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Shopping on line – User concerns

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Abstract

Electronic commerce systems have the potential to reach a much larger, and more global audience, than the traditional shop front. The number of users purchasing goods online is on the rise, however there are still many consumers who are not prepared to make purchases via the Internet. A variety of reasons have been suggested which contribute to deterring people from online shopping including; lack of knowledge, the difficulty of use of some shopping sites, delivery issues, and payment and security concerns. The major components of data collection for this study consisted of a survey of eighty Australian Internet users followed by interviews with ten of the respondents. The research suggests that Internet security remains one of the most important issues not only for those who have not yet purchased online, but also for those who do partake in online shopping. While current technologies provide the means for data to be transmitted securely, consumers' apprehension about the security issue is often prohibiting them from making full use of the capabilities of the Internet. The other major concerns for these users and non-users of internet shopping were human interaction and the issue of physical contact with the merchandise.

Key Words: Shopping online, user issues, security

1. Introduction

'The Internet is probably the most important consumer revolution of our lifetimes. Yet its managed to sneak up behind most of us – and many of our leading retailers – and take us by surprise. We're now waking up to the simple fact that for many goods, the Internet is a better way to buy and sell' (Collin, 1999).

The Internet is a means of expanding and developing a thriving retail business as it provides retailers with the exposure, selling capabilities and the opportunity to customize products to consumers needs. Many businesses that began their presence on the Web with 'information brochure' type-sites are now implementing online trading. The number of retailers selling goods via the web has steadily increased, as has the number of consumers who are prepared to purchase these goods and services online. Those users who participate in online shopping can now purchase a wide variety of goods including airline tickets, books, CDs, insurance, cars, investment stock and even pizzas and fresh produce. An estimated 45 million people purchased goods via the Internet during 1999 (Bayan, 2000) and some analysts are predicting that in the future online shopping will account for one-fifth of all retail sales (Goldsborough, 2000). However, a survey conducted by the Boston Consulting Group indicated that 43% of North America's Internet users had *not* shopped online (Bayan, 2000).

Why do so many Internet users refrain from using this medium for shopping? What are the experiences of the consumers who do attempt to shop online? Are their purchases

successful? What is the situation in Australia? This paper seeks to add to the dialogue by presenting results from a study looking at Australian Internet users' perspectives of online shopping. The users included those who do, and those who don't, feel comfortable in taking part in online shopping. The study explored what the issues were which users felt induced or deterred them, from shopping online.

1.1 Internet Usage Trends

The number of Internet users is constantly growing. Astor (2000) claims the increasing usage of the Internet is mainly due to the fact 'that the Internet is no longer a 'new' or 'emerging' medium'. By February 1999, approximately 3.2 million Australian households had a home computer. This was an increase of 10 percent from the previous year. By having a computer at home, 1.3 million Australian households had access to the Internet. This was an increase of 50 percent since 1998. Five million adults (37 percent of Australia's total adult population) accessed the Internet in 1999 compared to 3 million in 1998. Ninety percent of the home users, who had access to the Internet, used it once or more times a week. Of these, 40 percent accessed the Internet on a daily basis, 38 percent used the Internet between two to six times a week and finally, 10 percent use it once a week (Noie-E-commerce Banking, 2000a).

O'Brien (2000) reports that the Australian Bureau of Statistics found that online shopping increased by nearly 60% in the year to May 1999. Furthermore, during that time 'an estimated 650,000 Australian adult Internet shoppers made 3 million purchases for their private use'. However, this equates to only 12% of the Australian Internet users accessing the Web for shopping which is equivalent to only 5% of the entire Australian adult population. In comparison, 47% of adult Internet users in the USA shop online equating to 18% of the total adult population. It has been suggested that Australian online shopping lags behind other western countries because the Australian population has not adopted the catalogue culture and therefore remote retailing has historically been small (Forrester Research, www.thestandard.com).

The obvious benefits of online shopping such as time saving and convenience are also accompanied by various facts, which consumers need to be presented with in order to make an informed decision to shop online. Consumers must be aware of both the benefits and the risks of online shopping and these are well documented in the literature.

Online shopping is a convenient means of purchasing goods and services. It can give consumers access to an extensive array of goods and services as opposed to the products that are available locally at retail outlets (NOIE-Shopping on the Internet, 2000b). Some goods purchased online may also be offered directly from a manufacturer or distributor, eliminating middle costs and saving the consumer money (NOIE-Shopping on the Internet, 2000b). Goods may also decrease in price due to increased competition with suppliers around the world. Consumers are able to gather considerable information about the goods they would like to purchase and easily compare these with other products and prices (NOIE-Shopping on the Internet, 2000b).

Eloff and Labuschagne (2000) argue that one reason why many people are still 'skeptical' about shopping online is the perceived security risks associated with transactions over the Internet. "For most shoppers, feeling secure about entering financial information is the most important consideration in shopping online" (Fleming 1998, p106). Consumers may also be concerned with how their personal and financial information is handled during online

transactions. Results from the 8th Gvu User Survey indicate that privacy is the second largest user concern when it comes to online purchasing (Fleming, 1998). Consumers are willing to disclose certain information about themselves but cautious about disclosing other details, as they are unaware of how the information is to be used and who will handle it (NOIE-Shopping on the Internet, 2000b).

A survey conducted in the US found that 61% of the survey's 800 respondents claimed that they didn't purchase online because of privacy and security concerns (Lemos, 2000). Of those persons polled, 84% said they wanted to be informed of a site's privacy policies in easily understandable language.

Other issues documented include; concerns by users about delivery of the goods; concerns that they may not be completely satisfied with the goods or services once they do arrive; not having the ability to 'try before they buy'; experiencing various obstacles while using the Internet and being unsure of where to turn to for assistance. The fact that users do not receive a hard copy or receipt of their purchase can also make them anxious, as they are not certain whether the sale has been made and if they will receive the goods they have just paid for online. Not having a credit card with which payment can be made may also be a factor for some users.

2. Methodology

The major components of data collection for this study were a survey distributed to eighty Australian Internet users. Follow-up interviews were conducted with ten respondents.

A survey methodology was selected for its capability of providing a reasonably accurate description of real world situations from a variety of viewpoints. Respondent to the survey provided contact details if they were prepared to be interviewed at a later date. Respondents were consequently interviewed via the telephone or in a face-to-face situation.

Follow-up interviews were conducted with selected respondents to clarify responses or to prompt users who purchased online to provide additional information concerning these issues. Those users who highly disagreed with online shopping activities were also chosen for follow-up interviews to attain further insight as to the reasons why they opposed these online activities.

Of the eighty questionnaires distributed, fifty-four were completed and returned giving a response rate of 68%. The 54 respondents comprised 25 males (46 %) and 29 females (54%). Only eighteen of these Internet users had previously made purchases online (33%). Nine of these shoppers were male and nine of them were female.

3. Results:

Of the users surveyed, 19 percent were between the ages of 15 and 20 years, 26 percent were between 21 to 30 years of age, and a further 26 percent of users being between 31 to 40 years of age. 22 percent of users were aged between 41 to 50 years of age, but only 7 percent of users surveyed were in the age group of 51 to 60 years of age (Figure 1).

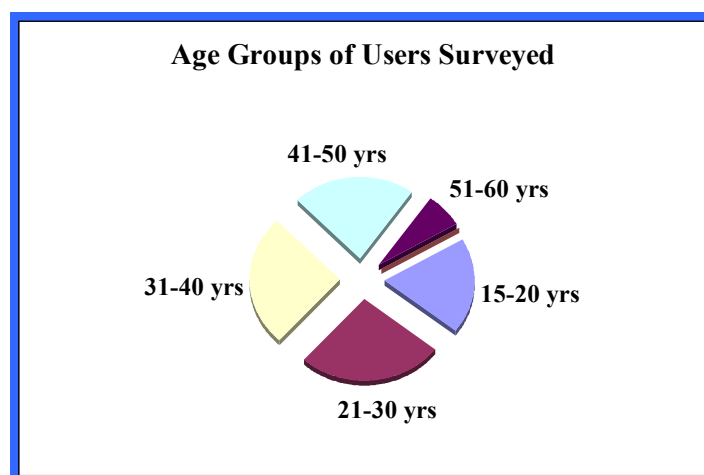


Figure 1: Age Groups Of Users Surveyed.

Of the Internet users surveyed, eighteen made purchases online. A breakdown by age indicated that some users from each of the age groups made purchases online, however the highest percentage of shoppers came from the 31 – 40 year age group. 50 % of this group of respondents were online shoppers (Table 1).

Age Bracket	Shoppers/Num. of Users	Percentage
15 – 20 yrs	2/10	20 %
21 – 30 yrs	4/14	29 %
31 – 40 yrs	7/14	50 %
41 – 50 yrs	3/12	25 %
51- 60 yrs	1/4	25 %

Table 1: Online Purchasing By Age Groups

The shoppers were grouped according to three main occupational categories. Of the eighteen shoppers, ten were professionals (55%). Five of the eighteen online shoppers fell under the non-professionals and students category (28%). Three online shoppers held occupations in the administration and services category (17%). These results indicate that in general professional types may have greater Internet knowledge and Internet use experience and therefore are more likely to make purchases online.

Online Goods Purchased	Users	Online Goods Purchased	Users
Books	6	Airfares	4
Apparel	0	Insurance	0
Accessories	1	Cosmetics	1
Electronics	1	Computers	3
Show Tickets	5	Accommodation	5
Sporting Equipment	2	Olympic Tickets	3
CDs / Videos	2	Shares	3
		Other	3

Table 2: Types Of Goods Purchased Online

The most common goods purchased online for these users were books, accommodation and tickets including events tickets, and airfares (Table 2). Other goods that users purchased

online were groceries, plasterboards and computer software. Goods such as apparel, accessories and cosmetics had a lower number of purchases or none at all. This could be because users prefer to try on and touch these items before actually purchasing them to ensure that what they are purchasing is exactly what they want. There were no particular types of goods purchased by users from a particular age group.

The number of Internet users who spend less than 2 hours online in an average week was 17 percent. Almost one quarter of the users spend 2 to 4 hours in an average week online. Slightly greater than 20 percent of users spent 5-7 hours or 10 or more hours online in an average week, with only 10 percent of users using the Internet for 7-10 hours in an average week (Figure 2).

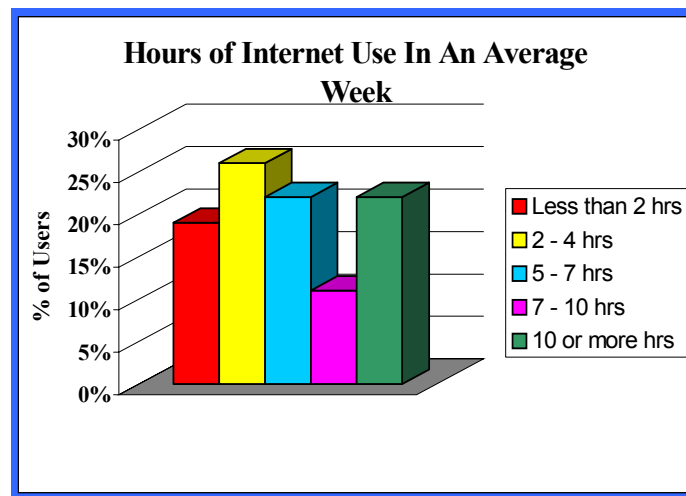


Figure 2: User Internet Use In An Average Week

The time spent on the Internet by the users, during an average week, did appear to be a factor in whether the user purchased online or not (Table 3). Of the 24 users who spend 5 or fewer hours on the Internet in an average week 25% purchased online. However of the 18 users spending between 5 and 10 hours a week online, 33% made purchases on line. Looking at the most prolific users of the Internet; those spending 10 or more hours a week online, 50% of these users made online purchases. The time spent on the Internet may provide the consumer with the confidence, trust and knowledge to use the Internet as a means of purchasing goods with ease.

Time Spent Online	Buyers	Non Buyers	Total	Buyers %
<5	6	18	24	25%
5-10	6	12	18	33%
10+	6	6	12	50%

Table 3: Time Spent Online By Online-Shoppers

The survey results indicate that users who spend 10 hours or more using the Internet actually spent the greatest amount of money on online purchasing. The trend of the results illustrate that the online purchasing amounts tend to increase as the users' time spent online in an average week increased. In other words, the more time spent using the web, the greater the purchasing confidence of the user and in-turn the greater the dollar amount spent purchasing online.

Of the Internet users surveyed, 78 percent of those users who purchased online (14 users out of 18) had access to the Internet both at home *and* at their workplace. 17 percent of those who made online purchases had access to the Internet *only* at their home and 6 percent had Internet access *only* at their workplace. This would indicate that those users who have access to the Internet both at work and at home are more likely to engage in the online purchasing of goods.

All the users who shopped online found the purchasing process simple to use and the web sites easy to navigate through. The majority, 83%, had not experienced any problems with the delivery of the goods and most of the goods purchased via the Internet were also available in retail stores. User 5 made the comment that “I was worried initially about delivery problems, however it was fine” and User 43 indicated that “the Order was delivered on time and was exactly what we wanted”. Only 17 percent of the online shoppers experienced problems with the delivery of the goods. User 12 commented that “the goods took an extraordinary amount of time to arrive and ended up carrying more hidden costs, which weren’t expected”.

A relatively high proportion of the users (55%) indicated however, that they would prefer to purchase from a retail outlet *rather than* online. These users used the online facility because it saved them time and was available 24 hours a day, 7 days a week. Shoppers turning to the Internet simply to save time, or to have access to goods when physical stores are closed, may be an indicator of the time pressures experienced by many workers in today’s society.

Online security is a substantial issue for those who shop online, with more than half the online shoppers expressing strong concern about the security of their transactions. A number of the users expressed their lack of confidence in the security of the sites they accessed; “I buy things via the Internet but I am still really worried whether something will happen to my credit card. You read stories in the newspapers of people who have had trouble. I think though, that if someone does fraudulently use my card because they accessed the numbers via the net, then I will not be held liable. I hope I never have to find out”(User 14). Another shopper expressed her anxiety by saying she kept her ‘fingers-crossed’ that nothing would go wrong (User 43).

Concerns of the non buyers:	No. of Users (N=36)	Percentage of Users
Do not have a credit card	11	31 %
Concerned about the security of their credit card details	28	77 %
Concerned they will not receive the goods	21	58 %
Believe the delivery cost on online goods is too high	6	17 %
Prefer to try on/touch goods before purchasing	30	83 %
Prefer human interaction when shopping	22	61 %
Frustrated at the slowness of shopping web sites	14	39 %
Find online shopping sites too complex	9	25 %
Concerned about the quality of goods online	17	47 %
Believe online retailers should be more concerned about the issue of security	26	72 %
Never attempted online shopping	29	81 %

Table 4: Online Shopping Concerns

Table 4 shows that of the users surveyed who did not purchase goods online, 11 of the 36 users (31 %) did not own a credit card and 81 % have never attempted online shopping. The security issue was a main concern for these Internet users regarding online shopping. Seventy-seven percent (28 users out of 36) are concerned about the security of their credit card details if they were to make online purchases and 72 % believe online retailers should be more concerned about the issue of security online. User 11 declared 'I do not know what will happen to my personal details or credit card details on the Internet and therefore I prefer to buy from a store' and User 51 said 'I regularly hear about credit card fraud on the Internet and do not want to be victim of it'.

The lack of human interaction in the online shopping process was a concern for 61 % of the users. Being able to try on goods or examine goods before purchasing them was important to the majority (83 %). User 19 who was not an online shopper, made the comment that "I would not shop at online department stores because I prefer to try on what I am buying if it is a material product". User 51 indicated that she frequently saw items in the stores that looked like what she wanted but on closer examination (either through trying on a garment, by feeling the texture of the material or by sitting in a chair for example) she would change her mind and not purchase the item. "What a hassle if I was to purchase via the Internet and then have to return the item" and consequently preferred to shop in physical stores.

To determine what factors might encourage non Internet buyers to consider shopping via the Internet, respondents were asked to reply to a series of questions. Table 5 shows that users would be prepared to consider shopping online as an option if they were more informed about the security of the web site they were purchasing from. Seventy-two % of users would partake in online shopping if there was a link explaining the sites' security. Yet 58% of users who did not shop online may do so if the price was right i.e. the goods were cheaper if purchased online than if purchased from a retail outlet.

Would partake in online shopping if:	No. of Users (N=36)	Percentage of Users
There was an online link explaining the sites security	26	72 %
Web sites were simpler to navigate through	11	31 %
The purchasing process was less complex	14	39 %
Goods were cheaper online than at an outlet	21	58 %
The goods were only available on the Internet	11	31 %

Table 5: Reasons Users Would Shop Online

4. Conclusion

The use of the Internet as a medium for the sale of goods is becoming increasingly popular for business. Understanding the concerns of the potential consumers is important if a business is to be successful online. However this research clearly points to security as one of the major areas of concern for those involved. Security of the transaction remains an important issue not only for users who have not yet purchased online, but also for users who do partake in online shopping. While current technologies provide the means for data to be transmitted securely, consumers' apprehension about the security issue is often prohibiting them from making full use of the capabilities of the Internet. Greater attention to educating and informing Internet users regarding security measures in place, on online shopping sites, may encourage more users to shop online. Other major issues of concern for these Internet

users were concerns about “touch” and the lack of “human interaction”. An obvious limitation of this project is the small sample size and replication of the research with a much larger sample size would be an interesting follow-up.

References

- Astor D. “Survey Finds More Net Use and Trust”, *Editor & Publisher*, (133: 20), 2000, p35.
- Bayan. R. “How Business Owners Can Prevent Online Shopping Failures”, *Link-up*, (17:4), 2000.
- Collin S. *The Virgin Internet Shopping Guide*, Virgin Publishing UK, 1999.
- Eloff J. and Labuschagne L., “Electronic Commerce: The Information-security Challenge”, *Information Management & Computer Security*, (8: 3), 2000.
- Fleming, J. *Web Navigation-Designing the user experience* O'Reilly & Associates Inc , US
- Goldsborough R. “How To Safely Shop Online”, *Rn*, (63: 11), 2000, p1.
- Lemos R. “Privacy woes scaring off e-shoppers”, *ZDNet News*, 2000.
- NOIE (The National Office for the Information Economy), *E-commerce Banking – A guide to Personal Internet Banking Services*, Australian Government, 2000a, p3.
- NOIE (The National Office for the Information Economy), *Shopping On The Internet – Facts for the consumer*, Australian Government, 2000b, p.2-3.
- O'Brien T., *E-Commerce Handbook*, Tri-Obi Productions, Victoria, 2000.
- Ryrie T. “A Walk On The Web”, *Charter*, (70: 10), 1999.