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ABSTRACT

How far has e-commerce penetrated the small retailer and business in NZ? A complete study of a suburban retail cluster of shops investigated their e-commerce readiness.

This paper sought answers as to why so few 3rd year BCS project students carried out transactional e-commerce sites for small business or retailers, and why small business does not appear to have caught the e-commerce wave. This appears to contradict the strong direction from government initiatives and the hype surrounding the potential for online business. For example, the NZ Ministry of Economic Development has set a vision for the development of e-commerce for NZ business, as "New Zealand will be world class in embracing e-commerce for competitive advantage." (Paul Swain). Research shows that New Zealanders are usually fast at up taking new technology, also supporting the potential for small business to exploit e-business opportunities.

A pilot study was undertaken which covered every single business within a geographical control zone. Within this retail zone of Taradale in Hawkes Bay, only 29% of the 122 retail businesses indicated they had a website, and only 5 of the websites allowed purchasing online.

Following the initial findings, answers were sought for this apparent contradiction between government e-commerce encouragement, consumer Internet readiness and retailer reluctance for online trading.

1. INTRODUCTION

As this paper reveals, a sampling of SME's, in particular, bricks and mortar retailers in NZ have a relatively low uptake of transactional e-commerce. Accompanied to this evidence, BCS students at EIT undertaking a "real-world" project have not been involved in any retail e-commerce projects with a view to setting up purchasing on-line. Research on the NZ ecommerce scene has suggested that only the larger corporate chains and specialist niche direct marketers have been early adopters in online purchasing in the retail sector.

While online shopping may be growing rapidly in NZ, the snapshot of a retailing district reveals a low uptake of e tailing. Does this mean that bricks and mortar suburban shopping centres are in danger from unseen competition? And are there any real economic benefits for a small gift shop, for example, with no national affiliations to offer an online channel?

This pilot study was undertaken in Taradale, Napier. Taradale is a large suburb in the greater Napier region. One hundred and twenty two businesses are located either within or around the main street and provide a good variety of good and services to the consumer. How are these businesses geared up for e commerce or in particularly e tailing functionality? Also how ready are the consumers in New Zealand for purchasing using these mechanisms? The following discussion section looks at these ideas along with other areas of interest.

2. **DISCUSSION**

2.1 PILOT STUDY

An initial pilot study was undertaken which covered every single business within the retail zone of Taradale,

Business Category	Number of Businesses		Number of e-tailing sites	
Automotive	7	2		
Books and	3	0		
Stationary				
Cafes	3	0		
Computing	5	5	1	
Finance and	8	4	2	
Insurance				
Florists	2	0		
Food and	9	1		
Beverage				
Footwear, Bags	4	0		
etc				
Furniture & Fittings	4	1		
Gifts	6	2		
Hair and Beauty	9	0		
Hardware	2	2	1	
Ladies Fashion	9	3		
Menswear	1	0		
Medical	7	2		
Music and Video	3	2		
Optometrists	2	0		
Pharmacists	3	0		
Photography	2	0		
Restaurants and Bars	7	2		
Real Estate and Travel	7	6		
Specialist Retail	10	1		
Sport and Leisure	3	1	1	
Takeaways	6	1		
Total	122	35	5	

Table 1: Sample Characteristics

Hawkes Bay. The purpose of this study was to identify the exposure that the businesses had to the internet, with a more specific aim of identifying which businesses carried out any e business or e tailing activities.

From the data collected, the name of each business, their address, contact details and information regarding their online business activities were collated and analysed. Table 1 summarises the sample population into business categories and identifies the number of business in each category who have a website and how many of these are engaging in any e tailing or e commerce. As the results in Table 1 indicate, only 29% of the sample population have a website and only 4% have e-tailing capability. No one category stood out for having a greater e tailing presence than another, however some categories did have a complete web presence among the businesses in this category. Interestingly enough, of the business categories listed above, 100% of the Computing group had a web presence, however only one of these offered online purchasing. This may be an area for further research or an extension of this study.

The business category, which had the greatest number of e tailing sites was Finance and Insurance,

Table 2: Reasons why Businesses resist E-Commerce in NZ (Statistics NZ 2001)

1	30%	Not relevant to business activity	
2	21%	Risk of virus or hackers accessing confidential	
		information	
3	16%	Cost of developing and maintaining an Internet	
		system	
4	15%	Lack of people with the IT skills needed	
5	12%	Data Communications is too slow or unstable	
6	8%	Technically too complicated	

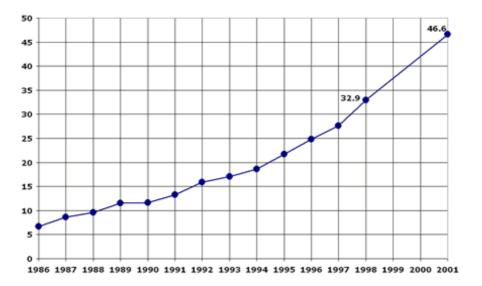


Figure 1: Saturation of PC's amongst households Statistics on Information Technology in New Zealand: Updated to 2002 Part 2

this in itself was quite surprising considering the type of products etc that could be purchased by the consumer.

2.2 BUSINESS BARRIERS TO E COMMERCE

According to Statistics NZ, the largest obstacle identified by NZ businesses to providing online sales on the Internet was that it was not seen as 'relevant' to their business activity. Another interesting observation by NZ Statistics is that the larger the business then the higher the percentage of NZ businesses who achieved sales via the Internet.

2.3 THE CONSUMER

The proliferation of the personal computer and the easy access to the Internet has enabled the consumer to be fully equipped to launch into e-tailing or ecommerce activities. This has been a global phenomenon, and it is no different in New Zealand. However, has the retailer kept up their half of the bargain, by allowing the consumer to make best use of this technological age we are now in?

Over the last 15 years the number of personal computers has steadily been on the increase in New Zealand, this may be for a number of reasons, however the decrease in the price and ease of use must have had some effect on this increase. To what extent has this increase actually happened and what effect will this have?

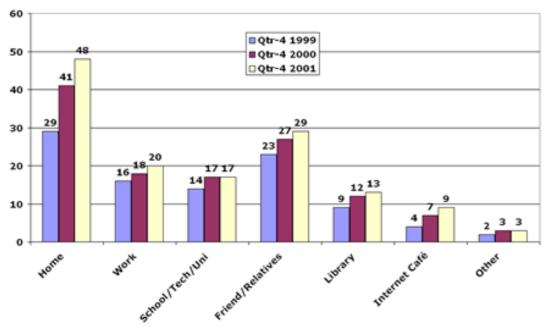


Figure 2: Consumer access to internet

Figure 1 outlines the increase in saturation of PC's amongst households in New Zealand over the last 15 years. The following graph illustrates how the consumer has adopted the uptake of the technology and how they are prepared to follow trends in order to kept up with the new technological age.

With reference to the above table, there is no question that technology will have a major influence in encouraging the end user from being able to have the choice, to make online purchasing. Alongside the increase of the personal computer in households comes the increased number of connections to the Internet to complete the necessary tools to participate in e-commerce or e tailing. Household Internet connections only make up some of the connectivity options and Graph 2 highlights where consumers are accessing the Internet.

Location may have some impact on who accesses the Internet as Brislen (2002) remarks "the large city centres have the largest user base in the country -44% of residents in Auckland and Wellington are online. Gisborne and the West Coast rated lowest with just under a quarter".

Taking this into account along with the increased usage of PC's, it is clear that the consumer is ready o leap into electronic commerce and e tailing. But are the retailers?

2.4 GOVERNMENT POLICY

The Ministry of Economic Development (MED) (2001) guide on E-Commerce for business also outlines how New Zealanders have already adopted e-commerce as it becomes available. There is a high use of EFTPOS and telephone banking with more than one EFTPOS machine for every 54 people.

The NZ Governments strategy is set out, as "New Zealand will be world class in embracing e-commerce for competitive advantage". The MED however acknowledges that e-tailing has been one of the slowest sectors of e-commerce to grow. Online supermarket shopping has been a success in some areas, but other e-tailer's tend to cater for smaller niche markets, which often includes a global market as well.

In a report from the NZ Statistics Department entitled "Information Technology use in New Zealand", it claims that 36% of the nations businesses had a website in 2001. This report also showed that IT use increased with the size of a business so this may help explain why most small independent retailers in a shopping center did not even have a website and very few had provision for online shopping. The national sales figures of products sold on the Internet in NZ show an even more downbeat picture of 0.03%.

Across all businesses in NZ, only 11% in 2001 had the ability to handle online payments.

The NZ Direct Marketing Association is aware that NZ retailers are lagging behind in full e-commerce

Internet purchasing and lays some of the blame on Tertiary education in NZ. "Unfortunately, with just a few exceptions, the tertiary education system in New Zealand is producing graduates who have little or no appreciation of modern business practices. Business leaders and academics in this country have entirely different expectations of higher education." (Norris, 2002).

3. RECOMMENDATIONS TO SMALL "BRICKS AND MORTAR" RETAILERS IN NZ.

For those small retailers with no e-commerce activity, it may well be economic now to invest in vertical marketing and select a small number of stock items to sell online. Retailers are recommended to undertake financial analysis to test the economic justification for online selling. Suburban retailers should become aware of the invisible nature of their competition in the form of pure online shopping sites in NZ. Retailers should acknowledge and attempt to measure the effect of this online competition along with the advent of the 'big-box' retailer.

4. CONCLUSION

After surveying a complete suburban shopping centre, we discovered that very few shops offer shopping online. This paper sought answers for this from the retailers, from NZ Government, and from general NZ Internet and e-commerce statistics. As this research progressed, it appeared that the suburban retailer without online shopping ability has certain threats from pure online retailers, 'big box' retail chains and changes in buyer behaviour.

5. FURTHER AREAS OF RESEARCH

BCS degree students could be appointed to build an online shopping site for a geographical cluster of retailers. This could be the subject of a further pilot study to ascertain the increase in turnover achieved by these retailers. Currently, the last 2 years of BCS student projects have produced 0% of online shopping sites.

Further research could be undertaken at larger and more central shopping districts such as Auckland and Hamilton to confirm whether this low rate of online shopping availability is widespread throughout traditional NZ centres.

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