles and are leery of the growing role of electronic commerce.

Maximize Product Profile

In this approach electronic commerce is used to support the sales of products that take place through a network of retailers or dealers. Electronic commerce is utilized for pre-sales activities such as providing advisory to facilitate product type selection or to provide the location of the closest retailer or dealer from whom the product can be obtained. The online channel is also utilized to provide post-sales service and support for the product or to identify where such support can be found. However, online sales are essentially restricted to replacement parts and accessories rather than direct product sales. The overall goal of this approach is to use electronic commerce to maximize the profile of the product to consumers, but only as the product currently exists in its retail network.

In fact, a significant underlying consideration for firms pursuing this approach is to both reassure and support the members of the product’s dealer or retailer network. Dealers and retailers need to be reassured that the supplier is not intending to use the online channel to disintermediate them or to exert pressure on their margins. They also appreciate the pre sales and post sales support offered online in as much as this support adds value and quality to products they are marketing directly to the consumer. Indeed electronic commerce can extend the life cycle as well as the convenience of use for the product by providing ubiquitous access to service information, replacement parts and accessories.

In this approach to balancing electronic commerce with brick and mortar operations the online channel is used to facilitate cooperation between suppliers and retailers rather than disintermediation or competition. For suppliers who may initially have limited access to retail outlets, this approach provides a way to increase the profile of the product in the eyes of consumers while concurrently offering a value added component for the retailers or dealers.

Front Lobby

In this approach the electronic commerce channel is used only to provide broad information about the firm’s products but not to carry out any detailed pre or post sales activities (let alone sales). In essence the firm’s web site is just a broad marketing platform (or electronic front lobby) to make consumers aware of the firm and its family of products. Prime face, this is difficult to identify as a concrete approach to balancing brick and mortar operations with electronic commerce in as much as it resembles the initial online efforts of almost small firms. However, for some firms this initial manifestation of electronic commerce is also the appropriate termination point as well. For a variety of reasons, firms such as original equipment manufacturers may be circumscribed from any direct channel involvement with customers.

For example, one firm observed to be following the front lobby approach was a large manufacturer of paints and resins. Since much of what it produced was sold to consumers under the house label of its retailers, using electronic commerce to provide detailed product guidance to consumers was of questionable value. Furthermore, the environmentally regulated nature of the firm's supply chain was such that it was extremely dependent on its retail network to handle the product distribution as well. The use of electronic commerce to perform more than perfunctory pre-sales activities would have been offering something to consumers that might not be under the firm's control to deliver upon. This firm's primary interest was in business-to-business e-commerce. Interestingly, this firm did use the electronic commerce channel to consumers more aggressively in respect to one family of its products that were less toxic and hence both less regulated and more appropriate as a direct-to-consumer product.

Some Conclusions

Running throughout most of these approaches to balancing brick and mortar with electronic commerce is a common denominator that strategy and operations for electronic commerce can be largely determined by imperatives set within the brick and mortar domain. Moreover, the relationship between product features and the degree of utilization of electronic commerce channels is far more complex than the degree to which a product is 'high-touch' and therefore difficult for the customer to assess the product's quality. Other product factors include transactional complexity, supply chain attributes and the degree to which the mode of marketing the product includes a value added retail experience for the customer. In that sense, strategy for electronic commerce also appears to be a function of, among other things, the ergonomics of the product transaction.

In the context of this research, the notion that it is generally beneficial to initiate electronic commerce for all business to consumer activities appears to be quite dubious. However, despite the necessarily limited role of electronic commerce in many instances, it still can help in supporting and even reshaping conventional business to consumer operations in some surprising ways.

References

Brandenburger, A. & Nalebuff, B. (1997). Co-opetition: Competitive and cooperative business strategies for the digital economy *Strategy & Leadership*; Chicago; Nov/Dec 1997.

de Figueiredo, J. (2000). "Finding Sustainable Profitability in Electronic Commerce". *Sloan Management Review*, Summer 2000, pp. 41-52.

Gulati, R. & Garino, J. (2000). "Get the Right Mix of Bricks and Clicks". *Harvard Business Review*, May/June 2000, pp.107-114.

Pine, Joseph (1998). "Welcome to the experience economy". *Harvard Business Review*, Jul/Aug 1998, pp 97-105.

Westland, J.C. & Clark, T. (2000). *Global Electronic Commerce*. Cambridge, Mass. MIT Press.

Porter, M. (1985). *Competitive Strategy*. New York: Free Press.