Internet applications, sites, trends and happenings

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This column aims to draw your attention to various interesting Web sites which I have come across and which might appeal to you, and to keep you up-to-date with news and views on Web trends and developments. It offers essentially a personal selection rather than comprehensive coverage.

E-books

Every now and then there is a surge of interest in electronic books. A recent article on the CNN Web site talked about the pros and cons of e-books (http://www.cnn.com/2000/books/news/09/25/ebook.primer/index.html). The new technology has several advantages over conventional, printed books: they are easier to store, they are more versatile (e.g. can be searched), they can be read in the dark, they can be bought (downloaded) when shops and libraries are closed, and so on. They can be read on computers and laptops, hand-held personal digital assistants, or special hardware devices dedicated to the task which weight just a kilo or so, but cost several hundred dollars. Although they don't use paper, e-book readers are not that eco-friendly in that there is a problem later in disposing of them. They usually have a small screen, so not much text can be read at a time and hand-held devices are not always adequate for the task of downloading texts – but technology is improving and the readers are getting lighter and more portable – and, more importantly, publishers are beginning to embrace this new medium. Amazon.com, for instance, is teaming up with Microsoft to create an electronic bookstore. Amazon will offer the Microsoft Reader as the preferred format and preferred reading appliance. BarnesandNoble.com already has a similar tie up with Microsoft.

However, in another article on the same site a survey revealed that few believe e-books will replace paper versions. (http://www.cnn.com/2000/books/news/09/21/electronicbooks.ap/). The Consumer Book Buying Study 2000, sponsored by Publishers Weekly and BookExpo America, included Internet users who had purchased a book online and/or at a traditional store between July 1999 and July 2000. Of 1 140 people asked, only 60% were familiar with electronic book formats and of those who knew about them 70% said they didn't expect to buy an electronic book within the next six months. Active use of e-books seems restrained, particularly among teenagers who are normally early adopters of technologies.

On the other hand, the advent of electronic books means not so much replacing print as supplementing it – redefining publishing economics and opening ways for authors whose works have been prevented from being printed conventionally. And as for those single-purpose e-book readers – forget it. According to an article in *Technology Review*, the future of electronic publishing lies in the files you can download to, view on and print out from your own computer (http://www.techreview.com/articles/july00/ditlea.htm).

Demographics and the Web

In past columns I've looked at the demographics of the Web and it's a topic which crops up all the time. In a new report from Forrester Research, Inc. it is revealed that income levels rather than ethnicity determines access to the Internet (http://www.cnn.com/2000/TECH/computing/08/07/access.report.idg/index.html). The report compares the width of the digital divide between the technology haves and have-nots, that is the divide between Caucasians and the largest ethnic minority in each US state (mostly Hispanics and African Americans), and found that it was the widest in southern states. However, the study determined that the digital divide was not driven by ethnicity, but rather by disparities in each group's income, age, technology, optimism and education. Seven of the ten states with the lowest median incomes for African Americans have a large digital divide. To close the gap the report suggests subsidizing Internet access in schools, libraries and workplaces since many minorities access the Web outside their homes.

On the other hand – and this is where you begin to wonder about all this kind of thing (it's a bit like food: for every report saying that wine or cheese or chocolate or whatever is bad for you, there is another saying it is good) – a report from Media Matrix found that lower-income Web users are now the fastest-growing segment of the US market. (http://www.cnn.com/2000/TECH/computing/08/22/internet.incomes.reut/index.html). A survey of 55 000 Internet users found that low-income groups, especially from households earning less than $25 000 per year, grew nearly 50% in the 12 months ending in June 2000. They are being drawn to sites like ValuePay.com and GetPaid4.com and are going online at three to four times the rates of wealthier groups that favour upscale financial or travel sites. The study found lower-income Web users, typically newer to the Internet, tended to be less experienced surfers and yet spend more time on-line – around 13 hours per month. By contrast higher-income users, who tended to be more experienced Web surfers, spent less time (just over nine hours per month) and viewed less pages. Household income also seems to reflect Web viewing preferences with lower-income groups visiting career and auctions sites, while higher income brackets viewed leisure, hobby, auto, sports and travel sites.

Actually, and this is something I have also discussed before, the phenomenon above is related to access charges. ValuePay.com, for instance, offers visitors a nominal fee of one dollar for each hour spent on the site. Last November when CallNet, in London, launched its free Internet access service, consumers signed up in droves for unlimited time on-line. However, in August this year CallNet withdrew the free service saying it was unprofitable in its current form (surprise!). The company's experience is not unique; in the past, several other UK companies (such as Breathe, LineOne) have announced and launched free or unmetered access plans only to have to withdraw them in the face of overwhelming consumer response. The problem apparently lies in underestimating customer demand and not getting the business plan correct. The theory is that with no (or low) price structure for access fees, they can accumulate as many users as possible in a very short time and this critical mass will the attract advertising and other sources of revenue for the company making the free service available. But this isn't happening. Read more about it in *Time*, 21 August 2000:52.

Though in another recent survey, results showed that half of adults in the USA do not have Internet access and some 57% of those non-users have no interest in going on-line (http://www.cnn.com/2000/TECH/computing/09/25/unwanted.access.idg/index.html).

The biggest group of non-believers are ageing baby-boomers and senior citizens who don't believe that the Web can bring them any benefits. Concerns over privacy and what Web sites do with the information they glean from cookies are some of the reasons for non-use.

Is the Web useful?

There has been quite some controversy in the past as to whether the Internet is useful or useless. Many pages were not up-to-date, many links were not working, much was ephemeral, much was porn, the search engines typically only indexed significantly less than 20% of the billion or more pages available on the public Web (and nothing at all of the billions of pages on the hidden Web). However, according to a University of California in Los Angeles (UCLA) report, the Internet is considered a more important and credible source for information than either radio or TV by those who use on-line technology. The Internet, in fact, at 67% ranks third in importance as an information source behind books (73%) and newspapers (69%) – though, since many major newspapers are now available on the Web, the distinction is less obvious.

Two-thirds of survey respondents who used the Internet said it was extremely important or important and over half believed that most or all of the information found on the Net was reliable and accurate. This contrasts with non-users, only a quarter of whom said it was an important or extremely important source, and only a third of whom considered it accurate.

Although there were disagreements between users and non-users of the Internet over the importance and credibility of the information found, the UCLA Internet study found that the two groups were in strong agreement in perceiving that the Internet creates risks to the preservation of individual privacy. A press release relating to the survey can be found at http://www.uclanews.ucla.edu/docs/LSHL379.html, while select questions and graphics can be found at http://www.college.ucla.edu/InternetReport/.

Further findings just released indicate that nearly 70% of Americans use the Internet; 55% use it for e-mail and 52% make purchases on-line; 57% read news on the Web, while 57% use it to find hobby information and 54% use it to find entertainment information. The study also found that 86% of Americans with college degrees used the Internet, 53% of Net users only have high school diplomas, and 31% have no academic qualifications. Regarding time spent on-line, 11% of parents say their children spent too much time on-line while an almost similar number think that their children don't spend enough time on-line. However, 26% believed that their children's grades improved with on-line use versus 3% who thought they declined (http://www.cnn.com/2000/TECH/computing/10/25/internet.study.ap/index.html).

How the Internet is used is also revealed to some extent in a recent survey conducted by Roper-Starch, where it was found that over 50% of Web users shopped on-line (of those 75% went shopping in their pyjamas!). Over 40% reconnected via the Internet with someone they had lost touch with – on average 12 years ago. Fifty per cent prefer to use e-mail these days instead of the telephone to communicate with business colleagues, and over 30% check their e-mail while on holiday (http://www.cnn.com/2000/TECH/computing/10/24/internet.survey/index.html).

NASA goes on Safari in Africa

Though this isn't strictly an Internet application, I did come across it on the Web and it might be of interest to you. SAFARI 2000 is an ambitious science project involving a global team of scientists, an armada of aircraft and NASA satellites to study the unique environment of southern Africa. Targets include smoke and gases released into the atmosphere by industry, biological sources, and the burning of forests and savannas. Using sensors on the ground, on planes and on spacecraft, scientists hope to build up a clearer picture of how such emissions affect phenomena ranging from regional crop productivity to global climate change. To ensure that the project data is available to everyone, a data repository will be created at the University of the Witwatersrand. Read briefly about the

project at http://science.nasa.gov/headlines/y2000/ast16aug_1m.htm or visit the project's home page at http://Safari.gecp.virginia.edu/.

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