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Internet applications, sites, trends and happenings

David Raitt
david.raitt@esa.int

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 Internet trends, developments and statistics. It offers essentially a personal selection rather than comprehensive coverage.

Top Internet trends for 2004
Rob Greenlee, Host of WebTalk Radio, has listed what he believes are the top ten interesting developments on the 2004 horizon as far as the Internet is concerned. They are:

1. The decline of the Web browser usage on the desktop as a way to get to Web content – mainly due to the launch of the Google Deskbar.
2. The growth of Internet connected executables or applications that perform data services and search requests delivered through task specific applications and not through the Web browser.
3. All things wireless – options to eliminate wires from the desktop to mobile media players, cell phones and PDAs with the combined use of bluetooth, Wi-Fi, ultra wideband, infrared and RF transmissions frequencies.
4. Digital media enters the living room.
5. Professional journalistic Web logs are syndicated through RSS (really simple syndication).
6. Microsoft mobile platforms will enable real-time access to network data and communications from anywhere at anytime.
7. Voice-over-Internet Protocol voice data communications services will enable lower cost long distance calling and better integrate the services provided by present telephone companies.
8. Internet radio growth and revenue – digital video and audio consumption will show significant growth in 2004 as streaming media, Internet radio and downloadable formats continue to grow in popularity.
9. Online search extends beyond Web – growing efforts to index more than just the World-Wide Web, as search companies find other deep database information to index and make public on the Web.
10. How online popularity is creating worldwide celebrities.

You can read more about the reasons for these at
http://www.Webtalkguys.com/10604.shtml.

Google widens gap
WebSideStory (www.WebSideStory.com) recently reported that the Google.com domain continues to distance itself from the competition and has reached an all-time high in US search referral market share. At the end of March 2004, Google posted a US search referral

percentage of nearly 41% – nearly 5% up from last year. Second-place competitor and former leading search referral domain, Yahoo.com, posted a referral percentage of 27% – 4% down on last year. MSN.com placed third at 20%. Search referral percentage measures the proportion of visitor traffic a search site sends to other sites on the Web. This can include referrals resulting from paid keywords, unpaid search results, and even banner ads on the search portal's Web site. In compiling the data for this report, WebSideStory relied on a sample size of more than 25 million unique browsers tracked by its network on 23 March 2004.

Read more at http://www.statmarket.com/cgi-bin/sm.cgi?sm&press&week_stat.

InfoAnarchy's Wiki
A wiki is a collection of Web pages that anyone (including you!) can edit. This wiki, made available by InfoAnarchy (http://www.infoanarchy.org/wiki/), contains information related to file sharing, copyright, the gift economy, cyber liberties, peer-to-peer research, information tools and similar topics which are discussed on infoAnarchy. All content contributed is in the public domain except where otherwise noted. A colour code is given: green links refer to external links; blue links refer to internal links, and red links means internal links to non-existent pages. Clicking on an entry in the list takes you to that particular site.

The wiki has a section on Internet trends. This is a list of links to software or Web applications which InfoAnarchy considers particularly innovative and trend setting. Criteria for inclusion are that the site should be in active use and should show some degree of innovation. The links are put under topics (e.g. social software, politics, economy and open resources) and include entries such as:

- MIT Open Courseware – MIT's courseware under an open content license
- Public Library of Science – 'a non-profit organization of scientists and physicians committed to making the world's scientific and medical literature a freely available public resource'
- Half Bakery – open repository of ideas, similar to MySociety
- IMDb – Internet movie database
- Bloggers Parliament – 'a flexible assembly of bloggers who are interested in finding and selecting from the blogosphere or from any other source – including their own thoughts – feasible solutions to current problems on both the local and the global scale'
- LinkedIn.com – like Friendster.com, but for professionals, not dating.

Find many more links at http://www.infoanarchy.org/wiki/wiki.pl?Internet_Trends.

Internet users no longer downloading music files…
Following on from the item in my last column, the number of American Internet users who say they download music or share files online has increased slightly, but continues to sag well below peak levels and one in seven say they no longer download music files, according to the most recent survey of the Pew Internet & American Life Project.

The Project's national phone survey of 1371 adult Internet users conducted in February 2004 shows that 14% of online Americans say that at one time in their online lives they downloaded music files, but now they no longer do any downloading. That represents more than 17 million people. However, the number of people who say they download music files increased from an estimated 18 million to 23 million since the Project's November-December 2003 survey. This increase is likely due to the combined effects of many people adopting new, paid download services and, in some cases, switching to lower-profile peer-

to-peer file sharing applications.

Between November 2003 and February 2004 alone, comScore Media Metrix estimates that 5 million fewer people are actively running KaZaa. At the same time, the comScore data also show growth since last November in usage of some of the smaller file-sharing applications, such as iMesh, BitTorrent, and eMule. Moreover, March data from comScore Media Metrix indicate that more than 11 million US Internet users visited just six major paid online music services.

While it's clear that the recording industry's legal campaign has made a lasting impression in the minds of American Internet users, there is evidence that a segment of users are simply moving away from the most popular and highly monitored file-sharing networks and are instead using alternative sources to acquire files.

Read more at http://www.comscore.com/press/release.asp?press=449.
Download the full report at http://www.pewinternet.org/reports/toc.asp?Report=122.

… Or are they?
Separate research studies revealed some interesting data about online music habits: collections average only a certain number of songs, yet more are swapping. The findings from a Jupiter Research (http://www.jupiterresearch.com) study indicate that those high-capacity (15GB, 20GB, and 40GB) MP3 players may be overkill since many music aficionados max out at about 1000 songs. According to the report, 90% of consumers who maintain a music collection on their PC have a maximum of 1000 songs in their collection. Furthermore, 77% of consumers interested in purchasing a portable media player would want a portable music player with a capacity of only 1000 songs. The research found that vendors who sell 4 to 5 gigabyte units are among the most successful, while devices that hold considerably less have not sold as well. As the 4 and 5 gigabyte players keep dropping in price, more of the market will adopt them, the report predicts. Despite the demand for smaller MP3 units, more Americans are downloading music and sharing files.

Read more about it at
http://www.clickz.com/stats/big_picture/applications/article.php/3348701.

Personal surfing just part of the professional workday
Did you know that one online movie trailer could use as much bandwidth as 10000 e-mails? Most employees aren't aware of the data clog either, as they use corporate networks for personal usage. A Websense, Inc. survey conducted by Harris Interactive (http://www.harrisinteractive.com) of 500 employees and 350 IT managers revealed some insight as to how the work/life lines have blurred. To illustrate how hooked the workforce has become on corporate Internet access for personal surfing, 49% of the surveyed employees would rather give up their morning coffee than their connection, while 46% chose the caffeine. Interestingly, more than one-quarter of the employees believed that personal Web surfing makes them more productive in the office, while 57% don't recognize an impact on productivity. Just over half of the surveyed employees admitted to spending between one and five hours per week using the corporate Internet connection for personal surfing, averaging about two hours per week. However, the IT managers that were surveyed were either more generous or more realistic: they estimated personal employee usage at more than six hours per week.

Streaming media for Internet radio or live news broadcasts are popular with 21% of the workforce. Even though only 6% admitted to downloading or storing non-work related video clips, IT managers estimate that some 10% of their company's total disk space is used

for non-work related movies, files, photos, and MP3s. And although 84% of employees consider peer-to-peer music sharing unethical, 17% have 100 or more music files stored on their work computer.

Of the surveyed male employees 22% and 12% of the women employees admitted to accessing porn Web sites – though 13% of the men and all of the women claimed it was unintentional!

The most popular non-work related Web sites accessed at the office were news (84%), travel (64%), personal e-mail (56%), shopping (55%) and online banking (53%). Websense estimates that half of the organizations that allow Internet access dismiss or discipline employees each year for misappropriating bandwidth.

Read more at http://www.clickz.com/stats/markets/professional/article.php/3346511.

Affluent Americans power Internet growth

Nielsen//NetRatings, the global standard for Internet audience measurement and analysis, shows that affluent Americans are the fastest growing income group online. Surfers with total household incomes of $150.000 and higher grew 31% year-over-year at home to nearly 7.9 million individuals. Those earning between $75K and $100K increased to 26.4 million in March 2004, as compared to 20.7 million a year ago. Internet users with upper incomes ranging from $100K to $150K rose 24% since March 2003.

Not perhaps surprisingly, broadband adoption rates were highest among affluent surfers. Internet users earning upper-level incomes have a higher concentration of broadband adopters. Broadband surfers made up 69% of the total audience for those with incomes of $150.000 and above, as compared to 31% accessing via dial-up. Of those earning between $100K-$150K, 61% favoured high speed, while Internet users with incomes between $75K and $100K posted an even split among narrowband and broadband users.

Read the full article at http://www.nielsen-netratings.com/pr/pr_040419.pdf.

Intel® Centrino™ mobile technology hotspot finder

An increasing number of people in the USA and throughout the world are accessing the Internet without a traditional wired connection to communicate and share and enjoy information and entertainment. Wireless connection points, known as hotspots, can be found in airports, public parks, college campuses and hotels, as well as in diverse locations such as truck stops, RV parks and malls. With the right mobile technology, you can connect from Wi-Fi certified wireless LAN networks and hotspots all over the world, without hunting for a phone jack or plugging in a special card.

Users of Intel Centrino mobile technology can now use the Web-based search and browse tool at http://intel.jiwire.com/ to locate an Intel Centrino mobile technology-verified hotspot (including several in South Africa). While you can use your Intel Centrino mobile technology-based notebook at any hotspot, the locations found through the tool have been verified by service providers for Intel Centrino mobile technology. Access to hotspots is available with a subscription to one of the service providers listed. It may also be purchased on a pay-as-you-go basis. New locations are added on a regular basis.

Location, location, location

How many times have we heard that location is really necessary? When you put your holiday snaps on the Web, it is difficult to get a real sense of the actual location. Enter

GeoSnapper – the birthplace of GPS photography. GeoSnapper enables users to upload and distribute accurately geo-referenced digital photographs. Images are displayed relative to their positions on the planet, with high enough accuracy for others to find and experience the location themselves at first hand. When you take a photograph, you are capturing an image of a particular place and time. When you show this image to someone, they can experience a little bit of what you experienced when you were there. Wouldn't it be great if you could share an experience with someone and give them the means to go and get that experience for themselves? That's what GPS Photography at GeoSnapper allows.

When you take a photograph, you also need to mark the GPS coordinates of that location. You can do this with any GPS receiver – increasingly being built into cameras. The picture plus the GPS location of where that picture was taken can be uploaded to GeoSnapper.com and shared with the Web community. The Web site allows you to organize your photos into albums and make comments and descriptions of each album and photograph. Because the GPS coordinates of each photograph exist, you will also be able to view a map with each photograph plotted on the map so you can visually see where your photographs were taken.

Find out more about the technology and possibilities at http://www.geosnapper.com.

How fast can you download?
comScore Networks recently released an analysis of average download speed across the three primary Internet connection types in the USA. Based on data captured in the first quarter of 2004, comScore ISP performance measurements show that cable providers are supplying the average end-user with a download speed more than twice as fast as that of DSL providers. The throughput for dial-up connections was 34 kbps, for DSL 861 kbps, while for cable it was 2178 kbps. comScore notes that broadband providers continue to compete on two primary fronts – speed and price. DSL subscriptions have often been marketed at a lower price and cable connections typically deliver a higher average download speed. The attraction of these two benefits is fuelling broadband adoption among consumers, with high-speed subscriptions accounting for nearly 50% of the connections in many of the nation's largest markets.

Read the full press release at http://www.comscore.com/press/release.asp?press=451.

Want to download even faster?
Researchers in North Carolina State University's Department of Computer Science have developed a new data transfer protocol for the Internet that makes today's high-speed Digital Subscriber Line (DSL) connections seem lethargic. The protocol is named BIC-TCP, which stands for Binary Increase Congestion Transmission Control Protocol. BIC can achieve speeds roughly 6000 times that of DSL and 150000 times that of current modems. While this might translate into music downloads in the blink of an eye, the true value of such a super-powered protocol lies in the scientific domain where large quantities of nuclear, physics, astronomy data can be shipped around the world rapidly. In a recent comparative study run by the Stanford Linear Accelerator Center (SLAC), BIC consistently topped the rankings in a set of experiments that determined its stability, scalability and fairness in comparison with other protocols. The study tested six other protocols developed by researchers from schools around the world, including the California Institute of Technology and the University College of London. By allowing the rapid transfer of increasingly large packets of information over long distances, the new protocol could also boost the efficacy of cutting-edge applications ranging from telemedicine and real-time environmental monitoring to business operations and multi-user gaming.

Read all about it at http://www.spacedaily.com/news/internet-04zc.html.

About the author

Dr David Raitt is senior technology transfer officer with the European Space Agency in the Netherlands. His work involves finding applications for space technologies in non-space sectors, particularly those useful for improving everyday life. An information scientist by education and training, David is also editor of *The Electronic Library* and chairman of the Internet Librarian International conferences.

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