INTERNET SIGNATURES COLLECTION: AN APPROACH IN CONDUCTING "RESEARCH"

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Abstract:

Network users often affix 'signatures' at the end of their e-mail messages. Signature styles used vary significantly, ranging from no signatures at all to sophisticated animated signatures and the most recent hypermedia 'Homepage signature'. There are diverse reasons and debates for containing or not containing a signature. This paper presents a succinct description of the Internet Signatures Project (ISP) and the process for carrying out the collaborative "research". This project is part of a university and high school enrichment program. Some of the preliminary research findings of the project may be of interest to users who wish to conduct research and advertise on the Internet. This article also introduces the forthcoming ISP report and epitomizes many innovative e-mail signatures which users may utilize to develop their own Internet signature designs. It will assist interested parties in scheming electronic signatures, assessing graphic designs, quotations, humour, mottoes, disclaimers, copyright issues and learning about network etiquette. This simple research exercise has provided staff and students with an opportunity to discover the vast cyberspace of the Internet in a structured way.

Introduction:

The Internet stores more information than a hundred libraries. It leads to a fundamental shift in access to information and provides a new frontier in conducting research. In the following paragraphs we highlight the approach used by the Internet Signatures Project during the collection of signatures and sketch the potential use of Internet Signature for advertisement purpose. This research report will not only benefit those Internet users and organisations involved in teaching, training, researching but also, those interested in advertising on the Internet.

What is the Signatures?

Following is an Unix-based definition of signature: .sig is used specifically to refer to the electronic signature block that most UNIX mail and news-posting software will "automatically" append

to outgoing mail. Many articles in Usenet end with 'signatures' that often include some witty saying, mottos, ASCII drawing, the sender's name and e-mail address etc. 2

Taking into account advances in the latest Internet communications technologies, and from the collections of signatures we received, we introduce a generic definition of Internet signatures:

This refers to any information contained in the electronic message itself, or in specific files such as .plan, .project, .sig/.signature or in personal hyperlink 'Home Page' that can be used to identify or lead to the identification of the sender's and/or the senders affiliation.

Signature Locations and Compositions:

The location and composition of signatures can be identified in the following five groups:

• In the header of a message:

This type of signature can be subgrouped into those with or without personal names. Examples of Signatures with E-mail address only:

From: IN*"p9342345@csu.edu.au" 6-Feb-1995 From: IN*"100242.174@compuserv.com" 3-Jan-1995

Examples of Signatures with E-mail address and personal name.

From: IN*"p9342345@csu.edu.au" "David Smith"
From: IN*"100242.174@compuserv.com" "Gloria Houston"

Of course, many users have learned how to change their personal names, and hence, it is unwise to rely on the name that appears as being the true name of the sender.

¹ E. Raymond (1993), The new hacker's dictionary, 2nd Edition, MIT Press: Cambridge, MA, p.376.

Adam Gaffin, (1994). Everybody's guide to the Internet. Cambridge: MIT Press, p61.

• In the .sig/.signature files (ie automatically appended):

This is the traditional approach of automatically appending one's signature to the out-going messages. Nowadays, many newsreaders impose a 4-line maximum for the composition of .sig file.

• In the body of a message:

This refers to the manual insertion of one's signature which may vary from time to time (ie. not automatically appended).

Contents of signature may include: basic personal information: place of work, position, or postal address, phone/Fax #, E-mail address(es), Universal Resources Locator (URL) address, quotes or graphics and public encryption key.

• In the .plan file or .project (Off line):

Contents of a signature may include: basic personal information: place of work, position, or postal address, phone/Fax #, E-mail address(es), URL address, quotes or graphics, public encryption key, daily project schedule, or other time table, company information, or essential information the account-owner wishes to make available to the public. Some users also put animated ASCII or bit-level graphics in their .plan signature.

• In the hyperlink URL Home Page (Off line):

As the fastest growing facet of the Internet, the World-Wide Web (WWW) allows a name and e-mail address to link back to an entire personal page containing pictures, video clips, voice clip, quotations, and other hypertext links of information relevant to the person whose page is being viewed. An example of URL signature:

SandyTse http://l37.166.76.23/~isc/isp.html ISC CU-SeeMe (reflector): 137.166.76.101

Rationale:

ISP started out as a data communications project for local talented high school students coordinated by the authors as part of the university-high school enrichment program. It has now grown to become an international collaborative research exercise involving colleagues from universities and organisations in the United States, Canada, Germany, Israel and Australia.

Aims of the project are to:

 collect 3000+ electronic signatures with permission from various Internet users, for an international electronic network publication (ISP Report is to be published by Oct 1995);

- formulate advice for users and, help design electronic signatures;
- study the graphic designs, quotations, humour, mottos, disclaimers and copyright issues;
- learn about the network etiquette of using signatures;
- study the differences in signatures between cultures with a view to improving international understanding:
- study the content of signatures;
- study the naming conventions of logins and user names on the net;
- study the possibility of including one's encryption PUBLIC KEY (i.e digital signature) in one's signature. (One application of this is to send examination papers via the Internet)

Although, the objectives of the ISP did not include any direct link with the commercial world, the first four objectives of the project may be of interest to people who want to advertise on the Internet.

Stages in the Research Process:

This study outlines a clear framework which systematically addresses the Internet as an essential tool in conducting research and attempts to present an approach to conducting research through the collection of Internet Signatures. The method used to develop the framework consists of the initial three phases:

- research design,
- · sampling process and,
- data collecting (including the method and implementation, as well as, responses from participants.)

Phase I: Research Design

At the beginning of the study, students (six boys and six girls) and two staff from the local high schools attended a two-day seminar/workshop on telecommunications, modems, AARNet (Australian Academic Research Network), Internet, file transfers, Netnews, e-mail, and other network tools. After the basic training in using the communications network facilities, students were asked to subscribe to various discussion lists and news groups on the Internet. The idea of this signature collection project was that it would be of interest to the students and it was achievable.

Phase II: Sampling

The second phrase of the Internet project started when the coordinators of the ISP project became aware that the White House was setting up an e-mail facility for the Internet community. An e-mail was sent to President Clinton asking his permission to include his e-mail signature in this project or, if he did not have a signature, suggesting that the local high school students could voluntarily offer several possible signature designs for his consideration. About the same time, the solicitation of consented use of signatures from the Internet community was conceived. It has always been our colleagues' perception that if the collection of signatures is to be published, permission should be requested, regardless of whether it is legally required or not. Since permissions to publish the signatures are granted by all the respondents, we don't have to deal with the privacy and anonymity issue.

Phase III: Data Collecting

A formal call for signatures was drafted and circulated for comments among Australian members. A final, approved draft was completed two weeks later after some major changes in wording and objectives. The final draft was posted to twenty randomly selected major discussion lists and about a dozen overseas netters were invited to become ISP international members. It was to no-one's surprise that the response rate was high and produced reliable results. Thousands of responses were received from more than 30 countries around the world. The contributors have granted their permission to include their signatures in the project report and publications. The ISP group has been very selective in inviting people to join as ISP International members, with only 10 people selected, one of which was a university student from Germany. The small group size was selected so as to ensure better group interaction. The processing steps are listed in the following:

The Processing Steps:

1) Call for research members and signatures:

(a) Call for research members:

To: ISP
CC:
Subj: RE: Signatures

........We have a project to collect
Internet mail signature.
If you are interested to be a member of our
Internet Signature
Project (ISP), contact us at:
isp@zac.riv.csu.edu.au
we can share our collection.......
Internet Signature Project

ISC/(Australia)

(b) Call for signatures:

To: IN%"isp@csu.edu.au" CC: Subj: signature projectWe would greatly appreciate your support for the project.
Please send an e-mail message with your signature, to the address below, giving us permission to use it in the collection.

E-mail address: isp@csu.edu.au

Internet Signature Project
ISC/(Australia)

2) Response from participant:

From: IN**John.M.Powell@cyber.Widener.EDU*
To: IN**ISP@zac.riv.csu.edu.au*
Subj: Reply to Re: Signature Project

Yes, you may attach my name to the project team. Sounds like an interesting project. I would like to help.

Mike Powell Wolfgram Memorial Library One University Place

Widener University Chester, PA 19013 Voice: (215) 499-4073 Internet:

John.M.Powell@cyber.widener.edu

3) Permission approved by participant:

From: IN%"E825LP@tamvml.tamu.edu"
To: IN%"isp@csu.edu.au" "ISP Group"
CC:
Subj: internet signatures project

You have my permission to use a copy of my signature file in your ISP collection.

Leila Payne phone: 409-862-4647
Head, Systems e-mail: L-PAYNEGTAMU.EDU
Sterling C. fax: 409-845-6238
Evans Library Texas A&M University
College Station, TX 77843-5000

- * Sample signatures are displayed in Appendix I.*
- Classification of Signatures: Data processing and Data Analysis.
- Drafting of the conclusion and report by the ISP key members.
- 7) Circulation of the draft to other Internet ISP members for comments.
- 8) Revision of the report.
- 9) Publication of the report on the Internet/WWW.

Readers will find the details of the classification techniques, code book and analysis used in the final report which will be available on the World Wide Web at the following WebSite:

http://137.166.76.23/~isc/isp.html. All contributors will also be automatically sent a copy of the final report by e-mail.

Some Preliminary findings:

1) There is a vast spectrum of reasons for using signatures:

The primary reason to use a signature is, of course, to enable others to contact the sender; but signatures nowadays serve more than just this fundamental objective. To some people, signatures are statements, a very personal and at most times very precise statement that the senders are either targeting or broadcasting to the recipient(s). They are designed to be revealing. Designers of the signatures felt they are necessary and even imperative.

Some do use signatures rather purposefully. It can personalise the e-mail and get publicity for the senders and their institution. Some users add signatures when they purposefully want to "sound" authoritative or at least very responsible. To other, the signature provides another means of adding 'personality' to Computer Mediated Communication.

2) Some important comments received by ISP:

One Internet user was concerned that the ISP efforts to understand signatures will increase their usage as well as their length. Other commented that signature files take up large amounts of valuable space and resources for their purpose. Another interesting comment was from a visually handicapped perspective. The user voted for eliminating the "=-=-" etc. because when someone has a lovely graphic in their signature it can't be "read" to visually handicapped Internet users through their voice synthesizer packages. Instead, they will hear something like "asterisk, asterisk, asterisk, dash, blank, blank, blank, blank, colon.

3) Other Observations:

Through out this research project, we observed other uses of Internet signatures in Organisational settings.

- i) Companies spent a fortune in establishing brand names, logos but sometimes find it necessary to change the names or their logos for various reasons:
- Australia's Commonwealth Bank spent almost one million dollars to redesign its logo.
- Telecom Australia/Telstra changes its names three times in two years to reflect the new era of the ending of its monopoly operation in Australia.
- Hong Kong University used to be the city hub of the HARNet (Hong Kong Academic Research Network) but rumour has it that The Chinese

University of Hong Kong replaced the HKU as a city hub due to political reason -- the name (Chinese University) says it all!

- ii) Some organisations have Visual Standards or Policies. They are used to define the visual identity of the organisations (e.g. the logo, logotype, bromide & slogan etc. and their uses) and these standards apply to e-mail also.
- iii) We also noted many users now use standard company e-mail signature template and use standard disclaimer.

Following are some specific use of signatures for advertisement purpose:

a) The use of Internet signatures in daily e-mail communications:

People interested in advertising via e-mail on the Internet (be it as a self portrait or for commercial reasons) face the problem of how to design eye-catching signatures and at the same time be succinct. Lengthy signatures sometimes get trimmed off from the e-mail as most of the latest software mail-posters impose a four-to-five line limit on signature files. Of course it is always possible to include lengthy signatures in the body of the e-mail to get around this software imposed restriction if so desired. Through the involvement in the ISP project, we have seen an increased number of people attaching their company logo as part of their signature. The ISP study should give some idea of how popular the use of corporate logos is and whether it is by choice or not. From an organisational point of view, advertising via 'cyberspace stationery' can be as effective as employees wearing company uniforms.

b) Generated automatic message or company profile can be distributed when sending mail - A Mail Reflector:

Given the fact that e-mail is the largest common denominator among Internet users, it is a natural medium for advertising products and services. There are approximately 200,000 active nodes with an average of 100 users per node, all of which adds up to about 20 million users on the Internet.³ An advertising message can be stored in a mail reflector, a mail address, that when sent mail, automatically replies with a canned message. It's like a fax-back service where customers call a voice mail system, enter the code for the fax they would like to receive and the phone number of their fax machine and wait for the fax-back to call and send the

³ Stephen Balbach (1994), Advertising on the Internet - Tools of the Trade, The Internet Business Journal, Vol 1, No.7, January, p4.

fax. Thus, the address can be distributed through all the traditional means such as business cards, signatures, descriptions and literature. With mail-reflectors there is no overhead, no labour and it is automatic for 24-hours a day. It is a perfect tool for marketing and advertising, as it selects only the millions who only have e-mail capability. It also does not require a full Internet connection such as through Gopher, FTP, Web and others.

c) The use of '.plan' or similar files for 'finger' inquiries: There is a command known as 'finger' on UNIX or VMS systems which allows a user to gain additional information about a given user or organisation on a particular computer system. In a typical scenario, finger ISP@machine_name (Figure 2) may display the contents of the following typical files: '.plan' and '.project' (read as dot-plan and dot-project respectively). The contents of the files can simply be the user's plan for the week or the month etc., or whatever the accountowner wants displayed. Some users also put animated messages or graphics for 'finger' command users to view. Organisations may adopt a similar approach by creating a '.plan' file where they include their logo and major services which can be listed or displayed via animated ASCII or bit-level graphics. The following comment sent to the ISP account, "The World Wide Wed (WWW) allows a name and e-mail address to link back to an entire personal page containing pictures, quotations, information, and other hypertext links to information relevant to the person whose page one is viewing." While the WWW holds great promise in the future, 'finger' and '.plan' are here ready to use and, above all, are easy to use!

d) The use of animated advertisements:

Countless Internet users have had the opportunity to see and enjoy the animated Christmas card in which boxes of gifts are placed under a twinkling Christmas tree, a train goes around the track, bubbling champagne is poured into a glass, and various greetings are displayed. Many other users have yet to see and appreciate it. (see Figure 3)

(Figure 3: Animated Christmas Card)



(To receive this animated Christmas card , please send an e-mail to ISP@csu.edu.au)

Selling or sending out complimentary animated greeting cards to Internet clients has great potential for marketing and public relations. For example, companies' seasons greeting e-cards (which can be regarded as modified forms of signatures) may be as effective as giving out complimentary coffee cups, pens or similar souvenirs with company logos on them. We see great promise in the use of this concept.

In the past 12 months, increasing numbers of organisations and research groups have posted conference announcements and conducted survey projects on the Internet. By observing the eye-catching ASCII graphics and 3-D layout effects, and the hundreds of conference and e-journal announcements in the many discussion lists, individuals and organisations obtain ideas to devise their own advertisements. Many individuals and organisations are already making use of the international electronic message highway.

Conclusion:

The Internet as a global network is opening a whole new frontier for conducting research. It is gaining acceptance in the academic and business community as an efficient, cost-effective communication alternative. This paper described the Internet Signature Project (ISP) and some of its preliminary findings. The Internet provides a forum for a myriad of postings including announcements, surveys, and discussion lists. E-mail signatures offer opportunities beyond simply identifying the message sender. Users design their signatures in various ways, and for various reasons, such as, to be functional, to entertain, and to advertise. Company

logos in e-mail signatures, 'cyberspace letterheads' and electronic greeting cards are just some of the adaptations which can be animated and become very effective marketing tools.

The Internet has opened a whole new way for us to learn, teach, manage, work and play. Educators, trainers and business people all need to learn new 'languages' and approaches in conducting research or business in this networked world. The use of signatures is an attempt to humanise a potentially depersonalising, dehumanising medium of communication.

Confucius (551-479BC), Chinese philosopher and teacher, once said "Tell me and I will forget. Show me and I will remember. Involve me and I will understand." Internet activities such as the ISP project involving active participation of students are excellent ways to uncover and utilise the enthusiastic ability of 'whizkids' at school and, to provide insight into how we will educate our children in the future.

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Acknowledgements:

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Author Information:

Sandy Tse was educated in Australia, received her MBA in Business Management from the University of New England in 1994. Her first degree was a BBus(BusMgt) in Business Management from Charles Sturt University (CSU) in 1993, where she is now a P/T Academic staff (from 1990 to present) in the School of Information Studies. She is one of the active committee members in organisating the Asia Pacific International World-Wide Web Conference'95 in Australia.

She is also a Research Associate and Doctoral Candidate in the School of Information Studies at the University of South Australia, and a member of the Post-graduate committee at the University of South Australia Students Association Incorporated (USASA Inc.)

Samples of Signatures:

Australia: (Charles Sturt University, SandyTSE)

Germany: (University of Glessen, J.P. Hasebrook) Joachim Hasebrook, Glessen 27th August 1993.

Dipl.-Psych. J.P. Hasebrook /\
University of Giessen //. \
Department of Psychology /. \
Department of Psychology /. \
D-35394 Giessen, Germany /-- \
(phone) ++49-641-702-3409
(fax) ++49-641-702-3811
(e-mail) HasebrookPsychol. Uni-Giessen, d400. de

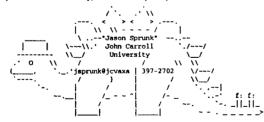
Australia: (The University of Newcastle, Arthur Kinsland)

Arthur Kingsland	<\55/>			
Faculty of Architecture) (Telephone: +61 49 215783		
The University of Newcastle	///\	Facsimile: +61 49 216913		
N.S.W., Australia, 2308	_// _	arajk@wombat.newcastle.edu.au		

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	England (Cumburgh Oniversity, Ken Joseph Oniversity)				
	Son, all the beautiful, intelligent, healthy young	# Ken Johnson			
		# +44 31 650 3799			
if you don't like it, go somewhere else.		# Business Studies			
	mr dad 1906-1992	# Edinburch University			

USA: (John Carroll University, Jason Scott Sprunk)



Israel: (The Technion - Israel Institute of Technology, Judy Koren - Head, Technical Services, Etyachar Central Library)

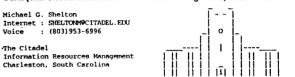
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USA: (AT&T Bell Laboratories, Arden M. Kronish)

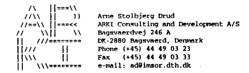
USA: (The Citadel-Information Resources Management, Michael G. Shelton)



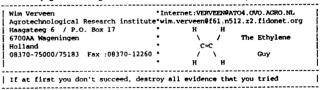
Canada: (Univeristy of Calagary, Alan K.C. Tai)



Denmak: (ARKI Consulting and Development A/S, Arne Stolbjerg Drud)



Holland: (Agrotechnological Research Institute, Wim Vereen)



France: (Universite P. & M. CURIE, Richard Bonarie)



(For clear portraits and more signatures in education and commerce, you may send an e-mail to ISP@csu.edu.au)