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

It's not what you know, it's who you know

Using the science of 'six degrees' and the knowledge that exists among your friends, family and colleagues, Ask My Network provides a safe and private way to take the pain and risk out of life's typical decisions. Ask My Network's success is based on the theory of six degrees, which suggests that everyone in the World is connected to everyone else through no more than six connections (or degrees). Your immediate friends, family, colleagues and so on would be your 1 st degree. Their friends and family would be your 2 nd degree contacts, and so on. Ask My Network uses this concept to govern its privacy policies and to maintain the value and integrity in the system. You control this through your privacy settings. In general, Ask My Network focuses on your 3 degrees (i.e. the friends of your friends' friends) – but you can set higher degrees if you wish. Theoretically anyone in the world is within six degrees!

Try it with people you know! For instance, I know Per Lindstrand – who went round the world in a balloon with Richard Branson. They both know Tony Blair – who knows the Queen, George Bush and just about every other president, king or prime minister. So theoretically I could get an introduction to any of these people as well as the celebrities they know!

However, that is not the purpose of this site. Some professions are infamous for cowboy traders. Some services, such as nurseries or kennels are extremely high-risk. Other services tend to last a lifetime, so it's important to choose a good provider (an accountant, or solicitor). Ask My Network focuses on providing a way to get shortlists of suppliers and provide reliable recommendations for high-value or high-risk, intangible services, or referrals for jobs and the like. It is akin to the 'old-boy network' – you set up who you want in the network and then you can ask them in an easy, painless manner to recommend a good builder, plumber, hairdresser or whatever. Find out more at http://www.askmynetwork.com.

Visiting the UK and want to know what's on?

Originally set up in 1999, the 24 Hour Museum is the UK's National Virtual Museum, offering a unique mix of dynamic content including daily arts and museum news as well as exhibition reviews and in-depth online trails. The site promotes publicly funded UK

museums galleries and heritage attractions and seeks to develop new audiences for UK culture. Venue and listings information is driven by a comprehensive searchable database of nearly 3000 museum, gallery or heritage sites. Many museums check and maintain their own entries in the database, so the 24 Hour Museum or gallery details are constantly up-to-date and authoritative. Users can search the site for what's on in the UK by place, date or by any subject you choose. The 24 Hour Museum aims to encourage visitors out into real attractions around the country and show them exciting activities all over the UK, all year round. Check it out at http://www.24hourmuseum.org.uk/.

Human ingenuity

Ingenious is a new Web site that brings together images and viewpoints to create insights into science and culture. It weaves unusual and thought-provoking connections between people, innovations and ideas. Drawing on the resources of NMSI, an umbrella name for three major museums, the site contains over 30000 images which are used to illustrate over 30 different subjects, topics and debates.

Users are invited on a voyage of discovery through the content, exploring new perspectives on human ingenuity. The rich resources offer authoritative re-interpretations, which challenge traditional views. You can contribute to these discussions by offering fresh opinions on the issues that have changed our lives, thereby creating dialogues within communities and with the museums.

The key NMSI contributors to the site are the Science Museum, the National Museum of Photography, Film & Television, the National Railway Museum, the Science & Society Picture Library and the Science Museum Library. Find out more on offer at http://www.ingenious.org.uk/.

Science fiction comes alive

In my last column I mentioned the science fiction study that I had done and also some good sites on SF cover art. Recently I came across a new site which I wish had been available at the time I carried out my SF study. The site is Technovelgy – where science meets fiction and is a great place to explore the wide variety of inventions and ideas of science fiction writers – over 650 are available on-site. There is a useful timeline of science fiction inventions as well as an alphabetical glossary of them. You can also access the information through categories. For real SF buffs, many SF books are listed by author and title – clicking on any one of these will give you a list of inventions in that author's book. You can also keep up with the latest news. Browse this site at http://www.technovelgy.com/.

What's in a name?

Whether you are looking for a name for your new baby or whether you are just curious to know what your name means, then Behind the Name is the site for you. The site provides the etymology and history of first names from many parts of the world. There are names in English, French, German, Italian, Spanish, Irish, Arabic, Indian, African as well as biblical and mythological names. There's stuff on the most popular names, how to pronounce them, sources for names as well as a search engine. All in all it's a very useful site – for instance, I edit a journal called The Electronic Library (http://www.emeraldinsight.com/el.htm) and I am receiving a lot of papers from Nigeria at the moment – so it is interesting for me to find out more about the meaning of some contributors' names. And just in case you were wondering – David means 'beloved'! Want to know what someone's name means? Then have a look at http://www.behindthename.com/.

Meta Web sites

There are many dictionaries, encyclopaedias and search engines on the Web. One of the latest is worldIQ – a comprehensive and searchable reference tool which offers search results from a diverse array of dictionaries, encyclopaedias, thesauri and other reference tools. The site is completely free, though it does contain advertisements to help offset the server and maintenance costs necessary to operate the Web site. The idea behind the site is to provide a valuable and free learning tool for students, parents and teachers alike. The originators also hope to improve the literacy rate in the English-speaking world by providing useful tools that will get young adults interested in reading and learning. Some of the possibilities for searching include various English dictionaries, the US Census, language dictionaries, law, medical terms, the Bible, electronic books, and so on. You can search these by source or by category. Put in any word and there is a range of answers – clicking on any of these will take you into definitions, history, notable personalities as well as additional links. This is an excellent one-stop source for many topics. Use it at http://www.wordiq.com/.

There are also many science-related Web sites. The-Science-Lab is trying to make a comprehensive Web-based directory of these. Sites are grouped into broad categories, such as agriculture, chemistry, history of science, museums, women and the like. Clicking on any of these will give a number of sub-categories and clicking on any of these will give you a short description of the entry as well as the URL. Users are encouraged to submit sites for inclusion in an effort to make the database even more comprehensive. Again, this is another good one-stop source for science-related topics. Check it out at http://www.the-science-lab.com/.

Another site, BotSpot, offers collections of bots. A bot is a software tool for digging or mining through data – give a bot directions and it will bring back answers. The word is short for robot (derived from the Czech word *robota* meaning work) On the Web, robots have taken on a new form of life and since all Web servers are connected, robot-like software is an excellent way to perform the methodical searches needed to find information. The term bot has become interchangeable with agent (or intelligent agent). Intelligent bots can make decisions based on past experiences, which will become an important tool for data miners trying to perfect complex searches that delve into billions of data points. BotSpot breaks down bots into categories such as: search bots (including meta-search bots and news), shopping bots, tracking bots, artificial life bots, surf bots, game bots and Web development bots. Clicking on the category lists the bots within it together with brief details about them and their URLs. You are also given the option of downloading a free trial version or buying the bot. The bots are also listed under Windows or Mac applications. More information at http://www.botspot.com/.

SPAM – nuisance or convenience?

According to DoubleClick's 2004 consumer e-mail study, 81% of consumers send and receive e-mail multiple times daily. The number of what the study terms 'constant e-mailers' jumped from 20% in 2003 to 33% this year. All that activity translates into a 16% increase over last year in the number of e-mails the average consumer receives – over 300 per week. Increased activity also means more spam for users to contend with. Spam makes up no less than 62% of e-mail volume – up 6% from last year.

The line between a consumer considering a message to be spam and something more legitimate extends across a range of situations. E-mail was considered spam when it came from an unknown sender (93%), but also from known companies where permission was given but e-mail comes too frequently (58%). Brand value is also a factor. The survey notes

the 'from' line is the leading reason (64% in 2004) why a consumer may or may not open a permission based e-mail (PBE). Real PBE only represents 8% of e-mail, and 67% of consumers indicate they open at least 60% of such messages.

In fact, PBEs can and do work to help companies make sales. One third of respondents indicate they have made an immediate online purchase as the result of receiving an e-mail. Consumers who said they have clicked on messages for information and later made an online purchase as a result tallied at 30%. E-mail also helps drive offline sales – 12% indicate they clicked on a message for information, then made the purchase offline. Delivering coupons via e-mail also helps drive consumers to purchase offline (59%), while 73% redeemed online coupons for online purchases. Read more at http://www.clickz.com/stats/markets/advertising/article.php/3423811.

Wi-Fi moving into the home

In 2004, over 64 million Wi-Fi systems are expected to be sold, up from 24 million in 2002, according to IDC. That rapid growth will soon accelerate, with home users accounting for much of the surge.

The relatively small home wireless market (8.7 million households in 2004), will climb to 28 million in 2008, according to a Jupiter Research/Ipsos-Insight Entertainment Technologies Survey. These households represent a growing segment of young, affluent, tech-savvy, early-adopter consumers who express interest in Wi-Fi applications beyond the Web, including mobile devices, entertainment and digital content.

Wireless home network users are more likely than average users to be broadband subscribers, and are more likely to access the Web throughout the house. The living room is the favoured access point by 79% because of increasing integration of wireless with personal entertainment. Some 37% want it in the bedroom, while the kitchen is a location for over 20%. Already companies are modifying content for such people – Allrecipes and Epicurious have modified content for cooks who bring their laptops into the kitchen rather than print out recipes.

Home Wi -Fi users are more interested in portable devices and digital entertainment than average online users. They want to integrate more gadgets into their Wi-Fi network and 97% of home Wi-Fi consumers say they regularly carry portable devices that enable them to browse content and consume media such as books and music. Get all the facts and figures at http://www.clickz.com/stats/markets/wireless/article.php/3416331.

The Grid enables digital libraries for science

Spacecraft constantly scan the Earth, creating hundreds of gigabytes of new data products daily. Working with this ever-growing mass of information has made the European Space Agency's Earth Observation Directorate a pioneer user of powerful Grid computing. Now ESA is participating in an ambitious project that applies this same technique to information distribution and retrieval, with the aim of creating 'Digital Libraries' for global scientific collaboration.

The Grid concept, which I introduced in my previous column, is named after the electricity grid, and works in the same way: a geographically dispersed (or 'distributed') network of computers provides users with access to advanced computing services, processing power and memory, enabling the solution of complex tasks beyond the capabilities of a single machine or local network. Within the field of earth observation, use of a Grid enables researchers to access large amounts of spatial and temporal data and perform high-level

processing as well as complex applications such as data fusion and modelling, and all within previously impossible timescales. Applying a Grid, tasks that might otherwise take days to accomplish are reduced to a few hours, minutes or even seconds.

With Grid computing for data processing already well established, the next step is to evaluate how Grids can support the predicted 21st century shift to 'e-science'. Whether in the fields of medicine, particle physics or environmental monitoring, the trend is towards large-scale science efforts carried out by diverse scientists and institutions joining together to achieve a shared research goal through networked global collaboration. The 'virtual research organizations' set up for such temporary enterprises will need common access to very large data collections, large-scale computing resources and a secure, shared context within which to collaborate – the sort of knowledge architecture often termed a 'Digital Library'.

As part of a variety of Grid-related research activities within its Sixth Framework Programme, the European Commission (EC) has begun a project called DILIGENT (DIgital Library Infrastructure on Grid ENabled Technology). Following on from successful collaboration with the EC during its previous DataGRID project, ESA has become a user partner in DILIGENT. The project aims to integrate Digital Library and Grid technology to create a test-bed system for e-science, based on the system infrastructure created for the EC's currently running follow-up to DataGrid, called Enabling Grids for E-science in Europe (EGEE). The objective of DILIGENT is to create an infrastructure for the creation of digital libraries on demand, so a new one could be created each time a virtual organization needs it as a supporting instrument for its activity. Each digital library would exist as long as it is useful for the virtual organization. The high computing power available from the Grid will make possible enhanced digital library functionality, such as intelligent retrieval for imagery, video and sound as well as word content. Read more about this project, DILIGENT and SpaceGrids at
http://www.esa.int/export/esaEO/SEMYJD0A90E_index_0.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.