

Net shopping

by Jonathan Ellison and Warren Clark

The Internet has changed the way many people obtain information for making purchasing decisions. It has opened up the relationship between buyers and sellers, providing buyers with the potential to easily comparison-shop and to learn much more about products before buying.¹

Net shopping is much more than purchasing goods and services directly on-line. Businesses that allow consumers to view product information on-line are also part of the Internet shopping boom, providing potential customers with descriptions, pricing, availability and customer support and education, that can lead to sales.

Convenience is one of the many advantages of shopping on-line: shoppers can save time and effort by shopping from their home or office at Web sites from around the world at any hour of the day or night. On-line shopping opens up a global marketplace with a much wider range of goods and services.

There are also disadvantages to shopping on-line. As with catalogue shopping, shoppers are unable to feel, smell, taste or try products. And, as with any form of shopping, the on-line product description and photo may not live up to expectations. The shopping experience may boost frustration if the Internet connection suffers from long delays, as a result of slow modem speeds, heavy Internet traffic, system crashes or if shoppers must wade through numerous computer screens to find the product. Those new to shopping on-line may be unfamiliar with

search engines, shopping bots,² and other ways of finding products. On-line shopping also requires customers to remember account passwords for security purposes, something not required at the local mall. Like mail-order shopping, Internet shopping also has the problem of providing convenient delivery options and hassle-free product returns.

This article focuses on Internet shopping (purchases and window-shopping) done by Canadian households accessing the Internet from home. It quantifies how much on-line shopping is done, what is most popular among shoppers, and what types of households do the buying.

According to the Household Internet Use Survey, in 1999, 1.8 million households (that is, 15% of all Canadian households) shopped from home on the Internet.³ While about 800,000 households placed orders over the Internet (e-commerce households), slightly more (1 million) only window-shopped — they compared products, looked up product descriptions or specifications, checked product availability, and obtained price quotes — but did not follow through with an Internet order. Although these window-shoppers did not make purchases on-line,

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the information they received via the Internet may have influenced subsequent purchase decisions made off-line.

One of the concerns of Internet users has been the security of credit card information transmitted on the Net. For this reason, about one-quarter of households who placed orders made alternative arrangements (for example, they used a 1-800 number to complete the transaction).

While Internet shoppers still are a minority, Canadian households spent \$417 million in 1999 on Internet purchases from home, an average of \$517 per e-commerce household. People are concerned that many Canadian Internet purchases are made to American dot.com companies. According to the

1. Carroll, Jim and Rick Broadhead. 1999. *Canadian Internet Handbook 2000 — Lightbulbs to Yottabits*. Toronto: Stoddart Publishing Co. Limited. p. 106.
2. A bot (short for robot) is a software tool for digging through data. You give it directions and it brings back answers. Shopping bots facilitate comparison shopping by combing the Internet to find the lowest price for a product.
3. Includes those who placed orders for goods and services over the Internet as well as those who only window-shopped, looking for goods and services without purchasing.

CST What you should know about this study

The data for this article are from the Household Internet Use Survey (HIUS) conducted in November 1999. About 36,200 households responded to the survey. The HIUS collected information on household Internet use and business-to-household electronic commerce for households that typically accessed the Internet from home. Electronic commerce information was collected from November 1998 to November 1999. The HIUS collected information on the household as a whole from a designated member of the household who was asked about the level of on-line orders made by all members of the household in the last 12 months. This may lead to an underestimate of the extent of business to household e-commerce because the respondent may not have been aware of purchases or the value of purchases made by other household members.

Excluded is the value of the consumer orders placed over the Internet from locations other than the home. For example, an employee who purchases a book over the Internet from work is not included in the on-line shopping numbers presented here. This study also focuses on Internet users who typically access the Internet and excludes those who rarely access it. Orders placed over the telephone, on ATMs or through other electronic networks other than the Internet are not included.

The HIUS surveyed households in Canada of which some used the Internet during a typical month. Some of these Internet households accessed the Internet from home. Of households who used the Internet from home, some did not shop on the Internet, some placed orders for goods and services (e-commerce households) and others only window-shopped (window-shopper households). Households that did shop online from home are called "Internet shoppers" and include both the e-commerce and window-shopper households.

1999 Household Internet Use Survey (HIUS), about 60% of the dollar value of purchases from Canadian homes (\$250 million) were to Canadian businesses.⁴ This is miniscule compared with the \$559 billion personal expenditures on consumer goods and services in 1999.⁵ Although there are many more American Web sites, Canadians may choose Canadian sites when purchasing goods and services to avoid currency exchange rates, customs duties, and possibly, slower, more expensive delivery.

Internet households very concerned about security and privacy on the Internet

Convenience is one of the key reasons why people shop on the Net. However, consumers are still uneasy with making electronic transactions on the Internet

due to security concerns. Several recent events involving cyber theft of credit card numbers, denial of service attacks⁶ and theft of e-mail addresses may have contributed to the public's concerns of Internet security. Accumulation and selling of personal information about visitors to Web sites, often without consent or knowledge, have raised privacy concerns. To help consumers have an enjoyable on-line shopping experience, e-commerce companies have been storing shipping addresses, credit card numbers and shopping preferences to eliminate re-entry of this information when revisiting. Although these features improve the on-line experience, this information may not be stored very securely.

And home users of the Internet are concerned: nearly half (46%) were very concerned about the security of

purchasing over the Internet while about one-third (33%) were very concerned about Internet privacy. These issues may be why Internet window-shoppers and non-shoppers did not place orders on-line. Indeed, almost 53% of the Internet window-shoppers were very concerned about Internet security while only 33% of households who paid for orders over the Internet were that concerned.

To overcome these perceptions, Internet companies are adopting new encryption and authentication technologies, posting privacy and security policies and launching consumer reassurance campaigns. Governments are also acting with new legislation to ensure confidentiality of information.⁷ If consumer confidence is compromised by a breach in security or by the distribution of personal information, it is very difficult to win that trust back.

4. Statistics Canada. August 10, 2000. *The Daily* (<http://www.statcan.ca/Daily/English/000810/d000810a.htm>). Canadian businesses reported \$4.2 billion in orders over the Internet in 1999, according to the Information and Communications Technologies and Electronic Commerce Survey. About \$611 million of Internet sales were made by Canadian retailers. These sales figures included orders from other Canadian businesses, from businesses and consumers outside Canada, and from Canadian householders who access the Internet from home or other locations. Only Internet purchases of Canadian households accessing the Internet from the home are included in the \$417 million total, \$250 million of which was purchased from Canadian businesses, as reported in the Household Internet Use Survey.

5. *National income and expenditure accounts — Quarterly estimates*. Statistics Canada Catalogue no. 13-001-XPB, Vol. 48, no. 1 (1st quarter 2000). p. 19.

6. Attackers flood Web sites with so many requests that other Internet users find it difficult to communicate with that service. Service to other visitors is blocked because the server is so busy responding to the flood of requests from attackers that it has no time left to handle requests of legitimate customers.

Books, software, music and travel were the most popular on-line buys

Buying books (48%), software (36%), music (30%) and travel (29%) were the most popular purchases among households buying on the Net. These items can be easily purchased by providing a credit card number to the merchant over the Internet. Because their cost is usually small, a purchase of these items has few long-term financial implications on a household, unlike buying or leasing a car. Automotive product purchases ranked 7th in popularity at 21% among e-commerce households.

Travel and automotive products popular among window-shoppers

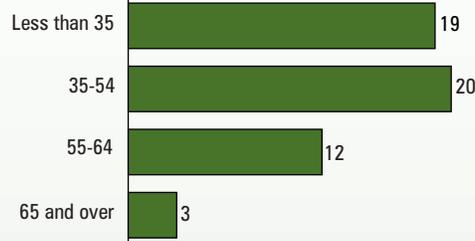
The Internet has become an essential research tool for consumers, enabling educated purchase decisions. Among window-shoppers automotive products (30%) were 2nd in popularity behind travel (32%). Purchasing or leasing a car requires considerable research, something that many Canadians have used the Web for. Yet most consumers still buy or lease cars off-line. This may be because many auto Web sites channel consumers back to a dealership to complete the sale. Consumers may still want to take a test drive and negotiate trade-in values, pricing and financing options face to face. The Internet

7. The *Personal Information Protection and Electronic Documents Act* that came into force on January 1, 2001 protects the personal information of individuals when it enters the commercial sphere in Canada. It will help to build trust in electronic commerce with the assurance of protection of digital information. In general, the *Act* requires organizations to obtain an individual's consent when they collect, use or disclose the individual's information. The individual has a right to access their personal information that is held by an organization and to have it corrected, if need be. Personal information can only be used for the purposes for which it was collected. Individuals should also be given the assurance that their information will be protected by safeguards such as locked cabinets, passwords or encryption.

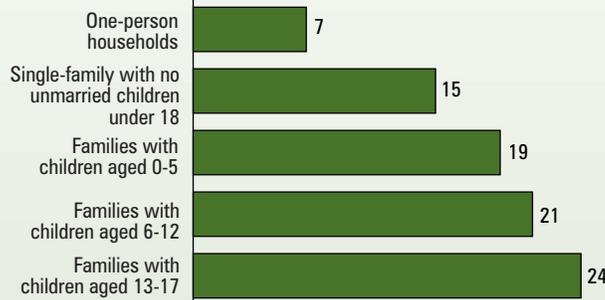
CST Highly educated, high income households and those with teenagers are most likely to be Internet shoppers

% of Internet shopper households

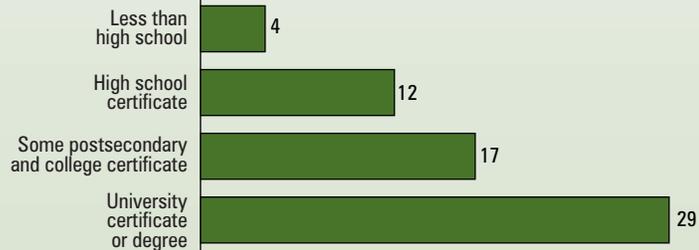
Age of household maintainer



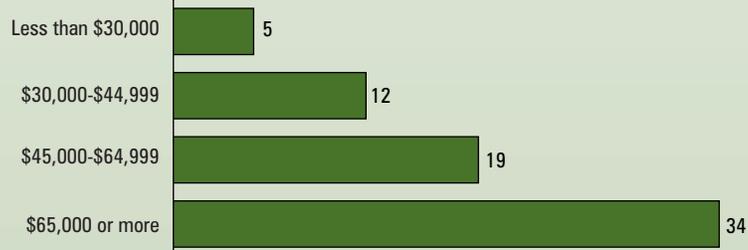
Type of household



Highest level of education of household maintainer



Household income



Note: Includes households that only window-shop and households that order goods or service over the Internet.

Source: Statistics Canada, Household Internet Use Survey, 1999.

helps consumers to reduce some of the legwork involved in making large purchases.

Who's shopping?

Previous research has shown that home Internet use was more common among households with high income, the highest levels of education, teenaged children and where the

household maintainer was aged 35 to 54.⁸ Households with the highest education and income were also the most likely to shop on-line.⁹ Households with an income of \$65,000 or higher were about 7 times as likely to be Internet shoppers (34%) as were households with less than \$30,000 income (5%). About 60% of household Internet shoppers had a

household maintainer in their mid-30s to mid-50s. Internet shopping rates were highest among households where the maintainer was in their mid-30s to mid-50s (20%), followed closely by those under age 35 (19%).

Summary

Although household Internet shopping in 1999 represented only a small part of retail commerce, e-commerce is growing rapidly. More and more households are becoming connected, and many are beginning to shape their purchasing decisions based on information they obtain on the Internet. Businesses increasingly use the Internet to disseminate information about their products and to develop relationships with their customers. This has led to growth in on-line transactions. In 1999, 1.8 million Canadian households shopped on the Internet. Books, computer software and hardware, music and travel were among the most popular on-line purchases. Canadians are still concerned about privacy and security issues related to making purchases over the Web; however, with stronger security measures, clearly articulated privacy policies and government regulations, these fears may abate in the future.

Product or service type	E-commerce households		Window-shopper households	
	Rank	%	Rank	%
Books, magazines and newspapers	1	48	3	30
Computer software	2	36	4	24
Music (CDs, tapes, MP3)	3	30	7	21
Travel arrangements	4	29	1	32
Clothing, jewelry and accessories	5	24	5	23
Computer hardware	6	24	6	21
Automotive products	7	21	2	30
Consumer electronics	8	19	8	19
Other entertainment	9	17	10	14
Other	10	16	13	7
Banking and financial	11	16	9	14
Housewares (furniture and appliances)	12	13	11	13
Videos, digital video discs	13	12	12	9
Hobbies	14	9	14	6
Food, condiments and beverages	15	6	15	5
Toys and games	16	4	16	3

Source: Statistics Canada, Household Internet Use Survey, 1999.

8. Dickinson, Paul and Jonathan Ellison. Winter 1999. "Plugged into the Internet", *Canadian Social Trends*.

9. Place orders or window-shop over the Internet.

CST Internet Use

In 1999, 4.9 million Canadian households (or 42% of households) regularly used the Internet from their home, work, school or other locations.¹ This was up from 36% in 1998 and 29% in 1997. The home has emerged as the most popular place for household Internet access (29% of households), while work ranked second at 22%.

1. In August 2000, 41.5% of American households had access to the Internet at home. U.S. Department of Commerce. October 2000. *Falling through the Net: Toward Digital Inclusion* (<http://search.ntia.doc.gov/pdf/ftn00.pdf>). p.1.

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