

Memo

To: Privacy Assessment Board
CSG256 – Security, Privacy, and Usability
Professor Simson L. Garfinkel
Northeastern University

From: Bradley W. Goldstein, Analyst

Date: May 11, 2004

Re: Assignment 2 - Website Privacy Statement Comparison

I send you this memorandum in order to compare and contrast the various privacy statements posted on the websites belonging to several organizations. Specifically, I will analyze the policies of: Amazon.com Inc., The National Security Agency, Harvard University, and Google Inc. This discussion is meant to be objective, and therefore will simply state the facts regarding the similarities and differences across policies.

Metric Analysis

In order to effectively compare privacy policies, it is first helpful to use various metrics for classification of the actual privacy statements (not yet accounting for content). Every organization's policy is assigned a value according to the following table:

	Amazon	NSA	Harvard	Google
Number of Levels of Sectional Division	3	0	1	1
Length (in characters)	2395	807	256	657
Number of Legal Citations / References	3	12	0	2
Hyperlinks to Further Information	49	0	1	1

These simple metrics serve to facilitate a general understanding of the syntactic differences between privacy sites. Next, I will discuss each site individually as a preface to a more in depth comparison of each organization's privacy attributes.

Organizations

Amazon.com

Amazon's Privacy Notice is the longest and contains the most sectional divisions compared to the other organizations' sites. In general, higher leveled section titles are phrased as questions posed to the user. Google uses this Question and Answer style in some cases, but Amazon clearly utilizes it the most. None of the other policies take this approach.

National Security Agency

The site for the US government's National Security Agency is brief and oriented towards utmost legality. There are no sectional divisions or Q&A style prose, simply paragraphs stating the user's freedoms as well as those actions that would be considered illegal and how such actions are punishable.

Harvard University

The privacy statement for Harvard's homepage is extremely brief and does not include any specifics or details, simply the general rules of conduct for the University and for the users of the site.

Google.com

Google's Privacy Policy is quite simple and organized into a few major subdivisions. While there is not much explanation or legal citation in the Privacy Policy itself, there is a link to Google's Terms of Service Agreement which contains a more official and in depth description of some basic concepts touched upon in the Privacy Policy.

Privacy Features

The following topics classify the possible content of a privacy statement. Every organization's privacy policies will be discussed based on each topic:

What Information is Gathered and Stored

Amazon states that they store all information that is provided by the customer in any way. They also admit that they get information about users independent of any interactions they might have with users. NSA is just the opposite; they do not make any attempts to identify users nor do they store or transmit personal information at all, unless required to do so by applicable law. Harvard does not track personal information, but does use IP address to determine statistics about their site, as well as to determine if a user is on their network. Finally, Google says that they collect a great deal of information with each query, however, do not aggressively pursue personal information that is not explicitly (intentionally) given by a user.

How Personal Information is Used

For the most part, Amazon promises they will only disclose personal information where there is a necessary business purpose, and that all parties are bound not to use that information for any other operation. They do however list many organizations and business processes that are parties to their

transactions. The National Security Agency specifically guarantees that profiles of their users are not collected, nor is any personal information used by them or disclosed to any other party, except to another agency when ordered by law. They also, somewhat contradictorily say that information that is collected on NSA.gov is used to assist the Agency in fulfillment of their foreign intelligence and information assurance mission. Google similarly mentions that any information could be released if instructed by law, but unless that were the case, they would only release generic facts, keeping user identity private. Harvard uses site usage information solely statistically, and fully deletes web logs after a specified period of time.

Cookies / Access to User's Computer

Amazon defines cookies and states bluntly that they use them. They also instruct the user, not how to turn them off, but how to find information about turning them off. The site for the NSA, as well as Harvard University's homepage does not mention cookies and presumably doesn't have any reason to use them. Similar to Amazon.com, Google's Privacy Policy discusses cookies, in fact, it is the first major topic under the heading, "Google and Cookies." Since the use of customer specific ad targeting could be considered a significant part of Google's business, it is logical that disclosure of cookie usage is important. Also like Amazon, Google informs the reader of the capability of browsers to disable such functionality, but doesn't give explicit instructions. They also mention once again that Google cookies could only be disclosed to a third party under legal requirement.

Information Security / Security Measures

Amazon focuses on three factors for security of user information. First they vaguely state that SSL is used for encryption. Second, only the last 5 digits of credit card numbers are used for order processing. Lastly, they implore the user to keep his/her own login information private. Google, however, does not mention information security in its privacy policy. The NSA states that they employ measures (although they do not say what measures exactly) to aggressively detect and disrupt attacks to their web service. They also note the applicable punishment and legal act. Harvard, like the NSA, firmly asserts that some unknown security measures are in place to protect loss, misuse, or alteration of their information.

Scope of Policies / Links to Outside Sites

Harvard makes it clear that many links accessible through Harvard.edu are privately hosted and thus the Homepage is not responsible for maintaining privacy with such sites. Google interestingly notes the information exchange that takes place during URL redirection, and while they also mention that almost all sites linked to from Google are outside their control, they focus on the fact that information flows in both directions when a query result is clicked. Amazon does not mention outside linking in much detail. The NSA does not explicitly mention outside linking, perhaps because there are no non-governmental links anywhere on their website. They do however extensively define the legal scope of their authority for collecting and utilizing information.

Conclusion

Hopefully, this memorandum provided an appropriate summary of the variances among organization website privacy policies. If you have any questions or comments, please do not hesitate to contact me using any of the methods on the first page. Thank you.