

Cyberglut: And What To Do About It

Carol Anne Ogdin

Art Giser

Deep Woods
TECHNOLOGY

GroupWare '94, San Jose
August 9, 1994

Drowning In Our Own Effluent

- **Proliferating Sources**
More Variety, More Media

- **Proliferating Volume**
E-mail Growing
Newsfeeds, Newsgroups Proliferating
Bandwidth Increasing

(C) 1994,
Deep Woods
TECHNOLOGY

Proliferating Sources

Saturating the Sensory Channels

- Phone, V-Mail
- E-mail, Pagers, MOSAIC
- Video, Electronic Whiteboards
- Television & VR
- Synesthesia: Text Pagers

Media

- Landline, Wire, Network
- Wireless LANs, WANs
- Cellular, PC+PC
- Internet & The NII

(C) 1994.
Deep Woods
TECHNOLOGY

Drivers to Cyberglut

▪ Anytime/Anywhere Computing

Global Business Patterns

- Electronic Meetings

Telecommuting

- Workflow/Workgroups

Contingency Workforces

Virtual Corporation

- Core-competency Focus

(C) 1994.
Deep Woods
TECHNOLOGY

More Drivers to Cyberglut

▪ Competitive Pressures

Downsizing is Not a Fad

$$1/2 \times 2 \times 3 = P$$

...half as many people,

...paid twice as well,

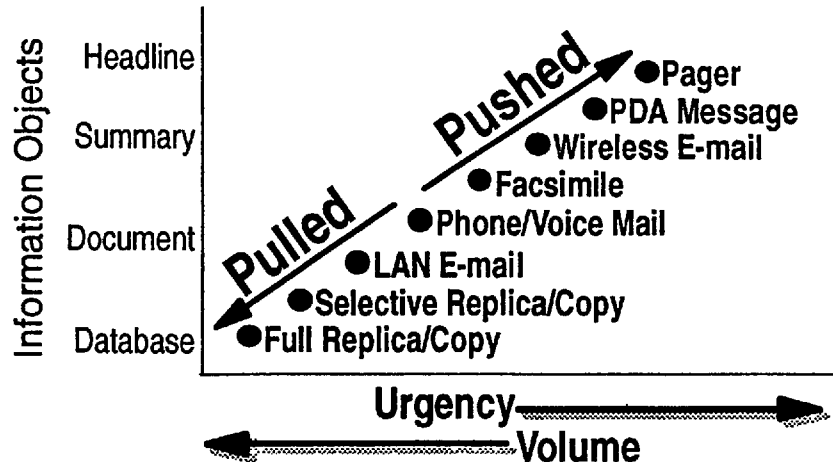
...producing three times as much

Chas. Handy: The Age of Paradox

▪ Survivors: The Quick, The Clever & The Connected

(C) 1994.
Deep Woods
TECHNOLOGY

Varieties of Media



(C) 1994.
Deep Woods
TECHNOLOGY

Din Drowning Data

- **Too Many Sources**
 - Newsfeeds
 - Discussions & newsgroups
- **Too many correspondents**
 - Internal, External
 - FYI vs. Need-to-Know vs. Action (vs. CYA)
- **Too Many Ways**
 - On-slaught of new media

(C) 1994,
Deep Woods
TECHNOLOGY

Some Really Do Stop!

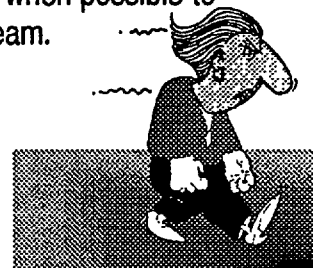
*To: (42 Addressees)
Subject: CC:MAIL MORATORIUM FOR ... TEAM

The ... Schedule shows that for most members of our team 10 hours a week are being consumed by cc:mail. In order to stay focused on our deliverables and meet our schedule there will be a cc:mail moratorium for all members of the ... Team for the next 3 weeks. The team will only be responding to those items marked urgent and I request you use that marking when something truly is URGENT. Please use the telephone when possible to resolve issues as it is much more efficient for the team.

Thank You Very Much for your support.

(C) 1994,
Deep Woods
TECHNOLOGY

Copyright © 1994



What Do We Really Want?

- "What I want, When I want it"
Characteristics?
 - Surprise & Utility
 - Pushed Media: Selective Transmission
 - Pulled Media: Easier Access
- Higher Signal-to-Noise Ratio

(C) 1994
Deep Woods
TECHNOLOGY

Push: E-mail Goals

- Eliminate Unwanted Traffic
Sender Restraint
- Address List Management
Sender Evaluation: "Do They Need It?"
Sender Consideration: "As To: or CC:?"
- Meaningful Subjects/Headers
Sender Empathy
- Comprehensive Messages
Sender Authorship Skills
Selective Use of Attachments

(C) 1994
Deep Woods
TECHNOLOGY

Pull: Access Management

- **Taxonomy/Catalogs**
"Cybersurfing" still specialized skill
Making originators responsible
- **Restricted Content (no "drift")**
Author restraint
- **Discussion Database Administration**

(C) 1994
Deep Woods
TECHNOLOGY

Key Problem:

- **Responsibility On Sender**
Motivations and Objectives
Rewards and Punishments
- **Benefits Accrue to Recipient**
Results: Major Disconnect!

Solution: Get Sender to ask:
"Do I want to occupy a world where
the behavior I exhibit is rampant?"

(C) 1994
Deep Woods
TECHNOLOGY

Some Likely Strategies

- **Filters/Rules**

Limited Utility

- Too Broad for Utility
- Language Poorly Understood

- **Agents**

More Intelligent Filters

- Intelligence Amplifiers vs. Artificial Intelligence
- Same Problems

(C) 1994,
Deep Woods
TECHNOLOGY

Key Skill Requirements

- **Sending from the Reader's Shoes**

Cowboys vs.
Communicators vs.
Collaborators

- **Simple Writing Skills**

Writing in the era of the Telephone

- **Communication in Digital Era**

Sensory Deprived
Likely to Change Slowly

(C) 1994,
Deep Woods
TECHNOLOGY

New Skills Required

- **Social Customs, Lexicon**
Early Uses of Telephone, Television
- **Communications Lexicon**
Emoticons are not Enough
Coevolution of new "shorthand"
- **Encouraging Feedback**

(C) 1994,
Deep Woods
TECHNOLOGY

Culture Shift is Inevitable

- **Existing Culture Inadequate to Media**
40 Million E-mail Users
 - No Guidance, No CustomsVideo: Scarey to Many
- **New Technology Always Shifts Culture**
May Lead to Dead-End
 - People Withdrawing from E-mail, V-mail
 - Technology Gets Blamed
- **New Culture Can Be Designed**

(C) 1994,
Deep Woods
TECHNOLOGY

One Example: A Case Study

- **Conjecture: E-mail is valuable...**
...but isn't always most-effectively used
- **Surveyed 250 (of 24,000) Users**
Goal: Define whether problem is *real*
Results contain few surprises
 - Put facts on conjecturesIdentified major savings opportunities
- **Next Step: Re-education**

(C) 1994,
Deep Woods
TECHNOLOGY

General Results

- **Respondents**
125 by in Two Weeks (50%!)
From AAs to VPs
Employed 6 years; Using e-mail 1 year
- **E-mail Use**
74 minutes per day
Send 12 messages/day, Receive 17
Check mail 7 times/day, virtually every day
Much frustration; some withdrawal

(C) 1994,
Deep Woods
TECHNOLOGY

Subjective Responses

- **Overall Effectiveness** (-5..+5) **+4**
- **Satisfaction with e-mail** **+3**
- **Major Problems:**
 - Sender's Urgency vs. Recipient's Urgency
 - Too many irrelevant messages (0 to 85%)
 - Too long to respond; way past expectations
 - Most people expect 24-hour response
 - Recipients have no sense of obligation

(C) 1994
Deep Woods
TECHNOLOGY

Bottom Line

- **17% Unimportant or Irrelevant Msgs.**
 - Elimination could save 12 minutes/day
 - (\$40 Million/yr Opportunity Cost)
- **Education is Needed, Requested**
 - "Menu Navigation" vs. Effective E-mail
 - Needs integration with daily activities
 - People avoid dull, all-day classes
- **LAN Product Features Irritate Many**
 - Poor User Interface Design
 - Lack of Needed Features

(C) 1994
Deep Woods
TECHNOLOGY

Searching for Significance

- **What Differences Make a Difference?**
 - How bad *is* Fan-out; can it be/should it be controlled?
 - How serious is Forwarding; must control?
 - What communication takes place in absence of response?
 - How to make "Reply to All" difficult to use?
 - How can users feedback to one-another (e-mail about-the-e-mail)?
 - Who are influential models of good e-mail practice?

(C) 1994
Deep Woods
TECHNOLOGY

Improvements Possible

- **Reductions in...**
 - ...Number of messages w/ no response
 - ...Turnaround time
 - ...Fanout (i.e., too many addressees)
 - ...Forwarding (i.e., duplicate messages)
 - ...Excessive use of attachments
 - ...Unnecessary meetings
- **Increases in...**
 - ...User satisfaction
 - ...Quality of communication, comprehension, utility

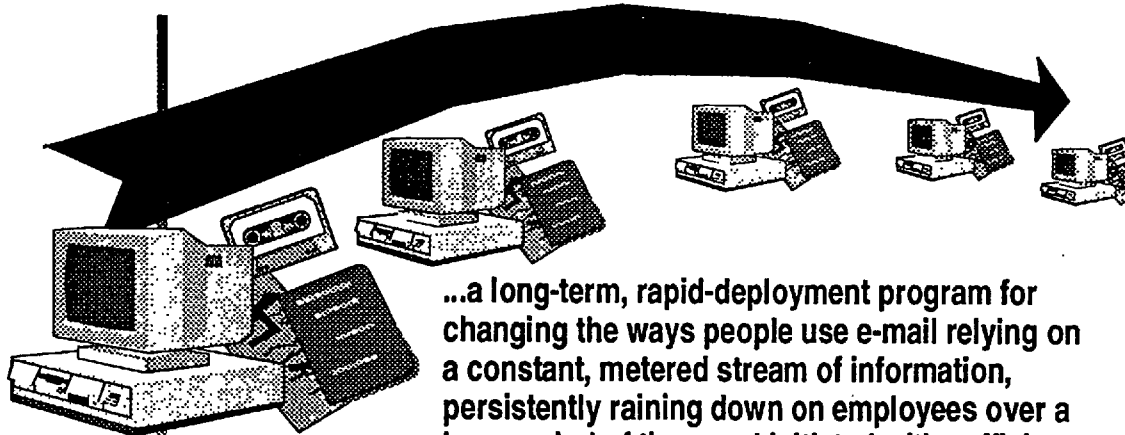
(C) 1994
Deep Woods
TECHNOLOGY

Evolving Goals

- **Eliminate Unnecessary Traffic**
Make originators more selective
- **Make Sure Remaining is Read**
Compose intelligent subject lines
Selectively use To: and cc: fields
- **Make Read Messages Meaningful**
Author self-identification
Apply outcome wellformedness criteria
- **Provide Worthwhile Feedback**
A new social lexicon?

(C) 1994
Deep Woods
TECHNOLOGY

Strategy for Change...



...a long-term, rapid-deployment program for changing the ways people use e-mail relying on a constant, metered stream of information, persistently raining down on employees over a long period of time, and initiated with sufficient energy to convey the sense of top management commitment.

Source: Phase 2 - Detailed Analysis and Action Plan

(C) 1994
Deep Woods
TECHNOLOGY

...Coordinated Media Variety

- **Posters: 'Spot' issue focus**
8-1/2-by-11 format; build excitement
- **Newsletter: For readers**
Four-page (one-sheet); topic-focused
- **Audio Tape: For commuters**
Recap newsletter contents
- **Desktop Demos: For experience**
Screencam replays of demonstrations
 - Software not required to use
 - Maintain repository of lessons

(C) 1994
Deep Woods
TECHNOLOGY

Coordinated Campaign

- **Repetitive, insistent messages**
Periodic and recurrent
Mutually-reinforcing
Signal: "Management's *serious* about this!"
Appeal to all learning styles
- **Use Conventional Media...**
Use *known* media to explain *new* media
- **...Transition to Electronic Media**
As E-mail becomes richer, rely on it

(C) 1994
Deep Woods
TECHNOLOGY

Budgeting for Culture Change

Typical operation cost	\$750	/user/year
Eliminate unwanted msgs	251,600	min/day
	~4,200	hours/day
	~400	employees
Annual employee cost	\$100,000	
Opportunity savings	\$40 Million	
Target ROI	30:1	
Budget to effect change	\$1.5 Million	
	\$ 75	/user/year

(C) 1994.

Deep Woods
TECHNOLOGY

Prerequisites for Success

- **Focus on Organizational Benefits**
Benefits of MIS/IT accrue to productive employees
Too many MIS/IT organizations are still cost centers
- **Requires Executive Champion**
Fortunately, higher executives easier to convince
- **Avoid Conventional Educational Organization**

(C) 1994.

Deep Woods
TECHNOLOGY

THIRD INTERNATIONAL SYMPOSIUM: NATIONAL SECURITY & NATIONAL COMPETITIVENESS: OPEN SOURCE SOLUTIONS Proceedings, 1994 Volume I - Link Page

[Previous](#) [Split Based Intelligence Operations During Desert Storm: A Glimpse of the Future Digital Army](#)

[Next](#) [Toward High-Performance Organizations: A Strategic Role for Groupware](#)

[Return to Electronic Index Page](#)