

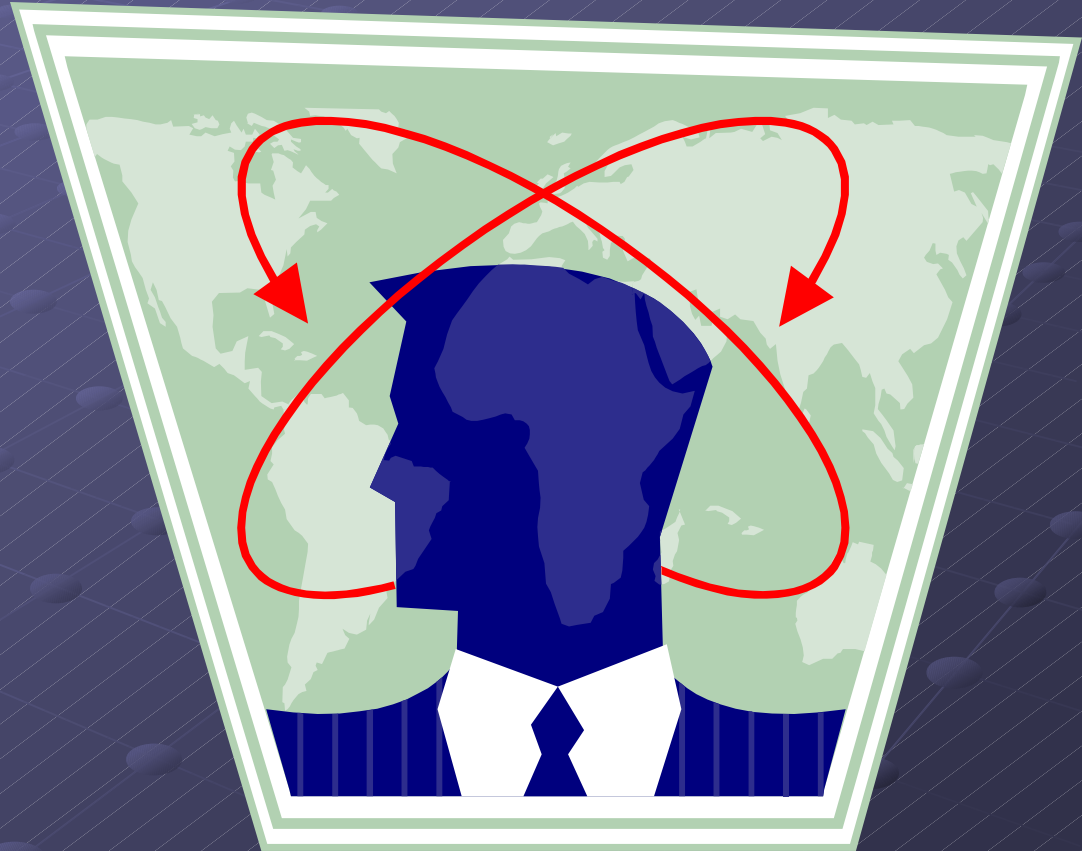
Looking Ahead Privacy, Laws, & Technology

J. Trevor Hughes

International Association of Privacy Professionals

Emerging Regulatory Issues

- Privacy
 - ID Theft
 - SSNs
 - Spam
 - Telemarketing
 - GLBA
 - FCRA
 - HIPAA
 - Patriot Act
- Security
 - The Ugly Stepchild
- A Look Ahead
 - Emerging Technology
 - Biometrics
 - Data Fluidity
 - Data Aggregation



The Privacy Strata

Technology Standards

Self Regulatory Standards

US Government

SSNs

GLB

HIPPA

The States

(Legislatures, DOIs and AGs)

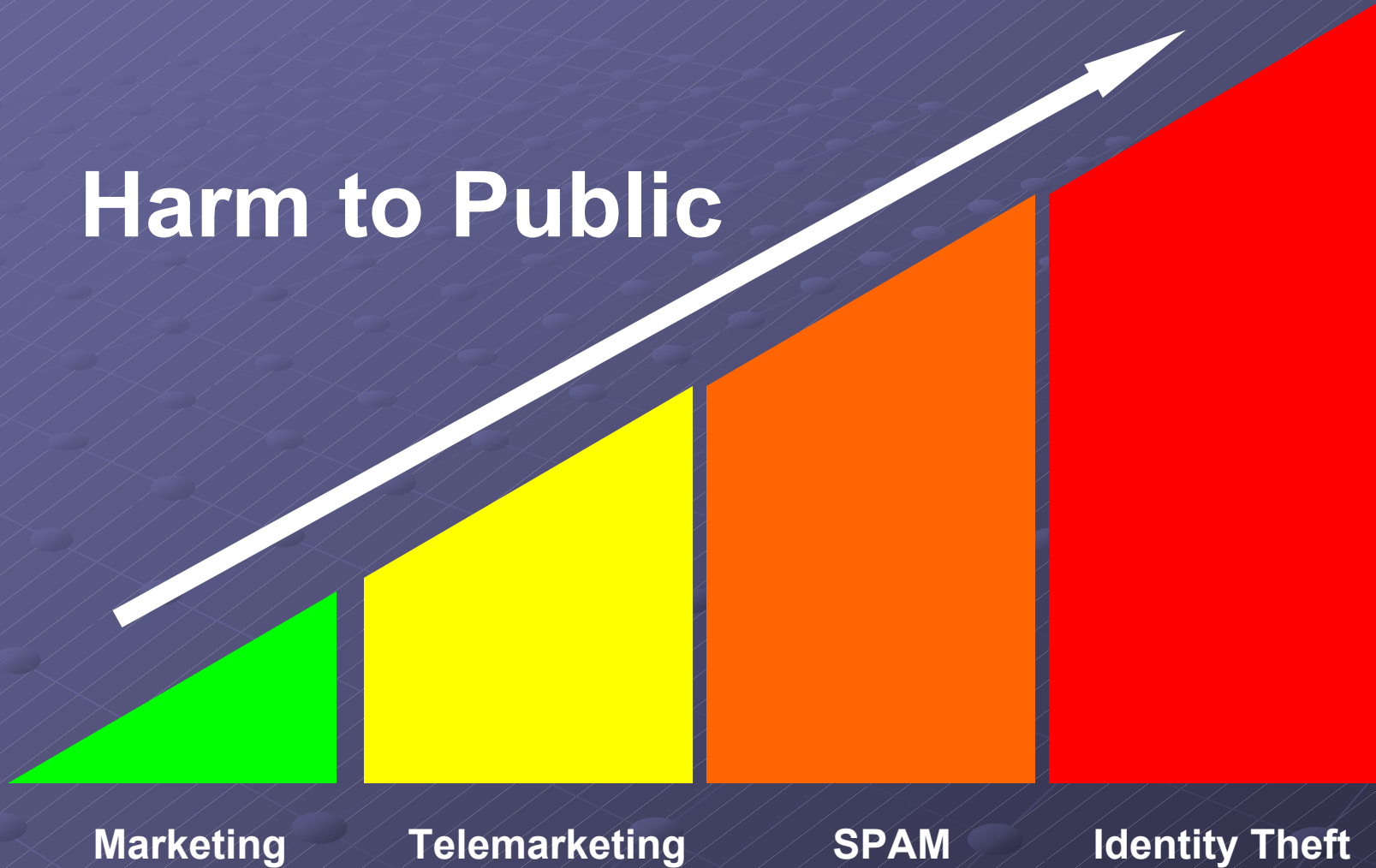
The
Rest of the
World

Canada

EUROPE

Show me the harm...

Harm to Public



Identity Theft

● **FTC Complaints:**

- 2000: 31,000
- 2001: 86,000
- 2002: 162,000
- Top consumer fraud complaint in 2002
- 30% growth predicted going forward

● **Average impact:**

- \$1500
 - 175 hours of clean up
 - credit disruptions
- 42% of complaints involve credit card fraud

Identity theft coverage now available

Social Security Numbers

● California:

- Correspondence to residential addresses cannot include a SSN
- (Simitian bill) employers cannot use SSN for purposes other than taxes

● Feds:

- Proposals to limit use as college ID

● Looking ahead:

- Restrictions on the use of SSNs as internal identifiers
 - May be used for verification of identity, accessing medical files and credit reports
 - May not be used as an account number

SPAM

- Hotmail – 80% unsolicited bulk email
- 31 billion per day (2002)
- 60 billion per day(2006)
- Dial up concerns (EU local call problems)
- Work productivity/liability concerns
- Deliverability concerns
- Channel viability concerns (the “900” phenomenon)



Will the Cure Kill Email?

● Legal Responses:

- 26 states with anti-spam legislation
- Can Spam Act in Congress (expected to pass this year)
- EU opt-in requirements

● Tech Responses

- Blacklists
- Filtering by ISPs
- Solution providers
 - Habeus
 - Trusted Sender
 - IronPort
 - Brightmail

**Aggressive filtering results in “false positives”
(legitimate email being blocked)**

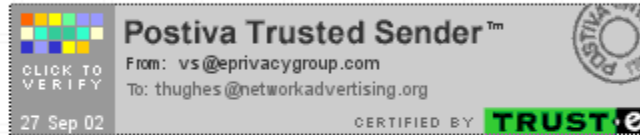
From: Vincent Schiavone [vs@eprivacygroup.com]

Sent: Thu 9/26/2002 9:34 PM

To: Stephen Cobb (Stephen Cobb)

Cc:

Subject: The Size of the Spam Problem now at 31 Billion a day - Email Usage to Exceed 60 Billion a day by 2006, According to IDC (P)



I thought you might be interested in this report.

Email Usage to Exceed 60 Billion by

FRAMINGHAM, Mass., September 26

person-to-person emails are joined by read receipts and other notifications, according to IDC. In 2006, email usage is expected to exceed 60 billion worldwide. More than 60 percent of these messages will be person-to-person.

CERTIFIED BY



[Postiva.com Privacy Statement](#)

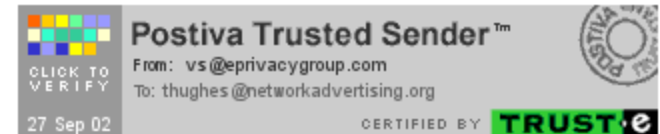
Postiva Trusted Sender
Verified



The email you verified was sent by a **Postiva Trusted Sender**.

Identity of the email sender: **Verified**
Authenticity of the email: **Verified**

ePrivacy Group respects your privacy and is certified by TRUSTe to comply with fair information principles and email best practices.



[Read the ePrivacy Group Privacy Statement](#)

[Contact ePrivacy Group](#)

[Unsubscribe from ePrivacy Group](#)

[Read About Postiva Trusted Sender](#)

[Register Comments or Disputes](#)

From: **vs@eprivacygroup.com**
To: **thughes@networkadvertising.org**
Date: **27 Sep 02**

Subject: **The Size of the Spam Problem now at 31 Billion a day - Email Usage to Exceed 60 Billion a day by 2006, According to IDC (P)**

The following organization is a Trusted Sender in good standing:

ePrivacy Group
43 Leopard Road, Suite 300
Paoli, PA 19301

Employee Email Privacy

- Blurring of work/home boundaries
- 30% of ecommerce sales generated from the workplace
- Extensive use of company email for personal use
- Issue: employer monitoring?
- European v. US approaches



Telemarketing

- The “must have” legislation for every up-and-coming AG
- TCPA – allows for single vendor opt-out
- FTC’s 2001 gift to consumers: a national do not call registry (call Billy Tauzin)
- Telemarketing will diminish as a sales vehicle

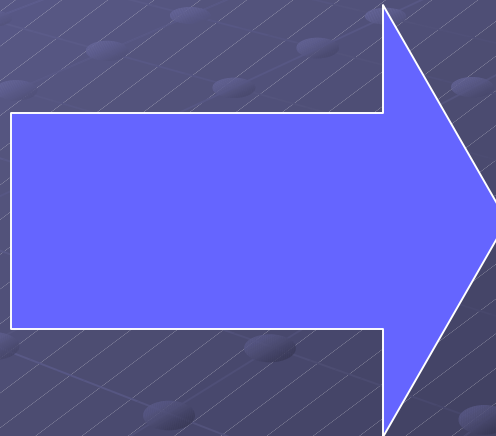


Fair Credit Reporting Act

- Reauthorization in 2003
- Big issues:
 - Expand consumer privacy protections?
 - Sunset state preemption?
 - NAAG says “YES!”
 - Business community says “please, no!”
- For insurers: beware of scope creep in FCRA reauthorization (Sen. Shelby – GLBA did not go far enough; wants opt in for third party transfers)

Layered Privacy Notices

Nutrition Facts			
Serving Size 1 pretzel (about 25g)			
Servings Per Container 20			
Amount Per Serving			
Calories 90	Calories from Fat 0		
% Daily Value*			
Total Fat 0g			0%
Saturated Fat 0g			0%
Cholesterol 0mg			0%
Sodium 470mg			20%
Total Carbohydrate 19g			6%
Dietary Fiber less than 1g			4%
Sugars less than 1g			
Protein 1g			
Vitamin A *		Vitamin C *	
Calcium *		Iron *	
* Contains less than 2% of the Daily Value of these nutrients.			
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g



Privacy Facts		
Data Collection and Use		
Data Collected by Acme, Inc.		
Name		Yes
Address		Yes
Phone		Yes
Email		Yes
Medical Data		No
Financial Data		Yes
Political Data		No
Age Data		Yes
Mktg Preferences		Yes
Family Status Data		Yes
Data Use by Acme, Inc.		
Purpose		Choice
Marketing	Yes	No
Transfer	Yes	Opt Out
Credit Rating	No	No
Ins. Rating	No	No
Enforcement by TRUSTe, www.truste.org , 800 222 2222		
Access to personal data may be obtained through www.acme.com or by calling 800 333 3333.		

Security

The Ugly Stepchild of Privacy

Hack at Amazon-owned service exposes thousands

By [Troy Wolverton](#)
Staff Writer, CNET News.com
March 5, 2001, 4:50 p.m. PT

Amazon.com-owned book service Bibliofind.com restarted its Web site Monday in the wake of a hacker attack that compromised some 98,000 customer records and forced the company offline.

Waltham, Mass.-based Bibliofind, which links buyers and sellers of hard-to-find and out-of-print books, discovered last week that a hacker had broken into its Web servers sometime in October and had continued to access the company's site since then, Bibliofind spokesman Jim Courtovich said. The hacker downloaded customer records from the site, including customers' names, addresses and credit card numbers, Courtovich said.

In response to the discovery, Bibliofind, a wholly owned subsidiary of Amazon, shut down its Web site Friday and removed customers' credit card information and addresses from its servers, he said. Courtovich declined to say whether Bibliofind had identified a suspect in the attack, saying only that the company notified the Federal Bureau of Investigation, which is looking into the matter.

▼ advertisement

"Bibliofind has just learned of a security violation on its site that compromised the security of credit card information used on Bibliofind.com."



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- [Tech jobs](#)
- [Taiwan's Computex](#)
- [JavaOne](#)
- [Online music](#)
- [Lucent Technologies](#)

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- [Intel exec: No new layoffs](#)
- [Lucent to offer early retirement to 10,000](#)
- [High-tech job growth rate at](#)

Egghead silent; customers angry

By [Robert Lemos](#) and [Troy Wolverton](#)

Special to CNET News.com

January 2, 2001, 1:30 p.m. PT

Nearly two weeks after an intruder cracked into Egghead.com's computer systems, the online retailer is still mum on whether any credit card numbers were stolen from its 3.7 million-customer database.

Representatives for Egghead and for the San Francisco office of the FBI confirmed Tuesday that investigations were continuing, but they would not provide details.

Customers, however, were talking.

"Any company that's going to do something as stupid as maintain a credit card online on a vulnerable server that long after the transaction, I have no reason to trust them at all," said John Groseclose, of Scottsdale, Ariz. "That goes against every industry best practice that's out there."

On Dec. 22, Egghead

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Mainframe performance in a midrange server. It's a big deal.

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Sun Fire™ Midframe servers offer mainframe-class performance and availability features, allowing you to harness the power of the Net's exponential growth at a much

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Columbia House breach exposes customer info

By [Stefanie Olsen](#)

Staff Writer, CNET News.com

February 21, 2001, 2:20 p.m. PT

Music company Columbia House left a hole in more than its CDs during the past week, when a security breach on its Web site exposed thousands of customer names, addresses and portions of credit card numbers.

A company representative confirmed the breach Wednesday, calling it "temporary" and an unlucky outcome of routine development work on the Web site.

Mark Alway, a software developer from Seattle, discovered the breach Friday evening while shopping for CDs with a friend. He found that by eliminating part of the [Columbia House](#) Web address, which contains more than 100 characters at any given time, he could reach a directory of administrative tools normally unreachable to the average Web surfer.

This directory mapped out a treasure trove of links to personal customer data and sensitive Web files including company coupon codes, log files, and names and passwords to Columbia House's main Informix database, Alway said in an interview.

"It's almost negligent to have this type of error--it's something you're trained to solve in very basic Web training courses, not to leave directory indexing on. A large business shouldn't have such a simple mistake on their site," said Alway, who immediately sent an e-mail to technical contacts at the site Friday. He said he received a response Wednesday that the site had been fixed.

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[High-tech job growth rate at five-year low](#)

Travelocity exposes customer information

By [Troy Wolverton](#)

Staff Writer, CNET News.com

January 22, 2001, 6:30 p.m. PT

A security breach at Travelocity exposed the personal information of thousands of the online travel company's customers, the company confirmed Monday.

Names, addresses, phone numbers and e-mail addresses of Travelocity customers who participated in a promotion on its site were exposed. Travelocity executives closed the breach, which involved an insecure directory, on Monday afternoon after it was pointed out.

For more than a month, up to 51,000 names could have been exposed by the breach, said Jim Marsicano, executive vice president of sales and service for Travelocity. Blaming the problem on human error, Marsicano stressed that no customer order information was compromised by the security hole.

"We take this privacy thing very seriously," Marsicano said. But he added, "In this case, we didn't do what we were supposed to do."

Although Travelocity is still investigating the incident, Marsicano said that it stemmed from the transfer of the company's servers from San Francisco to Tulsa last month. As part of the move, some of the company's internal data from two promotional contests that ran last year was inadvertently left on a computer that is now being used as a Web server, he said.

"We had a weak link in this particular transaction and you see the end result " he said

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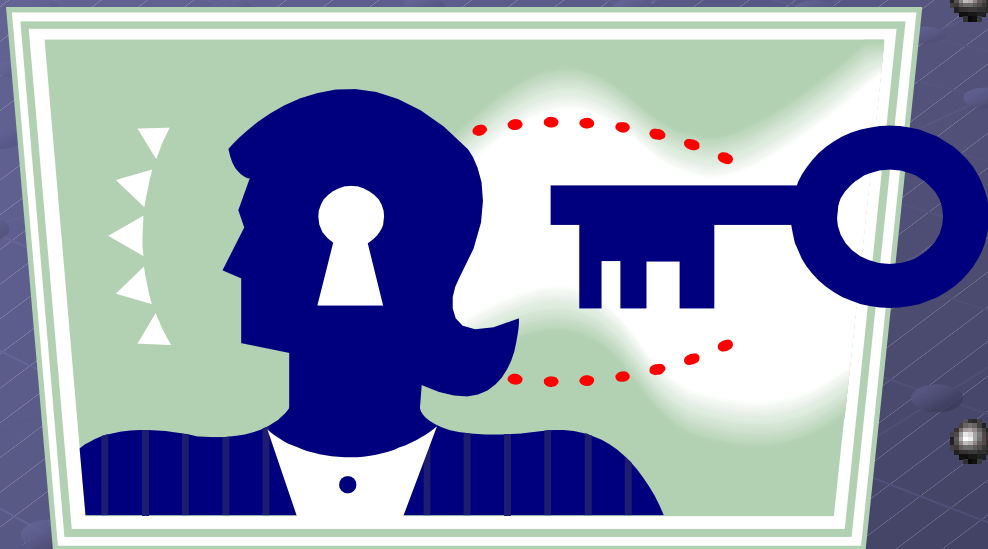
[High-tech job growth rate at five-year low](#)

Security

- Security Audit
 - Quickest, easiest way to get a snapshot of your security issues
- Develop a “Security Portfolio”
 - Internet/Acceptable use policies
 - E-mail policies
 - Remote access policies
 - Special access policies
 - Data protection policies
 - Firewall management policies
 - Cost sensitive, appropriate architecture
- Reassess, Audit, Revise

***Defense
In
Depth!***

Security



- Protect Internally and Externally

- IIS Survey (2000) – 68% of attacks are *internal*

- Protect Network AND Data

- Data is usually the target of an attack, not the “network”



YOU'RE PROTECTED AGAINST HACKERS, VIRUSES AND WORMS.

CHUNKY BUT WHAT ABOUT ROSE IN PEDIATRICS?

IN TODAY'S BUSINESS CLIMATE



CONSUMER INFORMATION

BUSINESS INFORMATION

PRESS ROOM

RESOURCES

EN ESPANOL

FOR KIDS



HOT LINKS



FOR KIDS: Are you a Safe Cyber Surfer? Take our quiz to find out!

How to Stay Safe Online if You Use High-Speed Internet Access

Dial in to Online Safety

RESOURCES: Check This Out!



INTRODUCTION

Our access to information and entertainment; credit and financial services; products from every corner of the world – even to our work – is greater than earlier generations could ever have imagined. Thanks to the Internet, we can order books, clothes, appliances and gifts online; book a hotel room across the ocean; check our credit card and bank balances 24 hours a day; or access our offices from an airport thousands of miles away.

And yet, while the Internet helps make our lives richer and more convenient, it also provides a gateway to our personal information; our homes, families and worksites; our security and safety. Viruses, hackers and worms have become the stuff of headlines, with results that can range from mere headaches to complete havoc.

The good news is that securing your computer is largely a matter of routine maintenance. Using strong passwords, installing personal firewalls, and regularly running updated virus software can go a long way toward protecting your computer, your information, and your peace of mind from computer creeps who try to slow down a network operation, or worse yet, steal personal information to commit a crime.



The Federal Trade Commission has created this website for consumers and businesses as a source of information about computer security and safeguarding personal information. All over the site, you'll see Dewie the e-Turtle. Dewie's wired, but carries his security shell no matter what he's doing on the Internet. Even though turtles take their time, Dewie crosses the finish line first because he takes the appropriate steps to avoid a disaster. From time to time, Dewie will post new materials on this site with useful information for computer users, from kids to businesspeople. Check it often for updates.

In the **Resources** section, you'll find links to information security materials from other government agencies and non-profit organizations, including the **National Cyber Security Alliance's StaySafeOnline.info** and the beta version of the **Internet Education Foundation's Privacy Toolbox**.

Security – What to do?



- Standards Emerge!
 - Data encryption to the column level
 - Role-based access control to the row level
 - Role-based access for DBAs
 - Transaction auditability
- Pay now, or Pay Later!



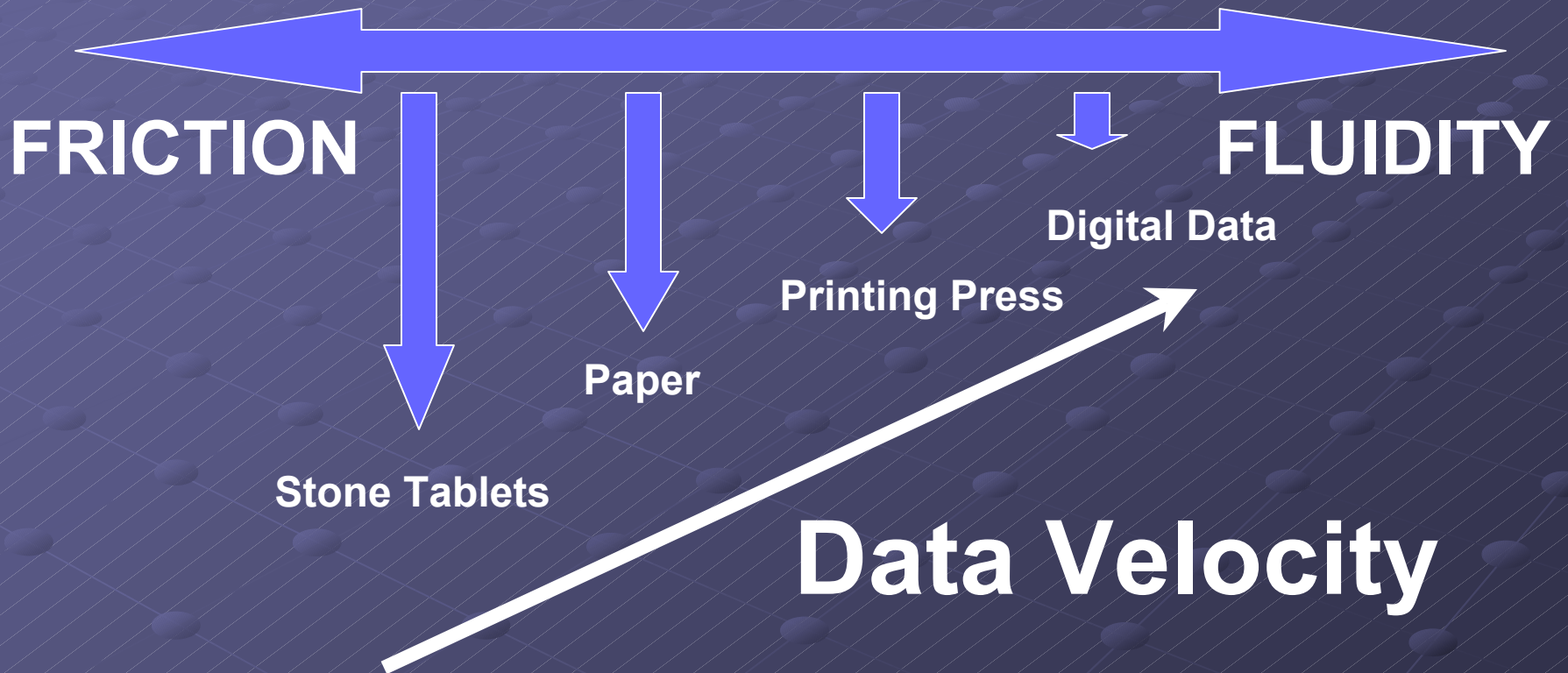
A look ahead...

Emerging Dynamics

- Data Fluidity
 - Personalization
 - Persistent Surveillance
 - Biometrics
- Data Aggregation
 - Targeted messaging
- Geo Privacy



Data Friction and Fluidity



Personalization

- As data becomes more fluid, personal targeting becomes possible
- Privacy issues prevail
- .NET (Microsoft), Liberty Alliance (Sun)
 - Never entering your name, password, address and credit card again
- Do we really want this?
- The rise of GUIDs



Quaker nuFood's
your life

Nutrition Facts
 Serv. Size 1 box (30g)
 Calories 110†
 Fat Cal. 40
 †(50% of 120 Cal. Male)

Total Energy	50%
Total Fat	7%
Total Protein	2%
Total Sugar	1%
Total Fiber	1%
Total Salt	1%
Total Fat	1%
Total Sugar	1%
Total Fiber	1%
Total Salt	1%

INGREDIENTS: FAST-BRO TRANSGENIC ABALONE, MECHANICALLY SEPARATED CAECILIAN MEAT, ROUNDUP READY ALGAE, SULFORAPHANE OR FORTIFIED BROCCOLI, VACCINE SOY BEAN POWDER, NATURAL COLORING, ARTIFICIAL MOUTH-FEEL TEXTURIZERS, BITTERBARK SEA SALT

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your life

The Cereal Specialty Formulated for CRAIG SHAPIRO

Tastes Great in MILK!

Specialty Formulated for consumption by
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Quaker nuFood's
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The Cereal Specialty Formulated for CRAIG SHAPIRO

FREE Toy Inside!

Tastes Great in MILK!

Milk (milk proteins, angiotensin derivatives, and liquid milk), **dry cow Chocolate Milk, too!**

Personalization Today

Hello John Anderton...

amazon.com

VIEW CART | WISH LIST | YOUR ACCOUNT | HELP

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TODAY'S FEATURED STORES
BOOKS ELECTRONICS DVD NEW CARS HEALTH & BEAUTY

INTERNATIONAL TOP SELLERS FRIENDS & FAVORITES FREE E-CARDS PLAYSTATION2

Hello, J Trevor Hughes. Check out the new [recommendations](#) area.

SEARCH

All Products

GO!

powered with

Wondering when your stuff will arrive? Track your [recent orders](#).

Bid on [exclusive props and memorabilia](#) from *Book of Shadows: Blair Witch 2*.

Free Shipping
on orders over \$100 [Learn more...](#)

- BROWSE**
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Your Recommendations

Technology and Privacy

This series of 10 scholarly essays lays a foundation for understanding the current state of technology-based privacy issues. The diverse group of contributors encompasses the fields of communications, human-computer interaction, law, political science, and sociology. Each contributor provides a... [Read more](#)

10% off

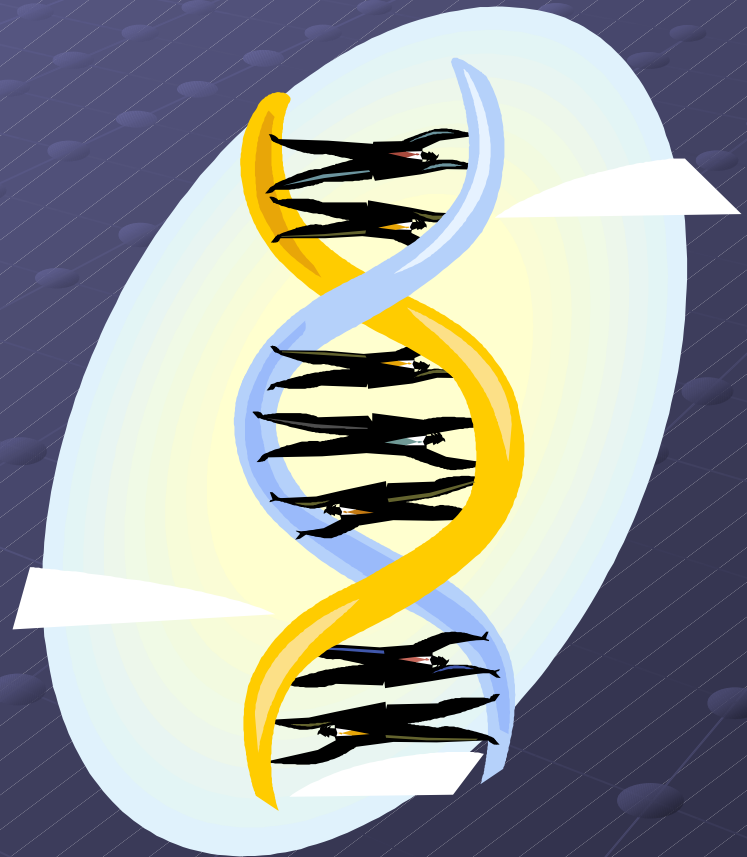
Holiday 2000

- Visit [Gifts](#)
- Try the [Gift Wizard](#)
- Buy a [gift certificate](#)
- View a customer's [Wish List](#) or update your own
- Find [holiday music, décor, and more](#)

More Quick Picks:

Data Fluidity for Healthcare

- Smart Cards
 - Genome
 - Entire Medical Record
- HIPAA code sets
- CRM across all lines/interaction points
- Single interface solutions for customers



Biometrics Everywhere

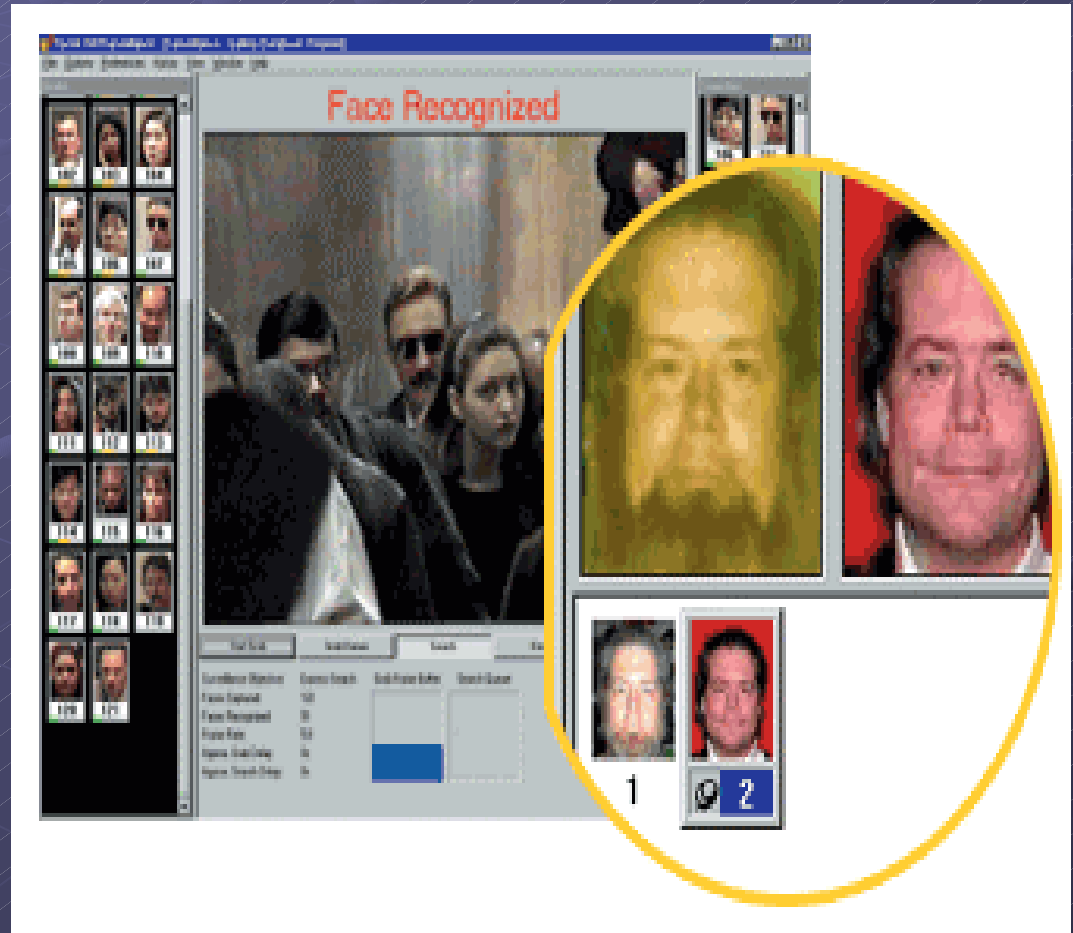
● Biometric Attestations

- Faceprints, eyeprints, fingerprints, hand geometry, voice recognition, vein patterns, gait recognition, odor...



Face Recognition

- 2001 Superbowl
- Airports
- Urban hot spots
- Business campus



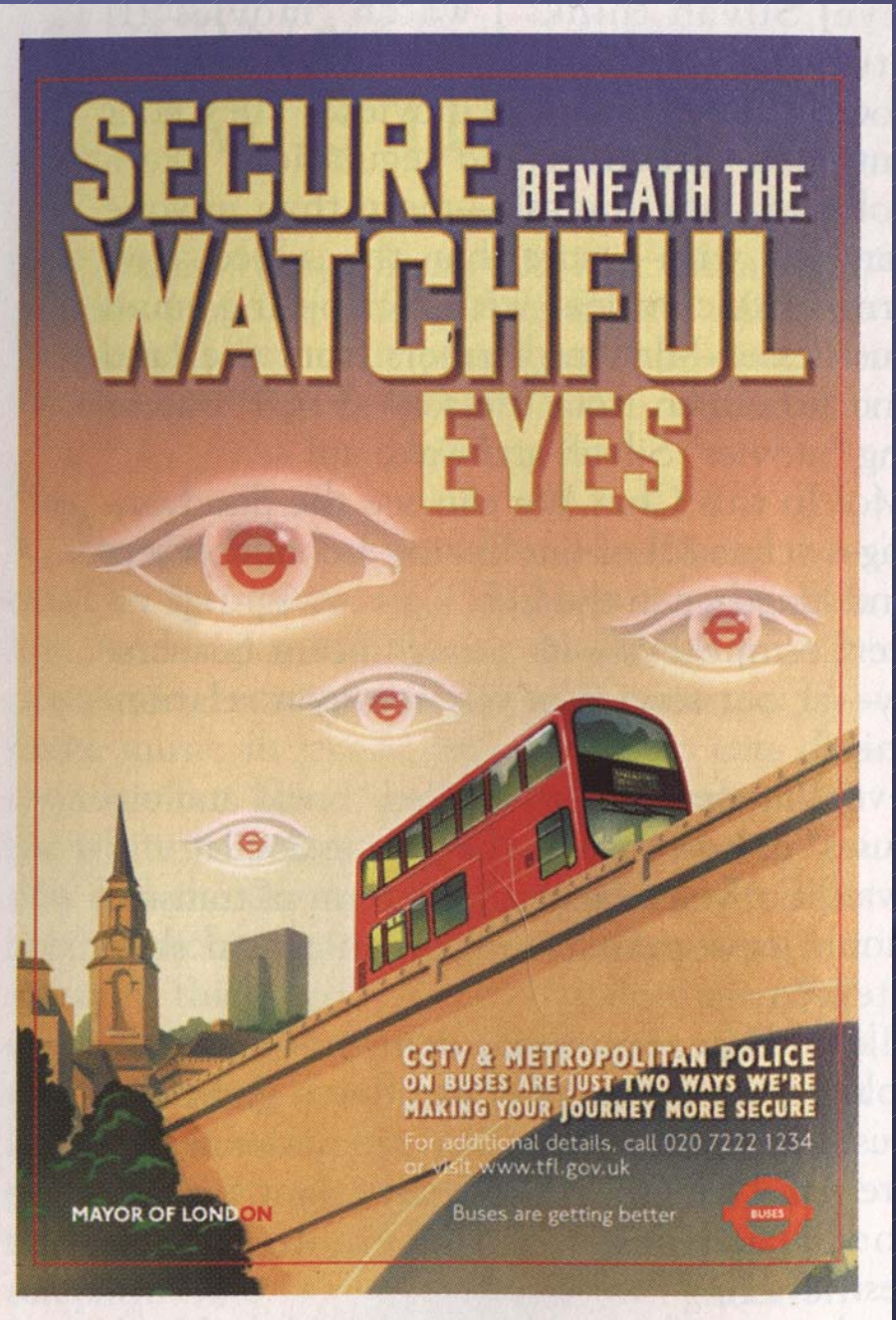
Iris/Fingerprint Recognition

- Airports (Vancouver and Toronto)
- Signatures
- High security buildings



Persistent Surveillance

- “He’s been idented on the Metro...”



Data Aggregation

Data Silos

Aggregation



Core Data



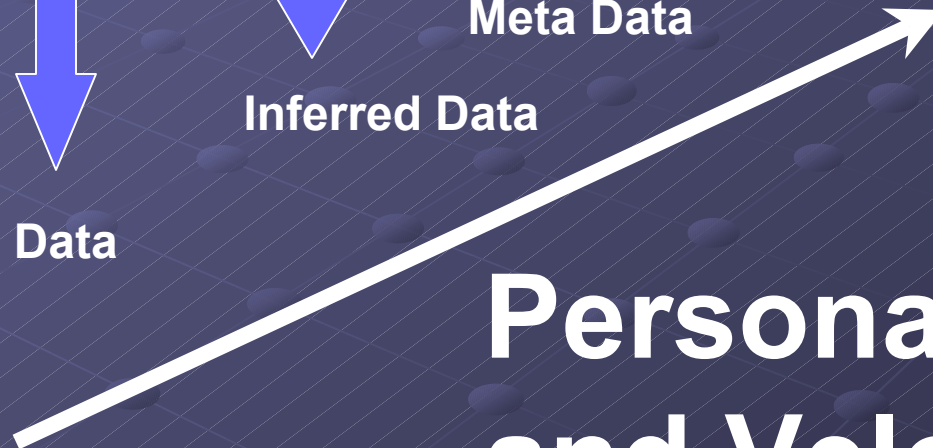
Inferred Data



Meta Data



Derivative Data



Personalization
and Velocity

THE BEST THING ABOUT
THE INTERNET IS THEY
DON'T KNOW YOU'RE A DOG.



You're a four-year-old German Shepherd-Schnauser mix, likes to shop for rawhide chews, 213 visits to Lassie website, chatroom conversation 8-29-99 said third Lassie was the hottest, downloaded photos of third Lassie 10-12-99, e-mailed them to five other dogs whose identities are...



TALS

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WITH OUR RESPECT TO THE NEW YORKER

DID YOU
MARK
ALL THAT?

10/5/99

10

Geo Privacy

- e911
- Geo Targeted Wireless Services
 - “Smell that coffee? Come in for a cup!”



Lessons to be Learned



- Data Becomes Much More Fluid
- Data Management Becomes Much More Difficult
- Data Moves More Quickly
- Smart Companies will Harness the Power of Data Fluidity to Reduce Costs and Improve Their Value Propositions



About Us

The International Association of Privacy Professionals is the nation's leading association for privacy and security professionals. It helps its members build and maintain privacy programs while effectively navigating rapidly changing regulatory and legal environments.

Mission of IAPP

1. To promote privacy programs and safeguards – their introduction, development and maintenance.
2. To provide a forum for interaction and information exchange for our members.
3. To create high quality educational opportunities for those involved

● THANKS!

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