Managing the Information Superhighway:  
A Report on the Issues Facing Communication Professionals

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The Institute for Public Relations Research and Education

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Executive Summary
Results of a year-long investigation reveal ten fundamental issues facing communication professionals using the technologies of the information superhighway. These issues are:

- Culture Wars: MIS v. Public Relations/Affairs
  Controlling the onramps to the information superhighway is a critical battleground in many of today's corporations, non-profits and governmental agencies. MIS departments, because of their technological savvy, are frequently winning the first round of the fight, but effective organizational communication is likely to be the first casualty of the war. In addition, many small organizations have downloaded responsibility of Web site development and management onto the overburdened shoulders of any employee with technical savvy. The best structure for managing the use of information highway technologies depends on the nature, tradition and situation of each organization, but should involve public relations at a policy level, especially in the management of all content and interactive services.
- Monks in the Digital Scriptoria
  Systems administrators in many organizations, both large and small, maintain the mystical nature of the Internet in order to maintain their organizational powerbase.
- The Loose Employee Cannon
  Employees with technical skill have created many personal Web sites, sometimes useful for their organization, sometimes useful only to themselves, and sometimes damaging to an organization's carefully cultivated public image.
- Public Mobilization
  Educated and active publics are capable of rapid and powerful issue-based mobilization on the information superhighway, not just domestically but internationally.
- Unofficial Sites
  Anyone can create an unofficial Web site. Hundreds, perhaps thousands, exist on everything from celebrities to politicians to corporations, especially those in the public spotlight.
- Legal Issues
  The lawless frontier called cyberspace presents a spate of legal challenges to communication professionals, including legal liability for the Web activities of employees, intellectual property rights and copyright, libel, privacy, piracy and the Telecommunications Act of 1996.
- Lessons from the Response to our Online Review
  Automated and human responses to our online queries suggests that MIS and IT personnel frequently set the de facto rules for the management of public affairs communication activities in the realm of the information superhighway.
- Effective Message Design
  The design of online communication should follow many of the same rules of message design in any other environment, including creativity, quality and consistency with overall organizational image. In addition, rules of the Web and other new media should be considered, including keeping content fresh, interactive and uncluttered.
- Intranet Concerns
  Technologies of the information superhighway present opportunities inside as well as outside organizations. Web-based communications, electronic mail, list serves
and chat rooms, all can be used effectively to communicate with employees, shareholders, volunteers and other "internal" publics.

- Preparing for an Uncertain Future

  In an world of increasingly rapid technological change, forming alliances with non-traditional partners, especially those in the academy, provides the best bet for keeping abreast of new developments on the information superhighway.
Introduction

Rapid advances in the technologies collectively called the "information superhighway" present both profound opportunities and challenges to public relations and communication management for organizations in the U.S. and around the world. Perhaps best exemplified through the Internet's World Wide Web, the so-called information superhighway has made it possible for any organization to create an international communication presence. Web sites, as they are called, number more than 200,000 (as of this writing, April 29, 1996), with a new Web site created approximately every four seconds. Although most Web site creators have designed their site using Hypertext Markup Language (HTML), new software packages such as Pagemill make creating a Web site as simple as point-and-click desktop publishing products such as Aldus Pagemaker. This development means that it will become even easier to create Web sites.

The Web represents a new medium of communication. With some eleven percent of U.S. households now connecting to the Internet through one of various online services, the Web is on the verge of becoming a new mass medium. However, it is unlike any other mass media because it is not just a one to many medium based on centralized content providers delivering prepackaged content to a passive mass audience. Instead, the Web is a many to many medium, featuring many thousands and perhaps soon millions of voices all interacting in an immersive and multimedia communication environment.

To public relations professionals, the Web is both a powerful tool of communication as well as a dangerous threat to organizational well being. Properly used, the Web represents the ultimate communication tool for building relationships between and organization and its publics, both internal and external. The Web can deliver messages incorporating all modalities of human communication, whether text, audio, graphics, still pictures, animation or full-motion video. It can even deliver immersive virtual reality environments where organizations can demonstrate products or services, tours of offices and other facilities, or educational environments. More importantly, the Web offers interactivity and customization of information never before available to a large-scale audience or public. In fact, using products such as PointCast, it is possible to offer fully customized information to the individual level.

In the context of Prof. James Grunig's situational model of publics (non, latent, aware and active), the Web offers a communication tool that can deliver in real-time interactive, individualized messages to any type of public, but is especially well-designed to communicate with active publics.

Conversely, the Web empowers the individual to create his or her own communication platforms. In fact, at least a third of all Web sites have been created by individuals outside any official organizational context. Journalist A.J. Liebling once observed that freedom of the press belongs to those who own one. The Web enables anyone to own a digital press. This may ultimately be good for democracy, but along the way it presents significant challenges to organizations trying to manage the communication function in the age of the information superhighway.
The Primary Challenges

Results of this study indicate that the technologies of the information superhighway present a set of ten fundamental challenges to the effective management of organizational communication and public relations. These challenges are:

- **Culture Wars: MIS v. Public Relations/Affairs**
  
  Few organizations, corporate, not for profit or governmental, have placed control of their World Wide Web sites in the hands of the public relations or public affairs offices or departments. Instead, most have either assigned primary responsibility for their Web sites in the Management Information Systems (MIS) department or under the joint responsibility of two or more departments, including MIS, Marketing and possibly public relations. The reasons for this are many. Most important is that the Web is technological and somewhat mystifying to those who don't know Unix programming or Hypertext Markup Language (HTML) coding. Moreover, most organizations see the Web as primarily a marketing opportunity, not as an interactive communication medium. The implications are critical. Most importantly, most organizations are missing a fundamentally important opportunity to use the unprecedented capability of the Internet, the Web and the information superhighway in general to effectively manage relationships with their most important publics: those with an active interest in the organization.

  Structuring responsibility for Web site development and management is a critical issue. Exact configurations depend on the nature, tradition and situation of each organization, but should fundamentally involve public relations at a policy level, particularly with regard to content and interactive services. One useful model comes from Chevron. It includes these four parts:

  - Corporate Public Affairs coordinates content;
  - Each individual Chevron company is responsible for its own Web presence;
  - Chevron IT is responsible for site security and day-to-day operations;
  - Employees may use the Web for business purposes only, with supervisor's permission.

Although most large organizations have assigned their Information Technology (IT) or MIS departments with the task of creating and managing their Web site(s) or have hired Web development specialists, many smaller organizations have taken a different approach. In many of smaller organizations, "the first guy with an AOL account" or the woman who says, "I've got a computer with a modem at home" have been charged with getting the company on the Web. This has often resulted in an informal, unsystematic approach to organizational use of the technologies of the information superhighway. Although some such employee Webmasters have proven creative and entrepreneurial, the more typical result has been a less than effective Web site, and an overworked employee.

A growing number of corporations have placed responsibility for the content of the corporate Web site in the public relations or public affairs departments. This sign may portend well for the future.

- **Monks in the Digital Scriptoria**
The complex, rapidly changing and mystifying nature of the information superhighway has resulted in many organizations relying on their MIS or IT personnel to create and manage their Web sites. Although some systems administrators view their role as exclusively providing an important service for their organization, some have a view that goes well beyond this. Some systems administrators have become the 21st century equivalent of medieval monks in today's digital scriptoria. Some systems administrators maintain the mystical nature of information superhighway technologies in order to maintain their organizational power.

- **The Loose Employee Cannon**

Because the Web has become widely popular and accessible, many employees use it both as a research tool (i.e., surfing the net for information they need for their job) as well as a publishing medium (i.e., creating their own Web site run off their company's server). Although this may in many cases be a good thing, their is the potential for significant problems. For example, some employees may create Web sites not directly related to their organization's area of business or mission, some may create links to sites the organization may not find consistent with its organizational image or profile, and some employees may intentionally or even inadvertently violate copyright law by "borrowing" images and other content their find somewhere on the Web. These problems are exacerbated by not fully integrating the public relations department into the organizational management of the Web.

Organizations should look carefully at whether to tightly control their employees' use of the information superhighway. Encouraging creative use of the Web, for example, is a double-edged sword. On the one hand, browsing the Web can produce unexpected information treasures and discoveries. On the other, employees may spend hours engaged in non-productive pursuits that follow nothing more than their own purient interests. Moreover, network technology and state and federal court decisions enable and grant legal permission to any employer to monitor all employee activity online. Whether an organization wants to create a culture of "big brother is watching" is a more fundamental issue.

Organizations should establish clearly articulated written policies for employee use of the technologies of the information superhighway. Employees need to have a clear understanding of the do's and don't's. In the best case scenario, these policies should be developed with employee input, rather than handed down in Draconian style. This is especially important in delineating the rules of the information highway with regard to particularly complex issues such as political communication.

- **Public Mobilization**

In the days before the widespread diffusion of the information superhighway, publics tended to become mobilized rather slowly and deliberately. Communication depended on a variety of limited technologies, such as what today's digital literati call "snail mail." In the Age of the Information Superhighway, characterized by e-mail (1995 saw more e-mail--95 million messages--than mail delivered by the U.S. postal service--85 million, Peter Winter, NAA, April 28, 1996), list serves and the Internet, publics can organize and mobilize almost instantly. Their power is enormously amplified and in the online arena mobilized publics can influence everything from votes in the U.S. Congress to organizational decisions.

- **Unofficial Sites**
One of the most dramatic examples of the danger and the glory of the information superhighway is the creation of unofficial Web sites. From the unofficial Bob Dole page to the unofficial Christina Ricci site (star of the Addams Family movie), unofficial Web sites are among the most common and popular on the Web. The dangers are many. In one case, a former NASA employee has created an unofficial NASA Web site, and has included information about employment practices and policies and other information NASA would rather not have made public. NASA is currently evaluating its options. The Gannett News Service is preparing a story for national distribution. Similarly, the McDonald's corporation fanned the flames of discontent by reacting strongly to an obscure Web site lampooning McDonalds. In response, an agitated Web meister created McSpotlight, which invites Web surfers around the world to post their criticisms of McDonalds.

- Legal Issues

Frequently characterized as a wild and lawless frontier, the information superhighway presents profound legal issues for those seeking to effectively manage it for organizational ends. Among those challenges are legal liability for the cyberspace activities of employees, intellectual property right and copyright protection, libel, privacy, piracy and the Telecommunications Act of 1996. As more organizations provide the technological infrastructure for their employees to access the Internet, and its features such as electronic mail, list serves, chat rooms, the World Wide Web and beyond, these organizations open themselves to possible legal liability now and down the road. For example, envision a major tabacco company in which hundreds of employees have direct access to the Internet. One employee visits and downloads research at a medical research center on the addictive nature of nicotine. Subsequently, that company is sued and accused of having prior knowledge of research on the addictive nature of nicotine. The CEO denies this accusation. Lawyers for the plaintiff produce an audit of Web activity of the company employee who earlier downloaded the research.

Driving the Internet and the World Wide Web culture has been an open view of content, in which information should be available as widely as possible, and that traditional notions of copyright dating to England of the middle ages no longer apply. This view is effectively described in a position paper by Terje Norderhaug. The U.S. government's position on this was outlined in the NII White Paper, published in October, 1995. Libel represents a second broad area of legal concern on the information highway. Although complex, perhaps the most significant aspect of libel law on the Internet is that because of the nature of the Internet, it is possible for anyone to be sued for libel in any number of local venues. The issues raised by the Telecommunications Act of 1996 are even more far reaching. One of the most notable is the section titled the Communications Decency Act, which prohibits making "obscene" material knowingly available to minors. Organizations that permit their employees to create Web sites may be held liable for employees that include obscene content or even link to such sites.

- Lessons from the Response to our Online Review

As part of this study, we reviewed the Web to determine which of the top 50 U.S. corporations (as ranked by revenues for 1995 by Forbes) have Web sites. All but 2 have Web sites. In addition, we contacted the Webmaster for each of the corporate sites and asked them to respond to three questions, including whether their organization has a formal Web policy, whether we could obtain a copy or a summary of that policy, and what role public relations plays in management of the company's Web presence.
Virtually every site replied by automatic response to our online query. A typical response follows:

"Thank you for visiting the ... web site. We hope that you enjoyed looking at our "work in progress" and will continue to visit as we expand and enhance the site in the coming months. We have many exciting new features planned.

This note is an automatic acknowledgement that our web server has received your e-mail message. Your note will be forwarded to the appropriate office for consideration and, if required, preparation of a reply. Because of the volume of mail received, most replies take three to five business days to complete.

Sincerely,

Web Team

About half subsequently answered our questions, either directly or by forwarding the questions to the public relations or corporate affairs office. Most notably, however, roughly half said they were too busy to answer the query. As one respondent said,

"Unfortunately, we must decline to participate in your study at this time, mainly because we are really busy trying to figure out how to develop our Internet services. :-)

Most of those apparently did not contact the public relations office before making this decision. From a relationship management perspective, this represents the penultimate form of inappropriate organizational communication or failure thereof. More than a rhetorical question, why invite e-mail if one has no intention of responding? If one does not intend to respond to all e-mail queries, it is better to not provide an e-mail address.

Effective Message Design

Effective message design is of great concern to most organizations, and but especially so to those organizations with the most interesting and well done Web sites. Notably, those with the most effectively designed Web sites were most likely to respond to our online query, reflecting their commitment to use the technologies of the information superhighway to their greatest potential. Consider the following comments from Chevron:

The Corporation's image is paramount, but, at the same time, the medium used asks for material that is not boring, obscure, outdated, but fun to access and read for diverse crowds: (not listed in importance)
the press, the general public, the stockholders, current and former employees, schools, ....

You mention "effective". This is "in the eyes of the beholder". We have seen articles and quotes in the press mentioning our site as "ridiculous; who wants to know how oil is extracted and converted into gas..." to others who were thoroughly enjoying its educational aspects...

Others note that hyper-links should be used judiciously and that any graphics or other multimedia content should not be so large that they require great bandwidth or time to download.

- "Intranet" Concerns and Opportunities
  Although most often thought of a vehicle for external communication, the Internet and its World Wide Web afford ample opportunities for internal organizational communication. Corporate Web sites, for example, can be a vital means for keeping employees abreast of internal news, corporate policy, employee benefits and events. E-mail and file exchange are powerful tools for not only employee communication, but for developing work groups, virtual work environments and telecommuting. Further, a wide range of software developments designed for the Internet are available free and may prove highly valuable in employee communication and information processing. For example, RealAudio makes delivering real-time audio broadcasts available at no cost to employees anywhere around the world. VDOLive makes it similarly possible to deliver "streaming" video in like fashion. The PointCast Network provides fully customizable news information available on the desktop, all at no charge, and converts to a constantly updated screen saver when the employee workstation is not in use.

- Preparing for an Uncertain Future
  Little is known with great certainty about the future of the information superhighway except that the pace of technological change is likely to continue to accelerate. What can organizations do to prepare for this uncertain future? One of the best strategies is to form partnerships with a variety of organizations facing this same uncertain future. Importantly, it is important to select partners that come from fields that are not in the same field, including forming alliances and partnership affiliations with the academic community involved in new media research and development. Benefits from such partnership formation include not only helping to learn about the information superhighway, but also perhaps shaping its future.
Epilogue: Looking Back to the Future: A Brief History of the Information Superhighway

Although often thought of as a phenomenon of the 1990s, the information superhighway has roots that reach far back in time. The actual term information superhighway dotted much of the political rhetoric of the Clinton/Gore presidential campaign of 1992. Not only did then Senator-Gore develop the legislation to build the Internet backbone called the NREN (National Research and Educational Network), but his father, Sen. Al Gore, Sr., wrote the legislation of four decades earlier to build the national highway system.

In 1972 journalist Ralph Lee Smith wrote a book on the merits of cable television, dubbing cable TV the "information highway." Smith envisioned public access channels as providing the opportunity to empower citizens to participate in an enhanced public dialogue.

In 1853 a Whig from Maine lobbied the U.S. Congress to build an information railroad connecting the east and west coasts. This underground telegraph line was to provide instantaneous communications across the nation, enabling a commercial and cultural transformation never before seen. In fact, much of the argument of the day sounded remarkably similar to arguments made in the 1990s about building the information superhighway.

But the earliest evidence of an information highway in the making was in 1795, when a French clergyman and a Swedish nobleman built the first optical data network, based on line-of-sight towers stretching for many kilometers across the European landscape. Recognizing the value of such a means of rapid communication over great distances, Napolean built an optical data network of more than 400 kilometers connecting Paris to Milan, and capable of delivering simple text messages from one city to the next in a matter of a few minutes.
Appendix A
Responses to our Online Query

Conversion: Allowed
Conversion-With-Loss: Allowed
Priority: normal
Disclose-Recipients: Prohibited
Alternate-Recipient: Allowed
Date: 19 Apr 96 11:04:53 -0800
From: Mimi <Mimi.Rosenheim@bankamerica.com>
To: jp35@columbia.edu (Return requested)
Subject: Re: The World Wide Web as a new medium of communication.
From: Karen Shapiro, Internet Channel Management, Bank of America

To: Prof. John V. Pavlik, Ph.D. Executive Director
Subject: The World Wide Web as a new medium of communication.

>Thank you for your interest. I will intersperse answers to your questions:

I am directing a study of how leading organizations are using the World Wide Web as a new medium of communication. In reviewing your Web materials, I have been impressed by your approach and invite you to participate fully in our study by answering the following research questions:

1) Does your organization have a formal policy on the use of the World Wide Web?

> We do not have a written document that we could forward. We do have an informal policy that is set and maintained by my Internet Channel Management team. We work with all business units in Bank of America that want to put content or applications on the Internet and they follow our direction.

1a) If yes, may we obtain a copy of that policy statement (either by mail or by e-mail)? We are particularly interested in your policy with regard to communication or public relations concerns.

2) Within your organization, which department is responsible for the content of your Web site(s)?

2a) What is the role of the public relations department with regard to content on your Web site(s)?

> We work closely with our Corporate Communications dept in working with the press and public inquiries. They have designed the "BA Today" content for our site and keep us up-to-date on corporate affairs.

3) What do you consider the most important issues when creating and maintaining and effective corporate Web site?
>Most important is putting your self in the place of your audience -- customers and prospects, press, etc. We have organized our site around the major orientations we think people will have when visiting. Because we are a large company, with services for varied markets, we are challenged to make it accessible to everyone.

Thank you very much for your help. Please let me know if you would like a copy of our final report. This study is funded by a grant from the Institute for Public Relations Research and Education.

> We would like to receive your final report. Thank you for visiting BankAmerica.com

Date: Thu, 18 Apr 96 16:52 EST
From: networkMCI <0006905444@mcimail.com>
To: jp35 <jp35@columbia.edu>
Subject: Re: Feedback for "For Work"

-- [ From: networkMCI * EMC.Ver #2.3 ] --

Thank you for selecting networkMCI to handle your communications concerns via our internet / e-mail response system. You may contact our Corporate Headquarters in Washington, DC for this survey. Please call 1-800-333-2435.

We hope that the information provided above will assist you with your concern. If you have any other concerns feel free to contact us via e-mail or at our 24 hour customer support center at 1-800-955-6505. Thank you for choosing networkMCI. S04

-------- REPLY, Original message follows --------

Date: Friday, 12-Apr-96 03:08 PM
From: jp35                     \ MCI Mail (EMS):
   * EMS: INNERMAIL / MCI ID: 208-7612
   * MBX: jp35@columbia.edu
To:   Multiple Addresses Suppressed \ MCI Mail (EMS):
   * EMS: INNERMAIL / MCI ID: 208-7612
   * MBX: Multiple Addresses Suppressed

Subject: Feedback for "For Work"

Remote Address: 128.59.192.175 Remote Host: mao-pc1.jrn.columbia.edu

First Name: Prof. John V. Pavlik, Ph.D.
Last Name:
E-mail Address: jp35@columbia.edu
John,

Please see my comments in brackets, and thanks for the kind words relating to our website. I apologize for the delay in getting this out to you, but we place higher emphasis on product related questions than surveys ... and our mail bag has been kinda full lately.

Regards,

Luke Crofoot
3M
St. Paul, MN 55144 USA

----- ORIGINAL MESSAGE CONTENTS ARE BELOW THIS LINE -----

I am directing a study of how leading organizations are using the World Wide Web as a new medium of communication. In reviewing your Web materials, I have been impressed by your approach and invite you to participate fully in our study by answering the following research questions:

1) Does your organization have a formal policy on the use of the World Wide Web?
   [yes and no ..... because we have some fragmented "official" uses, but not all activity is "covered" under these]

1a) If yes, may we obtain a copy of that policy statement (either by mail or by e-mail)? We are particularly interested in your policy with regard to communication or public relations concerns.
   [ Unfortunately, we would not be able to release anything in print, but if you want to discuss, we could do a phone session.]
2) Within your organization, which department is responsible for the content of your Web site(s)?
[Corporate Marketing and Information Technologies along with the content owners ... a kinda 'three-legged stool.'

2a) What is the role of the public relations department with regard to content on your Web site(s)?
[ To prepare and maintain our 'Front Page Stories' section. This is a corporate function. When you're in a market center, business unit / divisional marketing people are responsible.]

3) What do you consider the most important issues when creating and maintaining an effective corporate Web site?
[ Well, there are lots to the mix which ultimately leaves a positive impression in a visitors mind ... freshness, speed, locating and using product / service information, etc.... ]

Thank you very much for your help. Please let me know if you would like a copy of our final report.

[ Yes, I'd appreciate a copy of the final report. Please forward to this e-mail address - or snail mail to:

Luke Crofoot
3M
3M Center, Bldg. 225-3S-05
St. Paul, MN 55144  USA]
2) Within your organization, which department is responsible for the content of your Web site(s)?
Our 'organisation' is a network of volunteers working from many countries around the world. No 'department' is responsible for the content. We are sent material from many different sources, and anything that we consider relevant is added to the site.

2a) What is the role of the public relations department with regard to content on your Web site(s)?
We don't have a PR department.

3) What do you consider the most important issues when creating and maintaining an effective corporate Web site?
Corporate? McSpotlight? I think you may have accidentally sent us this form... Still, I shall answer the question. The most important issue is, without doubt, content - if you haven't got anything interesting to say then the website is essentially pointless. In our case, this was easy, as McSpotlight is centered around the McLibel Trial, and a huge amount of detailed research has gone into this case. We were able to transfer most of this onto the website.

Thank you very much for your help.
Not at all.

Best wishes,
Jessy
McInformation Network

!!! What IS wrong with McDonald's?, now you can judge for yourself.. !!!
!! Uncensored and unstoppable on the WWW: http://www.McSpotlight.org/ !!!
! (Spread the word, please add these 3 lines to your signature file) !

From: corpcomm@pge.com (PG&E Answer Person)
To: jp35@columbia.edu
Subject: Re: WWW: About - World Wide Web as new medium of communication
Date: Tue, 16 Apr 1996 23:36:32 GMT
Reply-To: corpcomm@pge.com
X-Newsreader: Forte Free Agent 1.0.82

Dear Prof. John V. Pavlik, Ph.D.:

Thank you for your email about our website/Internet development
process. We found your survey questions to be well thought-out and timely.

Unfortunately, we must decline to participate in your study at this time, mainly because we are really busy trying to figure out how to develop our Internet services. :-) 

--PG&E Answer Person

jp35@columbia.edu wrote:

Date: Mon, 15 Apr 1996 13:32:59 -0700
To: jp35@columbia.edu
From: Janet Brownstone <webmastr@cs.intel.com>
Reply-To: Janet Brownstone <webmastr@cs.intel.com>
Subject: Survey from Web Server

In a message received by Intel on 4/12/96 12:59:00 PM, someone@cgi1.intel.com wrote:

> invite you to 
> participate fully in our study by answering the following research 
> questions:

Dear John,

I have forwarded your survey to our online marketing group and asked them if they would like to participate. Someone should get back to you shortly.

Regards,
Janet Brownstone
Intel Corp.

From: latld100@ccmail.ca.boeing.com
Date: Mon, 15 Apr 96 10:25:11 PST
To: jp35@columbia.edu
Subject: World Wide Web as new medium for communication

I am directing a study of how leading organizations are using the World Wide Web as a new medium of communication. In reviewing your Web materials, I have been impressed by your approach and invite you to participate fully in our study by answering the following research questions:
1) Does your organization have a formal policy on the use of the World
Wide Web?
(Yes)

1a) If yes, may we obtain a copy of that policy statement (either by mail or by e-mail)? We are particularly interested in your policy with regard to communication or public relations concerns. (Sorry, but I can't send you the policy. Generally, though, it allows any employee access with their immediate supervisor's approval. Our policy is one of trust, but the direction is that it will be used for business purposes. The policy covers use of any company time and equipment resources, but applies to computers and the www just as it does for the telephone, fax, copy machines, etc. We allow occasional personal use of all of these as a matter of convenience, but not just so they can save personal money. We ask them to use good judgment. If people blatantly violate the policy [e.g. call up pornography and someone complains about it] we will apply discipline--it is a management problem, not a web problem.)

2) Within your organization, which department is responsible for the content of your Web site(s)?
(Public Relations.)

2a) What is the role of the public relations department with regard to content on your Web site(s)?
(We manage it and have oversight responsibility.)

3) What do you consider the most important issues when creating and maintaining an effective corporate Web site?
(Functionality is key. We try to make information available that we know, based on experience, our various publics want. And, we use feedback as a guide on what we should add to our pages. Our audiences include, customers, students, researchers, shareholders, opinion leaders, employees, and the flying public.)

Thank you very much for your help. Please let me know if you would like a copy of our final report. (YES. To Lee Lathrop, The Boeing Company, PO Box 3707, Mail Stop 10-06, Seattle, WA 98124, or through the Webmaster e-mail connection on our www site. Thanks.) This study is funded by a grant from the Institute for Public Relations Research and Education.

X-Sender: webmastr@ffx.mobil.com
Mime-Version: 1.0
Date: Mon, 15 Apr 1996 10:30:08 -0400
To: jp35@columbia.edu
From: webmastr@mobil.com (WebMaster)
Subject: Re: The Wide Web as a new medium of communication.

I have forwarded your note to the Public Affairs dept as they have fiduciary responsibility for our Web Site.
Regards,
Mobil WebMaster

From: www@www.ford.com
Subject: Thank you!
To: jpavlik@dragon.jrn.columbia.edu
Date: Fri, 12 Apr 1996 16:57:16 -0500 (EDT)
MIME-Version: 1.0

Thank you for visiting the Ford Motor Company "Worldwide Connection". We hope that you enjoyed looking at our "work in progress" and will continue to visit as we expand and enhance the site in the coming months. We have many exciting new features planned.

This note is an automatic acknowledgement that our web server has received your e-mail message. Your note will be forwarded to the appropriate office for consideration and, if required, preparation of a reply. Because of the volume of mail received, most replies take three to five business days to complete.

Sincerely,

Web Team
Ford Motor Company
http://www.ford.com

From: www@www.ford.com
Subject: Response to your mail message.
To: jpavlik@dragon.jrn.columbia.edu
Date: Mon, 15 Apr 1996 10:26:04 -0500 (EDT)
MIME-Version: 1.0

-- [ From: Stockholder Relations * EMC.Ver #2.10P ] --

Thank you for your recent note. We are gratified by your interest in Ford Motor Company. We hope you enjoyed browsing our Website and will visit again to see the new features we will be adding in the coming months.

We regret, however, that we are unable to respond to your questionnaire. We receive hundreds of requests similar to yours and, unfortunately, are unable to devote the time necessary to respond to each one individually. As a result, we have decided that the fairest solution is to not complete any of these questionnaires or other detailed
research requests.

Again, we are sorry that we are unable to respond to your request favorably, but want to thank you for your interest in our operations.

-------- REPLY, End of original message --------

Date: 12 Apr 1996 19:17:19 GMT
From: "Homepage, Feedback" <FEEDBACK@CORPHQN3.SSW.JNJ.COM>
Subject: J&J PR on the Web
To: jp35@columbia.edu
Comment: MEMO 04/12/96 19:14:00

Prof. John V. Pavlik, Ph.D.:
Regarding your inquiry on J&J's policies and use of the Internet, I will call you as soon as time permits to discuss these issues, rather than answer by e-mail.
Tina Gordon
Director of Corporate Communications

Date: Fri, 12 Apr 1996 18:33:37 -0400
X-Sender: nynex43@pop.tiac.net
Mime-Version: 1.0
To: jp35@columbia.edu
From: Customer Service <nynex43@pop.tiac.net>
Subject: BigYellow Forwarded Mail

Thank you very much for your correspondence and the compliment. We have forwarded your message to our Public Relations Department for review. We appreciate your interest in including us in your study. Thank you again.

BigYellow Customer Service
Dear Dr. Pavlik,

we normally do not answer these surveys but since you seem to be focusing on the P.R. department's role (a rare perspective), we'll try to help.

We do not have a formal written policy. The number of areas within our firm producing web content is growing day by day, though corporate communication (our name for P.R.) maintains primary responsibility for most of the content on our external web. The other significant producers of external web content at this point are recruiting (human resources), who publish through corporate communication, and our Global Research group, which maintains a research library, access to which is restricted to a small number of our clients.

The corporate communication department has played a number of roles since we launched our external presence in October, 1994. We designed Morgan's first web site and worked with internal technology units to open it to the public. We grew that site for about nine months and then tore it down, replacing it with a newly-designed and more logical successor site (summer 1995). Today we are (a) collaborating with a technology unit on the development of a second-generation intranet; (b) producing content – increasingly on behalf of marketing units – to add to the external web site; (c) developing a standards and guidelines package for other parts of the firm to use in designing and building internal and external offerings; (d) working with other parts of the firm to begin articulating a consensus view on why the Internet is important to us.

So far, the most important issues have been these:

performance, principally in the sense of making sure that we don't offer images so dense that they take forever to download

organization, principally in the sense of making sure that we don't require people to drill too deep before getting to information of substance (i.e., cool it on the hyperlinks)

maintenance and administration, which we've learned requires more planning and continuing energy than was apparent at first

currency and interactivity; we offer a lot of the former (market indices published daily), and are working on developing more of the latter
I'm sure my colleagues would be most interested in your report. Please send it to

Neil Gluckin                        Voice: 212 648-9528  
J.P. Morgan & Co. Incorporated          Fax: 212 648-5193  
60 Wall Street, 45th Floor              e-mail: gluckin_n@jpmorgan.com  
New York, NY 10260

From: Prof. John V. Pavlik, Ph.D. Executive Director on Fri, Apr 12, 1996  
3:38 PM  
Subject: World Wide Web as new medium for communication  
To: webmaster@jpmorgan.com

Date: Fri, 12 Apr 96 15:56:38 -0500  
From: innovation@mmm.com  
To: jp35@columbia.edu  
Subject: Message received at 3M

Thank you for your interest in 3M. This is an automated response to your message dated Fri, 12 Apr 1996 15:49:30 -0500 with Subject: "World Wide Web Com.". If you have requested a response, one will be sent within two business days.

From: askibm@VNET.IBM.COM  
Date: Fri, 12 Apr 96 13:41:51 MST  
To: jp35@columbia.edu

CALLOWN INTERNET RESPONSE FACILITY

To: jp35@columbia.edu  
Subject: Research on web

    Hello,  
    Currently IBM does not offer information on the internal makeup of the IBM homepage.  
    askIBM,,  
    Roseann

    (askibm@vnet.ibm.com)
I am directing a study of how leading organizations are using the World Wide Web as a new medium of communication. In reviewing your Web materials, I have been impressed by your approach and invite you to participate fully in our study by answering the following research questions:

1) Does your organization have a formal policy on the use of the World Wide Web?

1a) If yes, may we obtain a copy of that policy statement (either by mail or by e-mail)? We are particularly interested in your policy with regard to communication or public relations concerns.

We do have a policy that includes; use of the Internet/Web being limited to business purposes whether during business or non-business hours; employees responding to a newsgroup discussion on the Web may respond only as an individual and not as a representative of BellSouth, unless they are a recognized spokesperson; anyone wishing to put up a personal Webpage may not use company equipment or time to do so and may not use the company name in any graphics.

Our policies are considered proprietary so I don't think there are any documents I could share with you. Sorry.

2) Within your organization, which department is responsible for the
content of your Web site(s)?

That really depend on the site, e.g., PR/Adv assume responsibility for the corporate site -- Marketing/Com managers cover their site -- BAPCO techies cover the yellow page site -- External Affairs covers the International site -- PR covers the Mobility Site.

2a) What is the role of the public relations department with regard to content on your Web site(s)?

On the corporate page, we have oversight responsibilities.

3) What do you consider the most important issues when creating and maintaining and effective corporate Web site?

Protection of image/trademarks; overall (company-wide) plan for Web presence; Security; and a host of others.

Thank you very much for your help. Please let me know if you would like a copy of our final report. This study is funded by a grant from the Institute for Public Relations Research and Education.

My pleasure. Regards,

Lois Phillips, Assistant Director, Media
BellSouth
phillips.lois@bsc.blc.com

Date: Fri, 12 Apr 96 12:53:53 PDT
Reply-To: corpcmm@pge.com (CorpComm at PG&E)
Sender: listadmin@pge.com
Precedence: bulk
From: corpcmm@pge.com (CorpComm at PG&E)
To: jp35@columbia.edu
Subject: Re: Your email to corpcmm

X-_P_G_&_E_-Autoresponder-Version: 1.0

Thank you for your e-mail message. Your correspondence is important to us and it will be read and routed to the person most responsible for the subject you wrote about. While it may not be possible to respond personally to each of you, we want you to know we appreciate your taking the time to write us. We will give serious consideration to all your suggestions, requests and recommendations. And if you have written us with a complaint, we will do what we can to resolve the situation.
We know many of you would like to be able to check on your account and pay your PG&E bills, schedule service appointments, and see updates about power outages on-line. We hear you, and we're looking into these and other good ideas.

Unfortunately, we're not yet able to offer these services via the Internet. Until we are, please call our 24-hour toll-free number -- 1-800-743-5000 -- for these types of requests. A PG&E customer service representative will be happy to serve you.

Again, thanks for e-mailing PG&E.

From: "Philip Yzarn de Louraille" <yzarn@chevron.com>
Date: Fri, 12 Apr 1996 10:15:44 -0700
To: "Prof. John V. Pavlik, Ph.D. Executive Director" <"jp35"@columbia.edu>,
webmaster@chevron.com
Subject: Re: The Wide Web as a new medium of communication
Mime-Version: 1.0

I will forward your mail to our Public Affairs people who are involved with the project so you can get their point of view as well.
My point of view is more in the IT focus, being responsible for the site security as well as the day-to-day operations.

In any case, yes, I'd be interested in your final report, thanks.

On Apr 12, 11:54am, Prof. John V. Pavlik, Ph.D. Executive Director wrote:
> Subject: The Wide Web as a new medium of communication
> I am directing a study of how leading organizations are using the World
> Wide Web as a new medium of communication. In reviewing your Web
> materials, I have been impressed by your approach and invite you to
> participate fully in our study by answering the following research
> questions:
> 1) Does your organization have a formal policy on the use of the World
> Wide Web?

We just finished an architecture study on the use of the WWW for Chevron on both the Internet and our intranet.
We did not modify the existing communication policies. We see the Web as just another form or medium of communication.

> 1a) If yes, may we obtain a copy of that policy statement (either by
> mail or by e-mail)? We are particularly interested in your policy with
> regard to communication or public relations concerns.
2) Within your organization, which department is responsible for the content of your Web site(s)?

The Internet-based site is under the responsibilities of several parties.
a) Corp. Public Affairs for the coordination of the contents
b) Each individual Chevron company for their own WWW tree (if they have one)
b) Chevron IT company for the site security and day-to-day operations.

2a) What is the role of the public relations department with regard to content on your Web site(s)?

They act as the coordinators or integrators to insure that the material located on the Internet-based WWW server fits the Chevron image.
They were the original sponsors of the web server and, as of now, are responsible for most of the contents. Some other Chevron companies are starting to have their own material as well.

3) What do you consider the most important issues when creating and maintaining an effective corporate Web site?

The Corporation's image is paramount, but, at the same time, the medium used asks for material that is not boring, obscure, outdated, but fun to access and read for diverse crowds: (not listed in importance) the press, the general public, the stockholders, current and former employees, schools,....

You mention "effective". This is "in the eyes of the beholder". We have seen articles and quotes in the press mentioning our site as "ridiculous; who wants to know how oil is extracted and converted into gas..." to others who were thoroughly enjoying its educational aspects...

--
#include <disclaimer.h> Philip Yzarn de Louraille yzarn@chevron.com

Date: Fri, 12 Apr 1996 12:31:38 -0400
From: webmaster@gte.com (GTE Website)
To: jp35@columbia.edu
Subject: RE: World Wide Web as new medium of communication
This email message is to confirm that we received the message you recently sent us from the GTE Web site. If your message requires a response, we will try to get back to you as soon as we can.

Thank you for your correspondence,
GTE Webmaster
webmaster@gte.com

Subject: The World Wide Web as a new medium of communication.

*** Reply to note of 04/12/96 08:39
From: Bank of America Classification: Internal Use
Subject: The World Wide Web as a new medium of communication.

Thank you for your message. We have forwarded it to the appropriate department for review. We appreciate your interest in Bank of America.

From: root@polecat.sdsu.edu
Date: Mon, 25 Mar 1996 20:56:57 -0500
Apparently-To: jp35@columbia.edu

RESPONSE
TO INSTITUTE FOR PUBLIC RELATIONS RESEARCH AND EDUCATION
HOME PAGE QUESTIONAIRE.

Name of respondent: Virginia Ikeda
Email address: sitesys@azlink.com
Job title: Account Executive
Student = no
PR worker = yes
Economic sector = Media
Internet connection speed: 28K
Length of WEB experience: 6-12 months
Time spent on Internet: 24-48 hours per week
Major issues:
WEB issues are critical to me and my company. The glut of web sites makes getting effective attention mandatory from here on out and this issue alone will separate out or "shakeout" the numerous web design only houses from the the "full service" shop. Our company is vitally interested in anything that will help us to survive the next two years.

Other comments or suggestions:
Please read my remarks above and apply your resources to aid the public relations segment of the Inet to be effective.
I'd be interested in whatever you develop.
At 10:44 AM 3/26/96 -0500, you wrote:

John:

At the risk of sounding absolutely bonkers: Please let me know what/which survey it was that I participated in. I think I have filled out more survey questionnaires in the last few days than I ever -- 1) thought I would in a whole lifetime, 2) could have imagined were relevant to me, and 3) would reveal to a soul that I did.

As for our Web Policy: I'm not sure in which area you are concerned about -- marketing, advertising, PR, web design and development, publishing, technical support, customer support, retail interfacing, internal intranet interfacing, etc., etc. I can't release all of our policies but can certainly talk to you about our general principles in various area, depending on time and how much you want. We're working pretty hard to develop these and I frankly don't think that there are many companies out there who do business on the WEB in either a retail capacity or support capacity. You see, I think of these kinds of, what I call company "infrastructure," as quite proprietary. I see that 197-98 will be a shakeout year for many WWW support companies. Those that do not have the internal procedures, concepts, and production capacities in place, will be washed away.

I just looked at your Web Site and think that your educational approach to the "news" is great. I think that the use of the terms "innovative content" may be a dangerous when talking about the context of journalism -- think back on the news stories last year on the truck gas tank controversy, among other "creative" and arguably "innovative" journalistic content. I suppose that's an evil and danger that we must face when journalism begins to feel the need to compete with entertainment (since about 20 years ago from what I gather).
I may be way off the marks here, and if so, disregard my remarks. OK??

My background, among many other things, is writing. I am also a poet and musician, along with being a business woman.

Thanks.
Virginia Ikeda
>
>
>
>
>
RESPONSE
TO INSTITUTE FOR PUBLIC RELATIONS RESEARCH AND EDUCATION
HOME PAGE QUESTIONNAIRE.

Name of respondent: James Leveque
Email address: aa246@debs.ndhq.dnd.ca
Job title: Director, Departmental Public Affairs (National Defence, yes
Student = no
PR worker = yes
Economic sector = Government
Internet connection speed: 14Korless
Length of WEB experience: 12-24 months
Time spent on Internet: 24-48 hours per week
Major issues:
Coherence of messaging, information security

Other comments or suggestions:

Web policy = yes

Thanks for your response to our online survey. I'll send you the results of the study as soon as they are available (should be May). Would you send me a copy of your Web policy, or at least a summary of the main points?

Date: Thu, 25 Apr 1996 10:49:11 -0700
To: jp35@columbia.edu
From: Janet Brownstone <webmastr@cs.intel.com>
Reply-To: Janet Brownstone <webmastr@cs.intel.com>
Subject: Survey from Web Server

In a message received by Intel on 4/12/96 12:59:00 PM, someone@cgi1.intel.com wrote:
>In reviewing your Web
>materials, I have been impressed by your approach and invite you to participate fully in
>our study by answering the following research
>questions:

Dear Dr. Pavlik,

I forwarded your request to several people in Online Marketing.
Unfortunately, although several people were very interested in
participating, no one has the time right now. Sorry I couldn't help, and good luck with
your survey.

Regards,
Janet Brownstone
Intel Corp.
Appendix B
Web Site
http://www.foundation.sdsu.edu/~sdsf/pr/prhome3.html

This page has been enhanced for Microsoft Internet Explorer 2.0

How are Communications Professionals Using the Information Highway Technologies?

Audio Clip
Please take a moment to fill out our questionnaire.

Executive Summary of Preliminary Findings

A Research Home Page Sponsored by The Institute for Public Relations Research and Education

Principal Investigators

John V. Pavlik, Ph.D.
Executive Director, The Center for New Media
Professor, Graduate School of Journalism
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New York, NY 10027
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David. M. Dozier, Ph.D.
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San Diego State University
voice: (619) 594-6260; fax: (619) 594-6246;
e-mail: ddozier@ucsvax.sdsu.edu

Executive Summary

Through their use of the Internet's World Wide Web, communication professionals are driving much of the development of the information highway, reveal preliminary results of a research investigation funded by a grant from the Institute for Public Relations Research and Education.

Specific findings are that:
innovative firms are using the Web to provide an online presence for their firms and selected clients and thereby the development of this emerging medium of mass communication (one recent survey documents that public relations is the leading form of Web activity--21% of all Web sites are public relations in nature, followed by 20% for advertising);

most effective use of the Web is to integrate its use into an overall media plan and to recognize that the Web is primarily a communication medium in which users (i.e., members of a public) come to the organization seeking information, rather than a sales or marketing tool;

**Web sites require:**

- regular updates to insure return visits;
- a "Webmaster" who can continuously monitor "hits" and other data collected through the Web site, as well as provide software upgrades as new versions of browser tools are released and enhanced site features, such as virtual reality modeling language applications for three-dimensional online tours, full-motion video and effective use of audio and register the site on all relevant browsers;
- original design features that distinguish the site from the more than 100,000 sites currently on the Web (a new site is created every five minutes) and draw many of the estimated 30 million Internet users world wide who spend much of their online time "surfing the 'net" rather than seeking specific information;
- information highway technologies are an important and growing tool for internal communications among agency personnel at remote locations as well as between agency and client personnel (however, for many perceived and sometimes real security reasons, file transfer is used relatively infrequently, despite its speed and cost-effectiveness);
- a variety of online applications have been developed to use the information highway as not only a communication tool but as a means of: data collection (e.g., through online focus groups and by remotely accessing online databases such as the U.S. Library of Congress);
- electronic distribution of news release material; and, detecting issues developing online (e.g., among chat groups or on bulletin boards), best described as an "early warning" tool for issues management. These preliminary results suggest that not only can public relations professionals make effective use of online communication technologies, but their use is helping shape the development of the information superhighway.

**Findings to date are based on:**

depth interviews with ten leading practitioners in the U.S. and internationally, including:

Monita Buchwald, Senior Vice President and Deputy Director for Creative and Strategic Development,
Manning, Selvage & Lee Public Relations, New York;
Ms. Stephanie M. Harwood, APR and Vice President, Corporate Communications, Porter/Novelli, New York;  
Mr. Tom Jollie, Vice President, Padilla Speer Beardsley, St. Paul, Minnesota;  
Jon Higgins, Senior Vice President, Ketchum Public Relations, San Francisco (interview incomplete);  
Mr. Bill Trumpfheller, Vice President, Nuffer, Smith, Tucker, Inc., San Diego, CA;  
Mr. Milenko Djuric, Public Relations Director, Profile: Marketing & Communications Co., Svetozara Markovica 22/V, 11000 Beograd, YUGOSLAVIA;  
Mr. Don Bates, Executive Vice President and Chief Operating Officer, Sumner Rider and Associates, New York, NY;  
Mr. Don Lundy, Director of Program Operations, KGTV San Diego's 10, McGraw-Hill Broadcasting Co., Inc., San Diego, CA;  
Michael D. Bardin, APR, Senior Director, Public & Government Relations, Scripps Health, La Jolla, CA;  
Edward Van Herik, Sr. Communications Representative, San Diego Gas & Electric, San Diego, CA;  
depth interviews with leading Web designers, including:  
Mr. Terje Norderhaug, founder of Media Design in Progress, http://www.ifi.uio.no/~terjen/;  
James Kinsella, Managing Editor, Internet Project (i.e., Pathfinder), Time Inc. Multimedia, New York, NY;  
online profiles of 25 public relations firms active on the Web and, a review of 50 innovative Web sites.

All data have been collected between September, 1995 and January 1996. The study will be completed by May, 1996. We anticipate final results will include interviews with at least 25 leading practitioners, profiles of 50 firms active on the Web, interviews with ten leading Web developers, and 100 innovative Web sites.
Appendix A: Selected Interview Transcripts

Manning, Selvage & Lee

Monita Buchwald, Senior Vice President and Deputy Director for Creative and Strategic Development, Manning, Selvage & Lee Public Relations, New York, notes that her firm has developed three areas of application of information highway technologies. First is "Group Talk," a technique that reflects dialog on line. Her agency monitors discussions that occur on electronic bulletin boards (BBS), chat forums and special interest areas. Using these dialogs as an early warning device, her firm monitors those media and occasionally participates in the dialog. They have used this technique to prepare reports for clients in a variety of areas including a child health care client.

Second is "InterSearch," which the firm has used as a research tool on the Internet and other online services. They make heavy use of Nexis, as well as Gopher, Web sites, Lycos, and other services. They have even conducted online focus groups, in which participants are recruited online. One of the advantages of this technique is that it is possible to obtain larger, international participant groups at lower expense. Moreover, because the information is obtained over a period of several days, the dialog is very rich, and people are often less inhibited online.

Third is "OnQueu," a service based on developing home pages for clients interested in having a presence on the World Wide Web.

Buchwald adds that although advertising agencies frequently got into online world faster than their public relations counterparts, the Web is actually more well suited to public relations, since the field does not directly sell. At Manning, Selvage and Lee, the approach to information highway applications is to balance all forms of messages and tactics, and to integrate online communication into an overall media plan. One of the problems involved in online applications is there are few tools to adequately measure the effectiveness of online communication. Although much progress has been made in this regard, important research questions remain, including determining "hits" vs. "impressions" vs. "site visits" on the Web.

Why use the Internet?

Buchwald explains that using the Internet is not always appropriate for every client or public relations campaign, and may even be problematic. One effective approach is to be innovative in use of the Web. In the case of the Rolling Stones recent concert tour, fans with a password could talk via the Stone's Web site to the members of the band while on tour.

Porter/Novelli

Ms. Stephanie M. Harwood, APR and Vice President, Corporate Communications, Porter/Novelli, New York, observes that one of the unique aspects of the Web is that
people come to you seeking the information you provide, rather than vice versa. Although this has a number of advantages, it is also important to still use other media such as direct mail and traditional media, and integrate existing and new tools.

One of her firm's innovations has been the creation of a "Digital News Service." The service is proprietary, and enables the posting of graphics and text for newspapers to pick up stories and even download color graphics. Her firm is also producing press kits on CD-Rom, which enable the incorporation of interactive multimedia content.

Padilla Speer Beardsley

Mr. Tom Jollie, Vice President, Padilla Speer Beardsley, St. Paul, Minnesota, explains that the Internet and the Web, what today represent the information highway, are especially useful in public relations campaigns that are educational in nature. His firm successfully used for one client a Web site to make information about water quality programs available to the general public. The site enabled people to get information directly from the client. The firm's next goal is to help the client return to retail and use the "Net" as an opportunity to sell the product. This will require the creation of a user response mechanism available via the Web. One of the most important lessons from the firm's use of the Web is that the information provided must not become static; rather, it requires constant updating so that people will return to the site.

**Time Frame**

The proposed study will be conducted during a nine-month period, from September 1, 1995 to May 1, 1996. The initial three-month period will be used to design the study and conduct a pilot investigation of the central research question. The next three months will be devoted to data collection and preliminary data processing. The final two months will be used to analyze the data and write a report of the findings of the study for submission to the Institute, as well as for presentation at academic and professional conferences and publication in professional and scholarly journals. We will provide the Institute with an update of our research and findings midway through the project (January 15, 1996 target date), as well as a final report at the conclusion of the study (May 1, 1996 target date).

**Methodology**

The study will use multiple qualitative research methods, including focus group interviews with leading practitioners, depth interviews with selected top practitioners, online dialogues with practitioner user groups and ethnographic study or participant observation of leading practitioners engaged in the use of information highway technologies to monitor the environment. The use of these multiple methods is critical to provide a reliable and valid measure of the phenomena of interest (Pavlik and Szanto, 1994; Campbell and Fiske, 1959).
About the Institute

About the Project Investigators

John V. Pavlik, Ph.D.
Professor and Executive Director, The Center for New Media,
Graduate School of Journalism, Columbia University
New York, NY 10027
e-mail: jpavlik@cnm.columbia.edu

David. M. Dozier, Ph.D.
Professor, School of Communication
San Diego State University
voice: (619) 594-6260; fax: (619) 594-6246
e-mail: ddozier@ucsvax.sdsu.edu
San Diego State University Foundation
Appendix C
Online Interactive Quiz
http://www.foundation.sdsu.edu/~sdfs/pr/prquiz.html

Institute for Public Relations Research and Education
Questionnaire on Use of the World Wide Web

Please respond to the questions on the form below and click on the SUBMIT button at the bottom of this page when you are finished.

Name:  (Optional)

Email Address:  (Optional)

Are you a public relations student? yes no

Do you work in public relations? yes no

Please indicate the sector of the economy in which you work.

Job Title:

What do you think are the major issues to consider when using technologies of the information superhighway (such as the WEB) for public relations purposes?

Does your organization have a formal policy on the use of the Internet and the World Wide Web, including any rules about the development of Web sites? yes no

If so, could you please send them to us either by email at jp35@columbia.edu or snail mail to:

Prof. John V. Pavlik
Executive Director
The Center for New Media
The Graduate School of Journalism
Columbia University
New York, New York 10027
What speed is your connection?
  14400 Kbps or lower 28800 Kbps 56 Kbps T1 or faster

How long have you been on the Worldwide Web?
  Less than six months About a year 1-2 years More than 2 years

How much time do you spend on the Worldwide Web or the Internet in a week?
  1-5 hours 5-10 hours 10-24 hours More than 24 hours

Do you have any other comments or suggestions for us?
Appendix D
Research Assistants:
Don Roberts, School of Communication
San Diego State University

Jackie Oregel
Columbia News Service
Appendix E
Home Pages of Web Sites for Fortune 500 Top 50 companies by revenue 1996, as ranked by Forbes

<table>
<thead>
<tr>
<th>Rank</th>
<th>Equity</th>
<th>Company</th>
<th>Stockholders' Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>37,415.00</td>
<td>Exxon</td>
<td>37,415.00</td>
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</tbody>
</table>

World Wide Web as a new medium of communication

no home page only racing stuff
BUTLER COMMUNICATIONS
Butler Communications, Inc. is coordinating all public relations activities for the IMSA Exxon racing programs, for the third consecutive year. Butler Communications is a full-service public relations, marketing and advertising agency. Butler Communications has been serving clients for more than ten years and specializes in the fields of motorsports public relations and special events coordination. Janice Butler, Butler Communications, Inc.

2 General Electric done 26,387.00
http://www.ge.com/
For the help you need in GE... contact the GE Business Information Center.e-mail: geinfo@www.ge.com
phone: 1-800-626-2004; -or- 1-518-869-5555
webmaster@www.ford.com

3 Intl. Business Machines done 23,413.00
http://www.ibm.com/
For comments and questions about IBM's world wide web services:
You may e-mail webmaster@www.ibm.com

World Wide Web as new medium for communication

4 Ford Motor done 21,659.00
http://www.ford.com/
webmaster@www.ford.com

5 State Farm Group done 21,164.90
http://www.statefarm.com/about/about.htm
<table>
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<th>Company</th>
<th>Status</th>
<th>Revenue</th>
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</tr>
</thead>
<tbody>
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<td>BankAmerica Corp.</td>
<td>done</td>
<td>18,891.00</td>
<td><a href="http://www.bankamerica.com/">http://www.bankamerica.com/</a> <a href="mailto:webmaster@bankamerica.com">webmaster@bankamerica.com</a></td>
</tr>
<tr>
<td>7</td>
<td>ATT</td>
<td>done</td>
<td>17,921.00</td>
<td><a href="http://www.att.com/">http://www.att.com/</a> <a href="mailto:webmaster@att.com">webmaster@att.com</a></td>
</tr>
<tr>
<td>8</td>
<td>Citicorp</td>
<td>done</td>
<td>17,769.00</td>
<td><a href="http://www.citicorp.com/">http://www.citicorp.com/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><a href="http://www.citicorp.com/feedback/">http://www.citicorp.com/feedback/</a></td>
</tr>
<tr>
<td>9</td>
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webmaster@wal-mart.com |
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|20 | Merck               | [http://www.merck.com/!!qbvnd1uYgqbvnd1uYg/](http://www.merck.com/!!qbvnd1uYgqbvnd1uYg/)  
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@http://www.merck.com/!!qbvnd1uYgqbvmpR3qdR/webmail.html |
|21 | NationsBank Corp.   | [http://www.ia-us.com/pr5.html](http://www.ia-us.com/pr5.html)  
info@ia-us.com |
webmaster@nabisco.com |
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support@pepsi.com

49   Minnesota Mining Mfg. done 6,734.00
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