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Towards a Framework of Internet Strategies for Established Retailers

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Abstract

This paper reports the findings of research on the strategic responses of established retailers to the challenges and opportunities offered by the Internet and the development of electronic commerce. The paper identifies a range of factors that influence the adoption of Internet retailing and presents a simple framework for categorising Internet strategies based on six case studies of New Zealand retailing companies.

Keywords

Internet retailing, Internet strategy, New Zealand, case studies

Introduction

Electronic commerce offers the possibility of extending or reinventing existing business models as well as creating new ways of doing business, based on the openness and connectivity of the Internet (Timmers, 1999). Many of the opportunities in electronic commerce lie in the application of information, communication and network technologies to the different stages of the value chain involved in the production and distribution of products to customers, and to the linkages between them. Innovative strategies exploit these technologies to create new value propositions for customers (Kalakota and Robinson, 2001).

Firms compete along five dimensions of commerce (Riggins 1999): time, distance (geography), product (or service), relationships (with suppliers, customers and competitors), and the nature of the interaction for the customer. The various well-espoused features of the Internet and World Wide Web, such as real-time communication, cost-effectiveness, ubiquity and global reach, information-richness and multimedia capability, and user-friendly interface, allow "e-enabled" firms to impact and alter each of these dimensions. Riggins (1999) describes some fifteen ways in which firms can use electronic commerce to create new value, based on the generation of efficiency, effectiveness and strategic benefits, across the five dimensions.

For instance, firms could attempt to add value by eliminating time lags in product delivery or providing 24x7 customer service, by removing geographic barriers to customer transactions, by providing completely new products or services, by removing intermediaries or establishing closer customer relationships, or providing new types of user interaction. The emphasis on value creation reflects an increasingly pervasive sentiment that electronic commerce involves a shift in orientation or focus from the product to the customer. By performing these value-added activities at a lower cost than those of competitors or in such a way as to differentiate its product or service, a firm can gain competitive advantage over its rivals (Porter and Millar 1985).

Retailers are increasingly using the Internet to market either conventional or digital products. Some merchants operate exclusively over the Internet, while others complement their physical distribution channels with a virtual storefront. It is these latter, so-called “bricks and clicks” or “clicks and mortar” merchants, which form the main subject of this study. The research studies the reaction of established New Zealand retailers to electronic commerce. The intention is gain an understanding of organisational strategies with respect to electronic commerce through the experiences of these New Zealand companies. Six established retailers were studied.

The structure of the paper is as follows. First, existing literature on Internet retailing is reviewed. The method used in the study is presented, and then the case studies conducted are briefly summarised. An analysis of the factors that were influential in the companies’ development of an Internet retailing presence follows. Finally, based on the findings of the case studies, a tentative framework is developed that categorises Internet retailing strategies along two dimensions.

Internet Retailing

The recent trend in business-to-consumer electronic commerce has involved many existing retailers developing an online retailing presence (Elliot, 2002). Partly this relates to the tightening of venture capital availability in the wake of the “dot com” crash, and partly to the relatively slow awareness of these established companies to the potential use of the Internet as a retailing channel.

Many established retailers are developing Internet-based channels by which to market and sell their goods. In doing so, they gain the ability to use this new channel while retaining their existing physical presence in their market. Existing retailers may be best placed to make the move into electronic commerce. Unsustainable “pure play” Internet retailing business models are disappearing as virtual enterprises with viable strategies consolidate or form alliances with traditional retail partners. Many are adding additional, physical, channels. Multichannel retailing is becoming the dominant model (Barsh et al., 2000; Dennis et al., 2002).

Established retailers bring with them many advantages in going online. Becoming multichannel retailers allows them to leverage their existing brands and customer base. Available resources, whether financial or in terms of market knowledge, are likely to be higher than Internet start-ups. The high cost incurred by an Internet-only retailer in acquiring customers places them at a distinct disadvantage compared to existing retailers when establishing themselves in the market. For established retailers, the opportunities for cross marketing between physical and virtual channels helps to minimise this cost. Many of the competencies developed by an established company in its traditional retailing operation may also be transferable to online retailing. This includes expertise and experience in order fulfilment and a distribution infrastructure.

Of course, there are also difficulties in moving online for established retailers as well. Decisions on the extent of product range to make available online, together with appropriate pricing strategies for both Internet and traditional channels, are two examples. Potential channel conflict is another major management issue for companies using both traditional and Internet-based channels.

DeKare-Silver (2001) and Shaw (2000) present various channel management strategies that retail companies can adopt in order to enter the electronic commerce area. Each of these strategies requires a different level of digital technology adoption and integration. A number of the strategies allow for the integration of technology into the existing physical structure and some require that reductions be made to the physical structure of the company. These strategies include (1) use of the Internet to enhance the marketing of existing channels; (2) using the Internet as a channel to expand or explore new, often global, markets; (3) adding new product lines only for the Internet in an effort to avoid competition with existing distribution channels; (4) creating a separate Internet-based channel and related infrastructure; (5) integrating the Internet channel with existing channels and operations so that customers can choose between complementary channels; (6) collaborating in a joint venture or alliance with an Internet-based company in order to gain multichannel synergies; and (7) moving to Internet-only sales as the electronic operation grows or to prevent a takeover in the face of a perceived inevitable industry shift to electronic commerce.

To take advantage of this new medium, established retailers need to adopt strategies that address the Internet while retaining the commercial viability of their existing operations (DeKare-Silver 2000). The clear message to emerge from the literature is that for a company to develop a presence in the online environment, careful consideration needs to be given to the direction, strategy and expectations of performance before any development work is undertaken. Gulati and Garino (2000), DeKare-Silver (2001) and Riggins (1999) agree that strategy is at the core of any successful Internet retailing development.

Movement into the Internet retailing area is not for all companies and product types. Companies should take into account the suitability of their products to the online environment, especially in the way in which the products are presented and experienced in this virtual environment, as well as the percentage of their target consumers who are likely to have access to the Internet and be inclined to shop online (DeKare-Silver, 2000). Managing the trade-offs between separation and integration is an important requirement for existing retailers moving online (Gulati and Garino 2000). Gulati and Garino (2000) conclude that there are more advantages to be gained from integrating electronic commerce into a "clicks and mortar" type structure than separating out this area of business.

Earl (2000) takes an evolutionary approach to the transition from traditional business to an electronic business. He presents a framework that includes a number of key steps undertaken by companies when developing their business strategy to include the electronic business environment. Earl (2000) suggests that companies tend to begin with an external communication focus, using the Internet to create a static Web site that provides company information and signals that they can be a "modern" company. Building on the knowledge gained from developing an external Web site, companies often recognise the importance of developing an internal intranet, using Internet technologies to build internal communication channels.

With time, the focus changes to evolving the external Internet presence from static information provision to an interactive electronic commerce site, providing a new channel for retailing products. This electronic commerce capability includes services such as online enquiries, order processing, Web based payment services and order tracking. Having reached this stage a company has

integrated Internet commerce into their strategic approach, with the main focus being on the development of the customer base and the development of strategies to fully develop the potential of this new channel (McKay et al. 2000). Earl (2000) suggests that companies at this stage of development need to develop a good channel strategy: “Rarely is this a question of selecting either electronic or traditional channels but of balance and relative positioning of both giving choice to customers” (p. 35).

Further development involves the re-design of business processes and the development of a business model that incorporates all of the advances up to this stage. Much of the infrastructure development is done at this stage, as companies are forced to examine their order fulfilment capabilities. Ensuring that the company can provide the expected level of service and delivery from their customers is important. Indeed, this is one of the reasons that the virtual merchant, Amazon.com, developed a physical presence, building an infrastructure of warehouse and distribution centres in order to maintain quality of customer service (Dhillon et al., 2001). Business process integration results involves the company “e-engineering” its key business processes to integrate front office electronic commerce technologies with back-office systems and link core business systems to key trading partners using Internet technologies. The bringing together of Internet commerce and IT systems) allows the company to develop a combined strategy to take the company forward (McKay et al., 2000).

McKay et al. (2000) also view the path towards total integration of business systems as evolutionary, with each step towards electronic business maturity building on the previous step. Information technology is seen as being at the core of the development. This approach is supported by Venkatraman (1994) who defines information technology as being fundamental to creating and maintaining a flexible business network. A key aspect of McKay et al.’s (2000) approach is that different areas of a company can be at different stages of development. Different levels of maturity may exist for different components of information technology use. Only when a company becomes an extended enterprise, do the various areas have to be totally integrated. At this level of business transformation, external integration with the various trading partners needs to take place. Linking the various parts of the supply chain together using Internet technologies is critical at this stage to enable the company to become an Internet networked enterprise that can respond quickly and flexibly to the changes in the market and make the most of the business opportunities that are presented (McKay et al. 2000).

The theoretical frameworks reviewed in the preceding discussion (DeKare-Silver 2001, Earl 2000, McKay et al. 2000, Shaw 2000) provide a variety of prescriptions for Internet development by established retailers. Often such prescriptions are stage models that assume companies moving online start from a given point (usually a static Web site) and progress to more advanced stages as they evolve their Internet strategies. Such a conception may have been valid in the early days of Internet retailing when organisational learning occurred at a similar pace to advances in Internet technologies and applications. However, today companies may acquire the experience or expertise in aspects of Internet retailing that enable them to enter this arena at a relatively advanced “stage”.

Despite their prescriptive nature and staged approach, these early frameworks provide some useful indications of what is involved in the development of Internet retailing by established retail companies. For example, the Internet may be used for a range of functions, which may not necessarily involve sales transactions. Channel management is a common theme that arises – both in

terms of avoiding conflict with or cannibalisation of existing sales channels, and the integration of an Internet sales channel with the existing retail operation. Finally, some degree of business transformation is likely to be necessary in order to leverage the benefits of online operations.

Rather than propose a unified framework from these elements, the approach taken in this paper is to avoid prescription and instead inductively derive a framework from empirical research (albeit sensitised by this prior theorisation) in established companies. The following section describes the methods used to conduct this research.

Method

New Zealand is a country with a small domestic market and a high degree of technology adoption when compared to the rest of the developed world (Wallace et al. 2001). Currently the New Zealand retail sector is the most rapid adopter of Internet technology, making it an ideal context for this study. Six established retailing companies were selected for study to provide a range of retail markets and business environments (Table 1). The companies selected for this research needed to be large enough in both turnover and supplier network for electronic commerce to potentially impact their operations.

The research method used in the study involved semi-structured interviews of selected members of the case study organisations who were in a position to give a detailed account of the electronic commerce initiatives of their company. In most cases this was the senior manager responsible for information systems (referred to in this paper as the CIO) or, if the company had designated such a position, the manager responsible for electronic commerce. Where possible, the person occupying the same or equivalent position was re-interviewed at yearly intervals in order to acquire a longitudinal perspective on the companies' Internet development. The interviews, conducted over a three-year period from August 2000 to May 2003, are summarised in Table 1.

The interviews were structured around a series of questions related to the strategic approach of each company towards Internet retailing, the process the company went through in deciding to establish an online retailing presence, the people and events that helped shape that strategy, the implementation process, issues that arose in moving retail operations online, any changes to the organisation structure as a result of moving online, lessons learned by the company from its venture into electronic commerce, and the company's future intentions and plans for their Internet retailing initiative.

In most cases the interviews were recorded and subsequently transcribed. A review of available organisational documents and relevant documentation in the public domain was used to supplement the interviews and provide a degree of triangulation. Data analysis involved the identification of key categories emerging from repeated study of the transcripts and documentation. These categories were then compared between cases and synthesised into common themes.

Company	Retail sector	Turnover NZ\$million	Products online	Interviewee	Date
AlphaCo	Apparel	100	600	E-Commerce Manager Chief Information Officer	Aug 2000 Dec 2001

BetaCo	Consumer electronics	130	10,000	Chief Information Officer	Sep 2000
				Chief Information Officer	Nov 2001
				Chief Information Officer	Jan 2003
GammaCo	General merchandise	1,800	2,500	Chief Information Officer	Nov 2001
DeltaCo	Groceries	1,600	14,500	E-Commerce Manager	Dec 2001
				E-Commerce Manager	Feb 2003
EpsilonCo	General merchandise	800	600	Chief Financial Officer	Dec 2001
				E-Commerce Manager	Jan 2003
				Webmaster	Jan 2003
ZetaCo	Engineering supplies	60	20,000	Chief Information Officer	May 2003
				Information Systems Manager	May 2003
				Marketing Manager	May 2003

Table 1. Data collection

Case Studies

A brief description and summary of each of the six case studies conducted is now presented. Based on these findings, factors that influenced the development of an online retailing presence in the companies are presented and a framework for categorising Internet strategies for established retailers is synthesised.

AlphaCo

AlphaCo is a successful apparel retailer that has developed from a catalogue-based background. The majority of the company's turnover is generated from its original mail-based catalogue sales market, although the company now has four physical stores, indicating a stronger move into the physical retailing area. AlphaCo started with a conservative approach to the Internet, their strategy being to develop a basic Web site for the purposes of testing the market and raising brand awareness.

In the 1990s, the company identified that interaction with both suppliers and customers using Internet technologies was a critical area of development if the company was to grow on both a local and global scale while keeping costs down. Supplier interaction was necessary if the company was to reduce the infrastructure costs incurred as a consequence of dealing with these suppliers, and customer interaction through an Internet retail channel offered a valuable opportunity to develop into the electronic commerce area while generating revenue. The company felt it was well placed to take advantage of the Internet through leveraging the existing supply and distribution infrastructure established for its traditional sales channels. However, an initial review found that the internal information technology infrastructure within the company was unable to support a move into electronic commerce.

To solve this lack of technical development, re-engineering of the business processes was identified as being required if any integration of Internet functionality into the existing business structure was to be carried out. Re-engineering of the business processes required a large capital investment, so

initially, a simple Web site presence was developed to investigate this emerging area and to raise existing customers' awareness of the Internet and the possibility of a new sales channel. The company viewed a lack of computer literacy among its core customer base (women aged between 30 – 45 years) as a limiting factor that could affect growth. Rather than educate its core customers, the company has chosen to allow the natural development of skills to take place in the market.

By 2001, the focus shifted towards infrastructure development to support the Internet development. The company initiated a project that involved the replacement of the existing internal systems with modern systems that would allow the company to operate as an integrated channel retailer. Becoming an integrated retailer included the development of the physical, Internet and call centre channels along with the development of systems that allow for integration with the company's supply chain. Recent acquisition of a large offshore customer database that contained a large Web-based sales percentage provided justification for capital to be spent in the area.

The latest strategic development has been to develop the company's Web site into a complete online sales channel, integrating it within the existing retail presence and subsuming it into the existing business strategy. The company views its Internet sales channel as complementary to its direct-mail business. Approximately ten percent of the total turnover is generated through the Internet sales channel. Capturing additional customers and shifting existing customers from the catalogue to Internet also proved to be benefits of this approach.

BetaCo

BetaCo started as a catalogue-based company and has evolved into the largest physical retailer of consumer electronics in New Zealand, with some fifty stores nationwide. The company has a conservative approach to the adoption of new technology and wanted to observe the shifts and changes occurring in the area of electronic commerce before moving forward. The company identified the Internet as a chance to give a large potential customer base access to information about its product range. It purchased an off-the-shelf electronic commerce application to establish a presence on the Internet quickly and cheaply. This application was provided by the same manufacturer as the existing legacy systems hardware and was able to be integrated into the existing system with little additional cost.

The primary objective of this implementation was to provide a product information resource using Internet technologies that the existing customer base could access irrespective of location. As a result of this product information being provided via the Internet, both revenue in the stores and the size of the customer base increased. Customers frequently use the Web site to gather information about the products before using the physical stores to examine and purchase the products:

The benefit to us is not directly in online sales. It's through increased sales through our stores and reduced support requirements in terms of those customers who have found the information out for themselves on our Web site. (Interview with CIO, BetaCo, November 2001)

As the number of people accessing the company's Web site increased, customers started to enquire about using the Internet rather than the mail-based catalogue channel for non-store purchases. The company decided to rethink its strategy about the use of the Internet, and consequently went through a process of development to take advantage of an Internet retailing channel. The company leveraged its existing mail order infrastructure to build the new Internet-based channel. This system

was currently handling orders from a variety of channels – fax, phone and email – and little modification was required to allow the addition of online ordering. Developed from the original basic Web site, new levels of functionality were added allowing for better search response, current stock availability and the ability to purchase some ten thousand products online.

By subsuming this new channel into their existing sales infrastructure, BetaCo allowed the Internet channel to take much of the prior mail-based catalogue turnover. Existing catalogue customers were encouraged to use this new electronic commerce system. While the company has acknowledged that it needs to provide some degree of Internet retailing presence for the group of its customers that want to use this service, it also remains focused on the initial objective to use the Internet as a tool to provide information to customers with the intention of getting them into the stores:

We had a pretty good feel or technical understanding of what the Internet could be used for, and realistically for us it was always another medium for publishing our catalogue and getting product information out before the customers [so they can] research our products. That focus has continued and, as we expected, sales are constantly picking up and progressing. It's probably following the traditional curve of uptake and acceptance and confidence and service. (Interview with CIO, BetaCo, November 2001)

With the development of the electronic commerce application to a level that satisfies the company strategic requirements, BetaCo has now turned its attention to developing Internet-based interaction with their suppliers. The company is aware of the savings that can be gained from adopting an electronic supply chain approach.

GammaCo

This company is a large New Zealand retail group consisting of five distinct businesses. Its two largest New Zealand operations are a chain of some eighty general merchandise stores and a smaller retail operation based around MRO office supplies. Each of the five businesses runs on a different business model. Collectively, the group has adopted an experimental approach to the challenge presented by the Internet and Internet retailing. It deliberately chose to develop an electronic commerce strategy in one part of its operations – the office supplies business. The rationale for selecting this particular business centred on the opportunity to enter a new market segment in corporate sales using the Internet (previously the focus had been on the small office/home office market segment).

Within the office supplies operation, an integrated channel strategy was adopted. Customers can interact with the business by telephone, the Internet or in any of over thirty stores around New Zealand. Customer relationship marketing (CRM) applications are used to track how customers are interacting with the business across the multiple channels. Order status can be checked across any of the channels, irrespective of the initial mode of customer contact:

The reality is it's the about customer choice. You make it convenient to the customer. One day they feel like coming through the call centre, then another day they want to go on the Web, and another day they want to go into the store. All the systems are designed to reflect that. (Interview with CIO, GammaCo, November 2001)

Alongside the integrated retailing strategy, is the use of electronic commerce technology to manage the supply side of the business, increasing supplier collaboration in forecasting and reducing order times. The intention was to build a multi-channel and supply chain management capability for the

group. The advantages of the experimental approach were seen as relating to the learning process, the ability to incrementally implement the strategy in financially feasible areas, and the rapid pace of technological change in electronic commerce:

From quite small beginnings we've gone through a learning process, got used to the technologies, and we may want to scale them to [other operations] and start providing business capability there in a very integrated way ... The knowledge we've gained allows us to leverage those skill sets. (Interview with CIO, GammaCo, November 2001)

DeltaCo

DeltaCo is a well-established grocery retailer with a large chain of over eighty stores throughout New Zealand. DeltaCo recognised the potential of the Internet, and has developed into the largest online food retailer in New Zealand. Their initial foray into electronic commerce utilised a third party Web development company that had put together a virtual mall and required a large retailer to anchor the site. DeltaCo became involved because they saw the Internet as an emerging channel, one they wanted to examine and understand so that they could develop an appropriate strategy in relation to it. Working together with the mall development company (who had performed much of the prior development work), the company released a simple online store to market is product range. The infrastructure to support the site was provided by the mall vendor, with the company providing limited product information. This was a cheap and cost effective way for the company to develop a presence within the market at little risk to their existing business.

After two years, the decision was made to withdraw from the business partnership with the mall developer and develop their online presence in-house. In doing so, the company was able to build on the experience it had gained during the two year period spent in the virtual mall:

We got a lot of learning out of it in terms of the management of remote orders, what the customers are thinking about, what was good and what was bad, what the costs were involved in it, how the business model needed to take shape in terms of moving it forward for this to work both for our customers and for our business. (Interview with E-Commerce Manager, DeltaCo, December 2001)

The initial online application required the customer to install software off a CDROM onto their personal computer. There were a number of problems with this method, so the decision was taken to develop a new front-end interface that required only a Web browser to function. A development partner was used to develop the application to functional specifications from DeltaCo. The application proved to be acceptable, but over time the number of customers grew to a point where the value proposition of faster, quicker, and easier, was no longer being met. The company appointed a second local development partner, and a new strategy was developed, using local teams and building upon local market knowledge. The company had a well-established system for capturing customer feedback, which was then used to develop the requirements for the site. The company found that as a new version of the site incorporating the changes gathered from the customer feedback was released, utilisation of the site increased, coinciding with an increase in turnover.

In developing its online presence, DeltaCo decided to leverage its existing infrastructure and use the physical stores for order fulfilment and delivery. The company had already established that the keys to success in the industry were a reliable supply infrastructure and wide product range. Only by

giving online customers a product selection that was equal to that which they would find in the stores, and a reliable infrastructure, could customer satisfaction be guaranteed. This use of local distributors differs from the approach followed by many of the large online food retailers to use centralised dispatch plants that service huge geographic areas with limited success.

The current business model has the online business operating as a separate channel, resulting in some degree of channel conflict. To address this issue of channel conflict, each online transaction is processed and delivered by a local store. The store receives the income from this transaction, providing the motivation to support this new channel. Also the turnover from each of the stores can be separated into physical and online components, preventing poor performance figures from impacting on the wrong business channel.

DeltaCo has chosen to follow a conservative approach to developing an e-commerce solution. Initial developments were low cost and low risk. The company developed the strategy further over time, treating the online service as another business channel with the costs and revenues gained from this channel being monitored separately. Thought has been given to the development of a separate virtual business out of the online division of the company in the future if the consumer interest rises to a level capable of sustaining this type of enterprise. The company may even enter other retail markets in the future, but only after careful consideration of the effects on their core business. The company is in the process of developing their information technology systems up to a level that are able to better support their electronic commerce presence. Future electronic business development may need to wait until the existing systems are improved.

EpsilonCo

EpsilonCo is an established general merchandise retailer with some sixty stores located throughout New Zealand. The company has been trading for over ninety years and sells a range of products from apparel to appliances and furniture. EpsilonCo was slow to react to the Internet, developing a simple Web presence in the late 1990s only in response to instructions from its overseas owners:

If you go back to the early days of the Web emerging there was a fairly big discord between the sort of oak-panelled executive offices ... and this new-fangled Web thing. And we were slow off the mark, I think, during that phase when people thought the Internet was going to change the world as we know it ... The thing that slowed us down was more the fact that we were a ninety-year old retailing company ... In fact, the then chief executive was something of a technophobe. (Interview with E-Commerce Manager, EpsilonCo, January 2001)

The Web site was initially designed as a static “brochureware” site and offered no transactional capability. As the Web site was marketed widely in other aspects of the company’s operations, this led to a degree of unfulfilled customer expectations. The geographic coverage of the company’s retail stores and the department store nature of their customers’ shopping (browsing for multiple products as opposed to shopping for a specific known product) provided little incentive to sell products online.

In 2000, EpsilonCo formulated a new strategy towards Internet retailing. In this strategy, the primary objectives of the company’s Web site were to support the existing physical retail operation by increasing the number of customers through the chain of stores, and to retain customers through better customer relationship management. Increasing overall sales through the introduction of online

sales was present, but a less important objective. A limited range of products were offered for sale online, including a range of specials that matched those distributed in promotional mail-outs throughout the country. The number of product lines available has only recently increased from one hundred to six hundred.

The relatively small numbers of online sales use the same order fulfilment process as the company's phone-based mail-out sales, with goods being dispatched from local stores (if in stock) or shipped from elsewhere in the country. Control of the Web site has subsequently been brought in-house, and a content management system installed to allow dynamic changes to product availability and pricing to be made. Pricing is the same across all sales channels, as the main objective continues to be increasing customer traffic through the company's network of physical stores.

Internally imposed financial constraints limited the development of an Internet retailing channel within EpsilonCo. A conservative approach to the Internet, reinforced by much publicised Internet venture failures overseas, contributed to this situation. Return on investment is strongly emphasised within the company. Increased sales through the Web site would need to be generated, or the effectiveness of the Web site in increasing store sales demonstrated, before further investment was made available.

ZetaCo

ZetaCo is an eighty-year-old multi-channel engineering supplies company that markets a wide range of products across a large number of industry sectors. It has a chain of more than 20 stores throughout New Zealand and operates a team of sales representatives who visit major clients. In addition, the company regularly mails out a catalogue containing a reduced product range to its customer base. ZetaCo is a relatively late adopter of Internet technology, only establishing a Web site in 2001. Although this Web site had transactional capability from the outset, sales revenue from the site is small, with over half of sales resulting from in-store purchases. Telephone and fax orders, and sales through the sales representatives, account for most of the remaining sales.

As a MRO (maintenance, repairs and operations) supplier across many industries, ZetaCo sells a large and varied product range. Updating catalogues for its chain of stores and providing up-to-date information to traveling sales representatives is a costly operation. The company sees the Internet as a way of achieving this in a more cost-effective way, and is in the process of placing technical support information for its products online.

ZetaCo's perception is that they operate in a "staid" industry in which customers lack the experience or infrastructure to purchase online. Ordering via the Internet tends to increase the number of steps involved in the procurement process for most of their organizational customers. Although a Web-based form may provide a convenient order mechanism, various details of the transaction need to be manually entered by the customer into their internal information systems:

We have a gut feel that it's to do with the market – the fact that we're dealing with old engineers that don't normally use PCs. And then there are all sorts of other inhibitors that sit behind that ... Back office systems that they have to duplicate orders on. Things like that. So we've got a fair idea of why we're not getting the business on the Web. And it's really just breaking that barrier. (Interview with Information Systems Manager, ZetaCo, May 2003)

Nevertheless, the nature of their products and the expense involved in staffing their chain of physical stores has led ZetaCo to invest in an Internet-based operation. The intention is to both reduce

transaction costs by converting traditional store sales into online sales and to increase their market share. In doing so, they are working closely with selected customers to provide an integrated procurement solution:

The space we are supplying is ... bits and pieces to fix their machines to keep them going, and not anything that's core to their business. So it tends to be the last thing that they consider when they're looking at efficiencies and everything else. I suppose what we're trying to promote is how using e-commerce they can get some really big gains and efficiencies out of good supply chain management of the MRO-type products. We're trying to do it on a multi-tier approach, dealing with bigger corporates on a very close and customised basis ... through to the general market. (Interview with Chief Information Officer, ZetaCo, May 2003)

Discussion

Six New Zealand companies were studied in order to gain an understanding of their development towards integrated electronic business. Analysis of the data from these companies highlighted a number of factors that were influential in their decision to develop an Internet retailing presence. Consistent with Elliot (2002), these factors included both drivers and inhibitors of the Internet ventures. The factors are summarised in Table 2.

Drivers	Inhibitors
1. Overseas trends and firms (A,G,D,E,Z)	1. Consumer or market characteristics (A,D,E,Z)
2. In-house technical expertise or technological scanning (B,G,D,Z)	2. Conservative approach to new technology (A, B,E)
3. Parent company directive or support (D,E)	3. Perceived risk of new technological development (D,G)
4. Approach by third-party provider (B,D)	4. Published Internet retailing failures (B,E)
5. Leveraging existing brand (B,E)	5. Lack of in-house technical expertise (A,E)
6. Acquiring Web-based operation (A)	6. Inadequate IT infrastructure (A,D)
7. Product characteristics (B,Z)	7. Limitations of available technology (G)
8. Customer perception or demand (B)	8. Channel conflict (D)
9. Cost savings (Z)	9. Capital constraints (E)
	10. Internal staff resistance (Z)
Key: A = AlphaCo, B = BetaCo, G = GammaCo, D = DeltaCo, E = EpsilonCo, Z = ZetaCo	

Table 2. Factors influencing Internet adoption by established retailers

The companies studied tended to be followers, rather than leaders, in Internet retailing. The example of overseas companies who pioneered or led Internet retailing in a particular sector was a major influence in four of the companies studied. For example, the decision of grocery retailer DeltaCo to attempt Internet retailing was influenced by early developments in the US such as PeaPod,

EpsilonCo and GammaCo were very aware of WalMart's Internet operations, while AlphaCo closely followed the progress of large US catalogue retailer, Land's End. ZetaCo also monitored a comparable US company.

The presence of in-house technical expertise or active scanning of the environment for new technological opportunities was another important factor facilitating the development of an online retailing capability in half of the companies studied (BetaCo, GammaCo, DeltaCo). For instance, the existence of staff within BetaCo who had "played around with the Internet way back" meant that the company had a "good feel or technical understanding of what the internet could be used for" (Interview with Chief Information Officer, BetaCo, November 2001).

Other drivers included the support (DeltaCo) or direction (EpsilonCo) of a parent company, the unsolicited availability of a third-party provider as a partner in developing an Internet retailing channel (BetaCo, DeltaCo), the acquisition of a Web-based operation overseas (AlphaCo), and the opportunity to leverage a brand that was well-established in more traditional sales channels (BetaCo, EpsilonCo). ZetaCo anticipated significant cost savings from their use of the Internet, in terms of transactional costs, technical information publishing costs, and human resource costs in the physical side of their retail operation. For consumer electronics retailer, BetaCo, the information-intensive nature of their technical products and customer demand for online purchasing were important drivers in moving online. Also influential was the "need to be seen to be leading in technology":

We are a technical company, and we understand that in the market perspective people see us as technical, and therefore expect a level of technical awareness. (Interview with Chief Information Officer, BetaCo, September 2000)

Technology was a major inhibitor or barrier that needed to be overcome by the companies in the study in moving online. For example, a lack of in-house technical expertise was an important influence in delaying the development of an online retailing capability in AlphaCo and EpsilonCo. Similarly, the limitations of the existing information technology infrastructure inhibited Internet retailing in DeltaCo and in AlphaCo. The need to integrate the Web site with backend systems in order to reflect changes in product lines, prices and availability was an important constraint in the case of AlphaCo:

Web development ... [and] the maintenance of that is outsourced. At the moment we just could not handle it ... We are building up in-house knowledge of the system at the present, although we are not actually doing the work ourselves. We are following [technology as it moves along]. We probably don't want to be on the edge, mainly because our backend is a legacy system and it does limit us to what we can do. (Interview with Chief Information Officer, AlphaCo, December 2001)

A number of factors inhibiting Internet channel development were associated with attitudes towards new technology. Data collected from two of the companies studied (DeltaCo, GammaCo) suggested that the perceived risk associated with developing new technological applications was a significant barrier to participating in Internet retailing. Company management of AlphaCo, BetaCo and EpsilonCo apparently had a conservative approach to adopting new technology. The Chief Information Officer of BetaCo further suggested that the dot com "crash" meant that a more cautious analysis of the potential benefits from electronic commerce initiatives was required in the company. Similarly, any Internet sales channel in EpsilonCo needed to prove its viability before significant resources would be invested.

In the case of ZetaCo, a potential barrier to the growth of Internet sales channel was internal and related to human resources. The company assessed their staff's awareness of electronic commerce and found that it was generally low. Attitudinal and behavioural change was perceived as necessary with both store staff, who tended to be wary of the technology, and sales representatives, many of whom felt that their jobs were threatened. ZetaCo has embarked on an educational initiative to improve staff acceptance of the Internet and of the possibilities for enhanced staff roles:

Part of that is an internal problem. We've been trying to educate our sales people ... trying to get them to not feel threatened by this. You know, we're not taking work away from them. What we're doing is taking the boring stuff away from them. And letting them become account managers. (Interview with Chief Information Officer, ZetaCo, May 2003)

The characteristics of a company's target market were important inhibitors in four of the companies studied. Grocery retailer, DeltaCo, was constrained by the small New Zealand market, while AlphaCo felt that the relatively low percentage of its target consumers who were online shoppers limited the growth of its Internet sales channel. A focus on domestic customers, the relatively small number of customers who could not access a company store, and the type of shopping those customers performed, discouraged development of an Internet retailing channel for EpsilonCo. Lack of experience or information technology infrastructure in many of ZetaCo's customers is limiting the growth of Internet sales. Other barriers or inhibitors reported in the study included the limitations of the technology available at the time (GammaCo) and the risk of channel conflict (DeltaCo).

The principal objective of this study was to develop a framework for categorising how established retail companies are adopting Internet technologies. Based on the findings presented earlier, a simple two-dimensional framework can be constructed. One dimension is related to the degree of Internet channel integration involved in the Internet retailing strategy adopted. Three major approaches to channel management were identified from the case studies: (1) the use of the Internet as a marketing channel to support and reinforce existing traditional sales channels; (2) the separate development of an Internet-based sales channel, recognising the different competencies required for Internet retailing or to exploit a different product; and (3) the integration of Internet-based sales into the existing retail operation, providing customers with a seamless retail storefront that enables them to move from one channel to another.

The second dimension relates to the degree of business transformation involved in the Internet retailing strategy adopted. Again, three major approaches were identified: (1) evolutionary change, in which the company takes a conservative approach to the Internet, largely in response to changes in technology or customer requirements; (2) an experimental strategy, in which the company deliberately chooses to adopt a less cautious approach, but one constrained by product range or business unit, in order to learn by experience; and (3) revolutionary change, in which the company undergoes a more radical transformation of business processes or even business scope (cf. Venkatraman, 1994).

The resultant framework is shown in Figure 1. Each of the six established retailing companies studied is shown in the appropriate part of the framework corresponding to its Internet retailing strategy. The findings from the case studies suggest that a company can reposition its Internet retailing strategy over time. This is shown in Figure 1 using broad arrows.

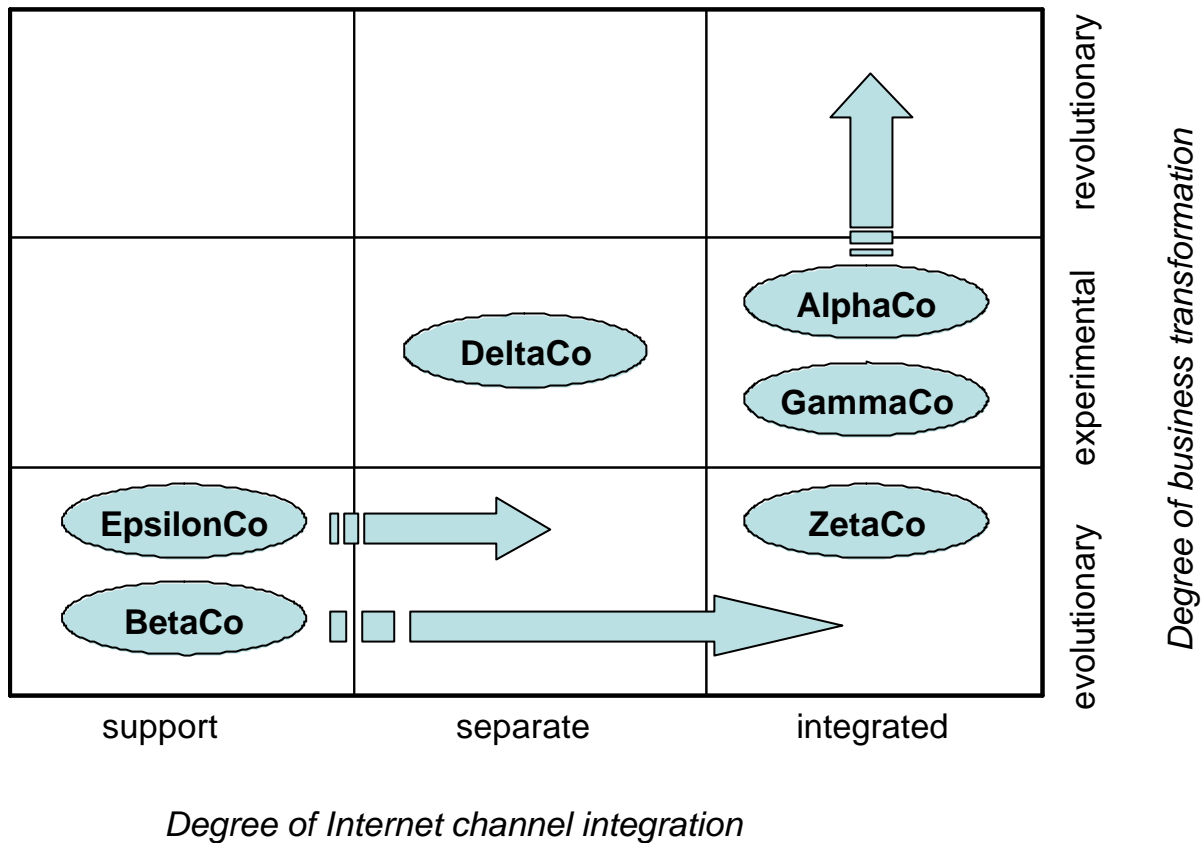


Figure 1. A framework for categorising Internet strategies for established retailers

For example, BetaCo continued its evolutionary approach to the Internet, building on its initial support role for the Internet channel to include online sales in an integrated retail business strategy. EpsilonCo followed a similar path, but with online sales essentially forming a separate channel in relation to the company’s physical stores. By comparison, AlphaCo initially adopted an experimental strategy towards the Internet, although always treating online sales as just one of its many sales channels. McKay et al. (2000) suggest that for a company to reach electronic business maturity it must ensure that its Internet commerce development keeps pace with its information technology infrastructure development. AlphaCo found that they had developed as far as their existing infrastructure was able to take them, and that further development required a more revolutionary strategy to re-engineer their information and business systems.

It is important to note that the framework depicted in Figure 1 is not intended to imply a sequence of stages that a company must pass through to reach a given endpoint. Rather, the various areas of the framework offer a range of possibilities or phases (cf. Chau and Turner, 2002) that a company may inhabit at any one time.

It is interesting to speculate on the possible relationship between the factors identified in Table 2 and the type of Internet strategy adopted by the retailers in this study. For example, did the desire to leverage their existing brands encourage BetaCo and EpsilonCo to follow an evolutionary strategy towards the Internet, based initially on supporting their traditional retailing operations? Was this incremental approach also a reaction to the various Internet venture failures publicised in the media? However, such questions fall outside the scope of this study. They require a larger-scale empirical survey of retailers and their motivations for moving online. This study was exploratory in nature, and

sought to highlight potential factors for further research and to develop an empirically-derived framework of Internet retailing strategies.

Conclusion

As Elliot (2002) observes, success in Internet retailing requires a complex interaction between various organisational, environmental, technical and market-related factors. This study has highlighted a number of factors that may influence how an established retailer responds to the Internet. Important drivers for developing an Internet retailing operation are likely to be the example set by Internet pioneers or leaders, a good understanding of Internet technologies, and the support or opportunity offered by a parent company or potential partner.

In contrast, if a company's management is cautious about investing in new technology, or if the necessary technical expertise or infrastructure is not present, Internet sales channel development is likely to be inhibited. In addition, as DeKare-Silver (2000) notes, the tendency for target consumers to be Internet shoppers is an important consideration for an established retailer contemplating moving online.

The framework developed from this study offers a simple, but useful tool for describing the Internet retailing strategies followed by established retailers as they come to terms with the implications of the Internet. The framework also offers a useful way for retailers contemplating the move online to explore possible strategies for doing so. Further research is needed to confirm the utility of the framework through its application to other companies and in other geographic contexts. Longitudinal case studies are particularly important if we are to observe the way that retail companies adapt and change their strategies to the dynamic environment of electronic business.

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