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E-tailing in Ireland: A review of Ireland's top 25 retailers

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E-tailing in Ireland: A review of Ireland's top 25 retailers

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Abstract

Electronic commerce provides a new sales channel for traditional retailers (Gulati and Garino, 2000, Griffith and Krampf, 1998). Yet, many traditional retailers have been slow to embrace the new technology (Bellman, 2001, De-Kare Silver, 2000, Maruca, 1999). However, others – "Clicks & Bricks" retailers have successfully integrated physical operations with online stores (Enders and Jelassi, 2000, Willcocks and Plant, 2001).

This paper assesses the current state of cyber retailing in Ireland and seeks to evaluate the impact electronic commerce has had on the retail sector. The top 25 Irish retail firms were identified and the web site (if existing) of these companies were then accessed and evaluated based on factors relating to web site functionality, technical sophistication and information provision.

The research found the cyber retailing market in Ireland to be buoyant and growing. The high incidence of web presence amongst the top twenty-five retailers illustrates that Irish retailers are pursuing cyber strategies. Furthermore, a high proportion of these retailers are actively pursuing cyber-retailing. However, a majority of these web adopters do not support online sales and it is evident that within a large section of the Irish retail sector the Internet is still being thought of as a medium primarily for information dissemination to support the existing business. Furthermore, the low instance of customisation features provides evidence to suggest that web sites are being implemented in a sub-optimal manner.

Introduction

Electronic commerce and in particular Internet based electronic commerce can be defined as "those organisations that conduct commercial transactions with their business partners and buyers over the Net"(Mahadevan, 2000). From the perspective of retailers, e-commerce offers efficiencies in the form of increased market access and

information and decreased operating and procurement costs (Rosen and Howard, 2000). Customers can potentially benefit from enhanced price competition, customisation of products, expanded information on goods and services, increased choice of products and a greater shopping experience (Rosen and Howard, 2000, Sinha, 2000).

Electronic commerce has existed in the business-to-business (B2B) market for several decades, in the forms of electronic data interchange (EDI) and electronic funds transfer (EFT) (Cunningham and Tynan, 1993, Williams and Frolick, 2001). However, with the recent emergence of the electronic business-to-consumer (B2C) marketplace, attention is now focused on the Internet and how its strategic potential can be harnessed for retailers, fuelling speculation about the actual size, growth and future potential of the "cyber retail market" (Porter, 2001, Sinha, 2000). The purpose of this paper is to examine to what extent the top 25 retailers in Ireland have utilised the Internet and innovative web technologies in providing an online retailing channel.

Pure Players versus Bricks and Clicks

To date most of the commentary on the impact that the Internet has had on retailing has been exaggerated, containing speculative and unrealistic forecasts of its potential. This is a dangerous approach however, as it has led many companies, dot-coms and incumbents to make decisions that have ultimately undermined their own competitive advantages (Porter, 2001). Initial predictions were that new Internet retailers, or e-tailors would wipe out existing traditional businesses (Chen and Leteney, 2000, Griffith and Krampf, 1998). The Internet was expected to become a major new retail channel supplanting the dominance of traditional bricks and mortar stores and indeed rendering bricks and mortar retailing a thing of the past (Van Tassel and Weitz, 1997). Companies operating solely online, the 'pure players', were predicted to cannibalise the market share of their off-line counterparts by offering fast, flexible and lower cost online solutions (Melewar and Navalekar, 2002).

However, the physical presence of retail outlets has proven to be more enduring than originally envisaged (Rosen and Howard, 2000). Established retailers, unlike their online counterparts, have well developed brand equity, extensive industrial knowledge, access to significant financial resources and well developed supplier relationships to support business developments both on and offline (Ellis-Chadwick et al., 2000). One crucial advantage that established retailers have is the opportunity to benefit from their experience and retailing knowledge to provide a higher level of customer service online. A recent rise in the number of dot com failures, especially in the business to consumer sector, has been accompanied by critical debate as to the viability and future potential of pure web based retailing (Porter, 2001). Indeed, Lindstrom(2001) strongly maintains that pure e-tailing will never become a gold mine because profitability is almost impossible to attain.

The underlying economics and competitive dynamics of web retailing indicates that it is structurally impossible for most pure web retailers ever to turn a profit let alone take a dominant market position (Barsh et al., 2000). Most e-tailers lose money on every transaction, indeed the flagship e-tailer, Amazon.com, loses about $7 for every non-book sale. The lack of success of pure players in the industry is attributed to inexperience, intense price competition, soaring customer acquisition costs and poor

inventory management (Barsh et al., 2000). Traditional retailers with established brands are relatively immune from such problems, as their main advantage comes from their ability to use the web to extend their already potent physical presence. This advantage can be seen from the fact that only 42 of the world's top 500 best known brands were born online (Lindstrom, 2001). As a consequence, it is likely that the most successful e-tailers will be those retailers that have already done well with existing traditional stores and have strong brand recognition (Barsh et al., 2000).

An important inhibiting factor to the success of 'pure players' is a lack of consumer trust. Again established retailers are in an advantageous position as customers do not trust the Internet but they do trust brands, especially offline brands (Lindstrom, 2001). Online shoppers, due to the fact that it is a virtual environment, are denied the circumstances that they are normally accustomed to when present in a traditional retail setting (De et al., 2001). Hence shoppers must content themselves with other cues that convey qualities they regard as important when contemplating a purchase. Brands fill this important function to a large extent (Willcocks and Plant, 2001). Consumers more readily identify with offline brands, those that are familiar to them and those, to which they are accustomed, trust and respect. Strong brand equity also helps to alleviate consumer fears concerning online security and loss of privacy. A brand that is perceived as trustworthy reduces such dissonance that consumers may experience (Willcocks and Plant, 2001). However, the goodwill and trust that a positive brand image engenders takes a considerable amount of time to achieve and is not a commodity that can be bought or synthesised (Lindstrom, 2001). Many pure players are at an early stage of their life cycle and as yet do not have this brand recognition. Off-line brands are more identifiable and consumers tend to trust and use these same brands online.

The climate in Europe and indeed Ireland at present suggests a similar trend, with traditional bricks and mortar retailers adopting a 'clicks and mortar' strategy. A report by Linter and Rasch (2001), which states that bricks and mortar firms dominate western online retail, verifies this . Although a number of studies have identified a certain potential for online pure players, in Europe consumers are still waiting for a typical virtual retailer (Kotzab and Madlberger, 2001).

Factors affecting the rate of Internet adoption

Attitudes of Irish Businesses

Attitudes of Irish businesses towards e-commerce and the Internet in general appear to be quite positive. A report compiled in 2001 by the Chamber of Commerce Ireland, which incorporated the views and experiences of senior staff members in small and medium sized businesses, shows positive results. The study showed that seven out of ten small to medium sized firms have Internet access and a third have their own web sites (Hynes, 2001). Computers are having an increasingly important role to play in Irish businesses with the study reporting 90% of SME's having at least one computer. However, this did vary by company size and sector, with the retailing industry possessing the lowest levels of penetration of both computer usage and Internet access. Only 66% of retail firms have Internet access as opposed to 95% of manufacturing firms (Hynes, 2001). The overall attitude to e-commerce was very

positive with 95% companies surveyed expecting their use of the Internet and involvement in e-business to increase over the next five years.

The Chamber of Commerce report highlighted the fact that many businesses encountered obstacles when trying to launch e-business initiatives. 34% of businesses felt that concerns about security were a major problem and a further 23% said that a lack of in-house technical skills made it difficult to implement e-business projects (Hynes, 2001). Lack of technical skills within Irish companies including Irish retail companies is a particular problem for small businesses because they typically do not have the specific IT skills. In addition, procuring external support is often prohibitively expensive.

Internet Use

Consumer demand for the Internet is a key factor that may ultimately drive widespread adoption of the Internet by Irish retailers. Whether the consumer has access and how they use or perceive Internet shopping will ultimately affect its success.

The key benefit of the growth in Internet usage is the potential it creates for retailers online. Over the last two years Internet use in Ireland has doubled. Almost a third of Irish adults, equivalent to about 895,000 people, currently use the Internet. By the end of 2003 it is forecast that 43% of Irish adults will be accessing the Internet on a regular basis (Amarach, 2001b). In the last quarter of 2001, 15% of Irish Internet users made a purchase online – this is equivalent to about 116,000 Internet users and is more than double the number of people buying online in the previous twelve months (Amarach, 2001b). This rise in online purchasing is clearly attributed to the increase in adults online. The average spent online during the last quarter of 2001 was €230 bringing the estimated total value of online purchases made by Irish internet users over the last quarter of 2001, to €25.4 million. A further positive outlook for Irish online retailers is the fact that the majority of those who made an online purchase rated their most recent purchase as very satisfactory. Online retailers would expect that high satisfaction levels with past online purchases would increase consumer confidence and hence facilitate further online spending.

Product Type

There are restrictions on the kinds of products that are sellable through the Internet retail channel, since the consumer can only visualise the product advertised certain product groups are more likely to succeed online (Vijayasarathy and Jones, 2000, De et al., 2001, Clark, 1999). Travel and computer goods constitute a substantial portion of business to consumer sales (Rosen and Howard, 2000). High levels of adoption within these sectors is attributed to the fact that these product categories are particularly suited to the e-commerce format; the consumer is often satisfied with visually identifying the desired product and furthermore, shipping these items is relatively simple and cost effective (De et al., 2001).

According to e-commerce trend studies, Irish e-tailing markets display similar trends to other international markets in that the products most frequently sold online in Ireland are books, music, travel, videos, DVD's and computer software, as is shown in Table 1 below (Amarach, 2001a). There has been a large increase in the number of users purchasing travel services online; most of this activity has been attributed to the success of the Ryan air web site. The sectors which are predicted to grow in the

future are groceries, electronics, and tickets for events (Amarach, 2001a). Much of the increase in the purchase of groceries and household goods can be related to the success of Tesco.com. Tesco.com is only four years old and is already deemed to be profitable and successful – Tesco.com has already become the world's biggest online grocer (Kennedy, 2001). Tesco began a pilot project in Ireland in 2001 and the success of these pilot trials, as well as those of the indigenous grocer Super Quinn, indicate Ireland is likely to follow the pattern of the UK grocery online market. Clothing is a major online purchase category in the US, however it is unlikely to take off in Ireland (Amarach, 2001a). The main reason for this is that the US has a highly developed mail order clothing market that is not evident in Ireland. The lack of the touch and feel factor is also an extremely inhibiting element to the Irish online clothing sector, with 20% of Irish Internet users in 2001 claiming this to be a major reason for not purchasing online (Amarach, 2001a).

Table 1: Top 5 Purchase Categories

	Ireland	**US**	**UK**
1	Travel	Books	Music
2	Books	Computers	Books
3	Music	Music	Computers
4	Videos/DVD	Clothing	Tickets/ Reservation
5	Computer Software	Tickets/ Reservation	Videos

Source (Amarach, 2001a)

Size

The size of the organisation may be a critical factor influencing retailer adoption of the Internet. A survey of the top 100 US retailers suggests that smaller companies are less likely to be online (Morganosky, 1997). The UK retail experience also suggests that it is the larger retailers who are currently exploiting the Internet to reinforce their market presence (Ellis-Chadwick et al., 2000). There seems to be a significant association between the size of retailers, in terms of the number of outlets each operates and the rate of adoption. More specifically these larger organisations are also most likely to have developed a fully transactional web site (Ellis-Chadwick et al., 2000). These retailers are more likely to have the investment resources, skilled personnel, scale and sophistication of logistical and technical infrastructure necessary to successfully support e-commerce projects (Hynes, 2001).

In a recent report IDS Media Group reported that the overall percentages for web site ownership is low and this is attributed to the large number of small firms (see Table 2 below). The report further identifies companies most likely to adopt e-commerce as being Dublin based and with a turnover of £2 million plus. The IDS Media group provides further information regarding email use. In Ireland 53% of the largest firms have e-mail, while only 4% of small firms possess e-mail.

These statistics provide evidence that size may be a factor influencing Internet adoption among Irish firms and furthermore that it appears to be smaller Irish firms who are less likely to be online.

Table 2: Web site ownership in Irish businesses			
Company Size	**Total**	**Web Site**	**Overall %**
Small (0-9)	171,878	11,048	6.43%
Medium (10-49)	17,884	6,070	33.94%
Large (50+)	4,366	2,797	64.06%
Source (IDS, 2002)			

Usability

New media technology associated with the Internet provides the potential to deliver fully automated customer service challenging the traditional face-to-face service chain (Voss, 2000). However, one of the most common complaints from users is that some documents take too long to download; consequently, the issue of data access speed is identified as one of the most important aspects of web site design (Lightner et al., 1996, Dreze and Zufryden, 1997). The perceived usability of sites on the Internet is a key factor influencing consumer uptake rates and of interest to web site designers is the consideration of Internet delay and the type of media used in documents (Jacko et al., 2000, Turban and Gehrke, 2000). While all information is transmitted in the same way, the type of information often influences the quantity of information that must be transmitted. As this influences the delay before the information is available, perceived usability is dictated not only by delay length but also by the type of information received after the delay, hence simple, meaningful graphics are recommended (Sklaire, 1997, Busch, 1997, Jacko et al., 2000).

The perceptions users reach of the quality of information on a site are significantly influenced by delay length and document type (Jacko et al., 2000). The organisation of the information provided by the site and the company's understanding about providing information on the Internet also influences decisions about recommending the site to others. This is a critical area affecting fundamental perceptions of a company's image and influencing not only the possibility of further interaction with the site but also whether the site is recommended to others (Jacko et al., 2000).

An important factor influencing perceptions of usability and quality is offering personalised interactions. Internet technology can be exploited to offer customers the potential to establish a unique web identity (Venkatraman, 2000). Trust and privacy issues can be addressed by providing a less impersonal image to the prospective consumer and can further provide the retailer with significant opportunities to gather customer information to focus subsequent advertising efforts (Voss, 2000).

Another issue relevant to the development of effective service over the Internet is the provision of the facility to contact the company and subsequently, the responsiveness of the company to customer enquiries (Voss, 2000). Web sites can be assessed in terms of the feedback facility provided, the delay in response time and the type of response received by the customer. Elements of good technical e-service can

therefore be illustrated by fast, preferably automated responses to customer queries (Voss, 2000).

Emerging Trends in Web Retailing

The Internet is used in three main ways to facilitate retail marketing. The most basic function it performs is as a means of communicating information about the retail organisation, its products and services. At this stage, it predominantly facilitates information gathering rather than promoting consumer interactivity. It could be argued that this is merely a reactive approach, with retailers jumping on the Internet bandwagon in an attempt to gain a web presence. At the next level, it is used as a more proactive marketing tool, inviting customers to interact with the web site to gain more product information to facilitate the purchasing process. This provides valuable consumer data for retailers, which enables more effective target marketing. A third level involves retailers selling products online through electronic transactions with consumers – pure e-tailing (Ellis-Chadwick et al., 2000).

Ellis-Chadwick et al (2002) define the first stage of web retailing as the Communication Platform, where information such as the location of stores, company history and profile, product information and customer services are made available. Additionally, interactive features are offered which prompt the user to take some form of action, for example, ordering a catalogue, entering a competition or joining a mailing list. The second stage is defined as the electronic shop. This involves retailers presenting their physical store online, for example, Clerys, Arnotts or Tesco. The third and final stage illustrated by Ellis-Chadwick et al (2002) is that of a trading community, where retailers move beyond the e-shop model and develop or participate in portals i.e. creating a shopping mall online. Buy4Now.ie is an example of an Irish portal consisting of a conglomerate of retailers some of which include Arnotts, Easons, Atlantic Homecare and SuperQuinn.

Research Methodology

The sample population tested by this research was identified using financial data gathered from the IDS Media Group and the FactFinder web sites (www.idsmediagroup.com/ and www.factfinder.ie respectively). The information identified the top 25 retailers in Ireland based on recent financial performance. A summary of this information is provided in table 3 below. Each company is further classified according to a specific retail category.

Table 3: Top 25 Irish Retailers

Name	Web Address	Category
Dunnes Stores	www.dunnesstores.com	Dept. Store
Roches Stores	No web site found	Dept. Store
Penneys	www.primark.ie	Dept. Store
Hickeys	www.hickeys.ie	Paints, Electrical Hardware
Brown Thomas	No web site found	Dept. Store
Champion Sports	www.champion.ie	Sports
Paddy Power	www.paddypower.com	Bookmakers
Clerys	www.clerys.com	Dept. Store

Molloy Group	www.molloys.com	Liquor Sales
A-Wear	www.a-wear.ie	Clothes Retail
Youghal Carpet Yarns	No web site found	Home
Avoca	www.avoca.ie	Clothes/Gifts
Dell	www.dell.ie	Computer Sales
PowerCity	www.powercity.ie	Electrical
RyanAir	www.ryanair.ie	Airline
Tesco Ireland	www.tesco.ie	Supermarket
The Body Shop	www.bodyshop.com	Cosmetics
Smyths Toys	www.toys.ie	Toys
Super Valu	www.supervalu.ie	Supermarket
Blarney Woolen Mills	www.blarney.ie	Clothes/Gifts
Heatons	No web site found	Draper
Easons	www.easons.ie	Books/Stationery
Arnotts	www.arnotts.ie	Dept. Store
Boots	www.wellbeing.com	Gifts
Marks and Spencer	www.marksandspencer.com	Dept. Store
Source: (IDS, 2002, FactFinder, 2002)		

These companies were then analysed using a quantitative web site evaluation survey, which sought to determine factors relating to web site functionality, sophistication and information provision. A detailed tabulation of this information is provided in table 4 below. The initial determination of web site presence was conducted using the Google search engine. All web site analysis was conducted between June and August 2002. These tests were conducted using a conventional 56k modem on a standard, domestic phone line. All temporary Internet Files were removed prior to each testing phase. All web site evaluation tests began at 21.00hrs.

Table 4 to be inserted here

Findings and Discussion

It can be seen from the results that the majority of retailers have taken the preliminary step in developing an actual web site. A total of 21 homepages were found through the Google search engine. This resulted in an online presence rate of 84% for Ireland's top retailers. Of those retailers 40% actually sell their products online. The provision of information is clearly the most common function of the Internet at present. Due to the fact that Ireland's top 25 retailers were surveyed, it was not clear whether size was an influencing factor in the rate of adoption. However, sector and product category did prove to be influential with certain categories portraying a higher level of sophistication leading to fully transactional online sales. The speed of adoption has been faster within sectors such as gifts, accessories, books and alcohol, as compared with other sectors such as cosmetics, pharmaceutical products and supermarkets. Easons, Molloy's Liquor Store, Avoca, Blarney, Arnotts and Clerys all having fully transactional web sites offering online sales and delivery in these sectors are evidence of this.

Regarding the level of sophistication and interactivity each site has to offer, it is clear that the Internet is still a medium for communicating information rather than conducting sales transactions. The majority of Irish e-tailers are at stage one, as

defined by Ellis-Chadwick (2002), the communication platform. 60% of Ireland's top retailers are currently at this level of adoption. The type of information communicated by retailers was focussed on company details: 71.4% provided company information, including company history, mission statements and customer service policies, whilst 72% provided detailed information on store locations. All of the retailers appeared to be using their web sites as extensions of their advertising campaigns, which included promotions offering information related to 'on sale' or 'new stock'. Many retailers use their site for recruitment purposes; 52.4% provided information about employment opportunities in their companies and included procedures for making an application.

40% of Irish retailers surveyed had progressed to stage two, the e-shop as defined by Ellis-Chadwick (2002). This stage requires retailers to present their offline shop online. Finally, two of the retailers had progressed to stage three, the trading community or portal. These included Arnotts and Easons who are involved in the Buy4Now portal.

Each web site was further tested for its technical ability to respond to customer feedback. For each web site it was noted that almost half of the participants used email as the means to interact with consumers online (see table 5 below). Only 24% of retailers use the method of forms to provide feedback facilities. Of those web sites offering technical feedback facilities, there was a 61.1% response rate in the same day. However, 33% did not respond at all to the standard query. The response type was also noted: 25% of companies provided a fully automated response, while customer service staff generated 75% of responses. Clearly there seems to be fewer retailers adopting purely automated, technical response systems in dealing with consumer feedback. Given that there is only a 66.7% response rate to a standard consumer query, there appears to be scope for improvement in both the mechanics of responding to consumer feedback and in consumer service. However, it could be argued that the high percentage of human generated responses to consumer queries is a reasonable trade-off from the technical alternative, as the personal contact would be more likely to promote consumer trust and project a friendlier, more responsive corporate image.

Table 5: Response Methods

Feedback Facility		**Response Time**		**Response Type**	
	Percent		**Percent**		**Percent**
Phone	12%	Same Day	61.1%	Human	75%
Email	48%	6 + Days	5.6%	Automated	25%
Form	24%	No response	33.3%		
None	16%				

The web sites were assessed in terms of their technical functionality, which included the use of cookies and the provision of technical functionality online. These techniques can be used by e-retailers either to gain valuable marketing information about their consumers, or to personalise the web site according to user information. This further allows the retailer to customise advertising for each user based on previous purchases. It was noted that 40% of web sites used cookies (see Table 6) for the purpose of storing user information, which could be updated on subsequent visits

to the web site and the results communicated to the host server. Slightly fewer retailers offered consumers the opportunity to create an online account, where the user could create a username and password in order to access particular services of the web site. This was the most sophisticated element to be analysed, as it requires most technical expertise and hence financial investment. Only the largest companies or those involved in the Buy4Now portal supported this advanced retailing method.

Table 6: Technical Functionality

Cookies		**Online Account**	
	Percent		**Percent**
Yes	40%	Yes	36%
No	60%	No	64%

The web sites were finally examined to determine download times. The purpose of the test was to ascertain how the design of the site affected the time the homepage required to fully download; one would expect the best sites to use graphical images in such a way that download times were kept to a minimum but that the quality of navigation and general presentation would not be compromised. As can be seen from Figure 1 below the majority of sites took 16-30 seconds to download, while only 10% were fully downloaded in less than 15 seconds. The fastest site to download was Supervalu (http://www.supervalu.ie/) at 13 seconds, while the slowest was Blarney Woollen Mills (www.blarney.ie) at 51 seconds. The most sophisticated web sites such as Tesco, Dell, PaddyPower and Arnotts had a download time of around 23 seconds. This was thought to be a reasonable download rate and it was noted that these sites generally had a trade-off between a restricted use of quality graphics and good use of text, which is quick to download. Marks and Spencer was a notable exception to this rule at 47 seconds, however this site although heavily reliant on graphics, generally reused the same images and thus subsequent page requests downloaded at a much more satisfactory rate.

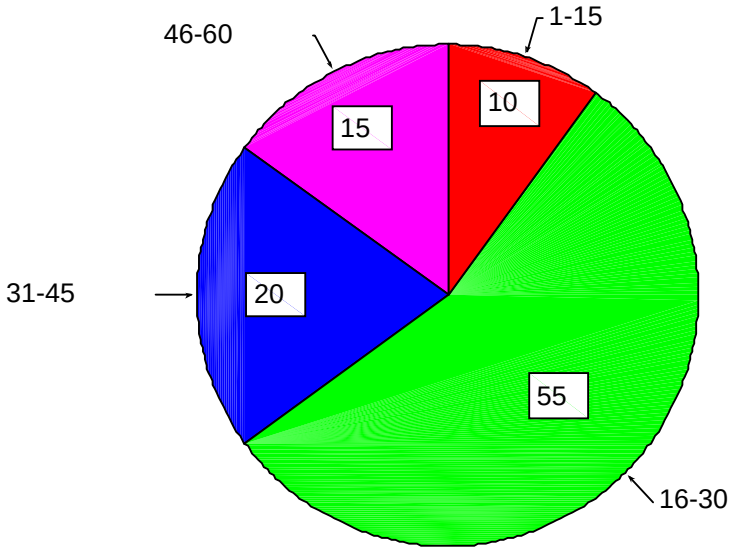

Figure 1: Download Time

The final analysis of the web sites determined what percentage of those sites offering online sales also made best use of Internet technology to support those sales. It was noted that 52% of web sites do not offer online sales. Of the web sites that do offer sales online, 60% of these do not use techniques such as cookies or provide facilities such as online accounts to personalize the users experience and consequently to aid in online purchasing. These statistics point to a major sub-optimisation in the deployment of web sites by Irish retailers.

Conclusion

Although the scope of this study is limited to the top 25 Irish retailers it can be seen that the cyber retailing market is buoyant and growing. There are a number of results that provide an insight into the direction Irish e-tailing is taking. The high incidence of web presence among retailers is an indication that Irish retailers are pursuing cyber strategies and furthermore a high number of these are pursuing cyber retailing. However, the technical functionality and sophistication among web retailers remains low. There are many benefits to be gained by deploying techniques, such as customisation features and the low instance of this suggests that the potential of the Internet is not being optimised by Irish retailers.

Positive business and consumer attitudes as well as high Internet usage rates and high satisfaction levels with online purchases contribute to a healthy e-commerce environment which should stimulate further growth on the Internet. However, it must be noted that size, concerns over security, lack of internal IT staff and resources are major stumbling blocks in the rate of Internet adoption. As well as this, retailers in particular have one of the lowest Internet penetration rates, which is surprising given the potential of the Internet as a means of generating additional revenue streams.

The crucial findings highlighted in this research are firstly, the low level of sales that are available online and secondly, the level of sophistication used in those online sales. The literature suggests that larger companies enjoy a significant competitive advantage over smaller retailers in respect to online retailing, as they possess greater

financial resources, strong brand equity and greater experience in marketing and consumer advertising. However, the findings of this research show that, of the top 25 retailers in Ireland, only 40% of companies offer online sales and of those, 60% do not optimise their sales functions to take advantage of technologies that increase online purchasing rates.

References

Amarach (2001a) *Eir-Commerce 2001*, In Amarach Consulting.http://www.amarach.com/news/press3.htm

Amarach (2001b) *Irish B2C finally gains momentum*, In Amarach Consulting.http://www.amarach.com/news/press13.htm

Barsh, J. B., Crawford, B. and Grosso, C. (2000) How e-tailing can rise from the ashes. *The McKinsey Quarterly*, (3) 98.

Bellman, L. M. (2001) Bricks and Mortar: 21st Century Survival. *Business Horizons*, 44(3) 21.

Busch, D. (1997) Avoid the five cardinal graphical sins. *Internet World*, 98-99.

Chen, S. and Leteney, F. (2000) Get real! Managing the next stage of Internet retail. *European Management Journal*, 18(5) 519.

Clark, R. (1999) The Willingness of Net-Consumers to pay: a lack-of-progress report. *In the Proceedings of the Twelfth International Bled Electronic Commerce Conference*.

Cunningham, C. and Tynan, C. (1993) Electronic Trading, Inter-organizational Systems, and the nature of buyer - seller relationships: the need for a network perspective. *Proceedings of the 4th EDI Conference, Yugoslavia*.

De, R., Mathew, B. and Abraham, D., M (2001) Critical constructs for analyzing e-businesses: investment, user experience and revenue models. *Logistics Information Management*, 14(1/2).

De-Kare Silver, M. (2000) E-shock 2000: the electronic shopping revolution - strategies for retailers and manufacturers. *Macmillan Press Ltd*.

Dreze, X. and Zufryden (1997) Testing web site design and promotional content. *Journal of Advertising Research*, 37(2) 77.

Ellis-Chadwick, F., Doherty, N. and Hart, C. (2000) Retailer adoption of the Internet - Implications for retail marketing. *European Journal of Marketing*, 34(8) 954.

Ellis-Chadwick, F., Doherty, N. and Hart, C. (2002) Signs of change? A Longitudinal study of Internet adoption in the UK retail sector. *Journal of Retailing and Consumer Services*, 9(2) 71.

Enders, A. and Jelassi, T. (2000) The converging business models of Internet and bricks and clicks retailers. *European Management Journal*, 18(5) 542.

FactFinder (2002) *FactFinder's top 5000 companies*, In Business and Finance.www.factfinder.ie

Griffith, D. A. and Krampf, R. F. (1998) An examination of the Web-based strategies of the top 100 US retailers. *Journal of Marketing Theory and Practice*, 6(3) 24.

Gulati, R. and Garino, J. (2000) Get the right mix of bricks and clicks. *Harvard Business Review*, 78(3) 107.

Hynes, K. (2001) *SME E-Business Survey*, In Chambers of Commerce Ireland,

IDS (2002) *IDS top 300 Irish companies*, In IDS Media Group.www.idsmediagroup.com/

Jacko, J. A., Sears, A. and Borella, M. S. (2000) The effect of network delay and media on user perceptions of web resources. *Behaviour & Information Technology*, 19(6) 427.
Kennedy, J. (2001) How bricks can generate clicks. *Business and Finance*.
Kotzab, H. and Madlberger, M. (2001) European retailing in e-transition? *International Journal of Physical Distribution and Logistics Management*, 31(6) 440-462.
Lightner , N. J., Bose , I. and Salvendy , G. (1996) What is wrong with the World-Wide Web?: a diagnosis of some problems and prescription of some remedies. *Ergonomics*, 39.
Lindstrom, M. (2001) Clicks, Bricks and Brands. *Kogan Page Limited*.
Lintner, A. and Rasch, S. (2001) *The Multichannel Consumer: The Need to Integrate Online and Offline Channels in Europe*, In Boston Consulting Group, Boston.www.bcg.com
Mahadevan, B. (2000) Business Models for Internet-Based E-Commerce. *California Management Review*, 42(4) 55-69.
Maruca, R. F. (1999) Retailing: confronting the challenges that face bricks-and-mortar stores. *Harvard Business Review*, 77(4) 159-168.
Melewar, T. C. and Navalekar, A. (2002) Leveraging corporate identity in the digital age. *Marketing Intelligence & Planning*, 20(2) 96.
Morganosky, M. (1997) Retailing and the Internet: A perspective on the top 100 US retailers. *International Journal of Retail and Distribution Management*, 25(10/11) 372.
Porter, M. (2001) Strategy and the Internet. *Harvard Business Review*, 79(3) 63.
Rosen, K. T. and Howard, A. L. (2000) E-Retail: gold rush or fool's gold? *California Management Review*, 42(3) 72.
Sinha, I. (2000) Cost Transparency: The Net's Real Threat to Prices and Brands. *Harvard Business Review*, 78(2) 43.
Sklaire, D. (1997) Latest research: guidlines for effective sites, In *Online marketing handbook*(Ed, Janal, D.), pp. 351-353.
Turban, E. and Gehrke, D. (2000) Determinants of e-commerce Website. *Human Systems Management*, 19(2) 111.
Van Tassel, S. and Weitz, B. A. (1997) Interactive home shopping: all the comforts of home. *Direct Marketing*, 59(10) 40.
Venkatraman, N. (2000) Five steps to a dot-com strategy: how to find your footing on the web. *Sloan Management Review*, 41(3) 15.
Vijayasarathy, L. R. and Jones, J. M. (2000) Intentions to Shop Using Internet Catalogues: Exploring the Effects of Product Types, Shopping Orientations, and Attitudes towards Computers. *Electronic Markets*, 10(1) 29.
Voss, C. (2000) Developing an e-service strategy. *Business Strategic Review*, 11(1) 21.
Willcocks, L. P. and Plant, R. (2001) Pathways to e-business leadership: Getting from bricks to clicks. *Sloan Management Review*, 42(3) 50.
Williams, M. L. and Frolick, M. N. (2001) The evolution of EDI for competitive advantage: the Fedex case. *Information Systems Management*, 18(2) 47.

Table 4: Results of Web Activity

Name	Web Presence	Store Locators	Online Sales	Online Payment	Recruitment	Security Policy	History/Profile	FeedBack	Response Time	Response Type	Cookies	Online Account
Dunnes Stores	Yes	Yes	No	No	Yes	No	Yes	Phone	N/A	N/A	No	No
Roches Stores	No	No	No	No	No	No	No	None	No	No	No	No
Penneys	Yes	Yes	No	No	Yes	No	Yes	Email	Same day	Human	No	No
Hickeys	Yes	Yes	No	No	No	No	Yes	Form	No response	N/A	No	No
Brown Thomas	No	No	No	No	No	No	No	None	No	No	No	No
Champion Sports	Yes	Yes	No	No	Yes	No	Yes	Email	No response	N/A	No	No
Paddy Power	Yes	No	Yes	Yes	No	Yes	Yes	Email	Same day	Human	No	Yes
Clerys	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Email	Same day	Human	Yes	No
Molloys Liquor Store	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Email	Same day	Human	No	No
A-Wear	Yes	Yes	No	Yes	No	No	No	Form	Same day	Human	Yes	Yes
Youghal Carpet Yarn	No	No	No	No	No	No	No	None	No	No	No	No
Avoca	Yes	Yes	Yes	Yes	No	Yes	No	Email	6+days	Human	Yes	No
Dell	Yes	Yes	Yes	Yes	Yes	Yes	No	Form	Same day	Automated	Yes	Yes
PowerCity	Yes	Yes	No	No	No	No	No	Email	Same day	Automated	No	No
Tesco	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Form	Same day	Human	Yes	Yes
The Body Shop	Yes	Yes	No	No	Yes	No	Yes	Email	No response	N/A	Yes	No
Smyths Toy Store	Yes	Yes	No	No	No	No	No	Form	No response	N/A	No	No
Super Valu	Yes	No	No	No	Yes	No	Yes	Phone	N/A	N/A	No	No
Blarney Woolen Mill	Yes	Yes	Yes	Yes	No	Yes	Yes	Email	Same day	Human	No	Yes
Boots	Yes	Yes	Not in Ireland	Not in Ireland	No	Yes	Yes	Form	Same day	Human	Yes	Yes
Heatons	No	No	No	No	No	No	No	None	No	No	No	No
Easons	Yes	Yes	Yes	Yes	No	Yes	No	Email	One Day	Human	Yes	Yes
Arnotts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Email	Same day	Human	Yes	Yes
Marks and Spencer	Yes	Yes	Not in Ireland	Not in Ireland	No	Yes	Yes	Email	Same day	Automated	Yes	Yes
RyanAir	Yes	No	Yes	Yes	Yes	Yes	Yes	Phone	N/A	N/A	No	No