Chapter I

Google: Technological Convenience vs. Technological Intrusion

Andrew Pauxtis
Quinnipiac University, USA

Bruce White
Quinnipiac University, USA

ABSTRACT

What began as simple homepages that listed favorite Web sites in the early 1990’s have grown into some of the most sophisticated, enormous collections of searchable, organized data in history. These Web sites are search engines—the golden gateways to the Internet—and they are used by virtually everyone. Search engines, particularly Google, log and stamp each and every search made by end-users and use that collected data for their own purposes. The data is used for an assortment of business advantages, some which the general population is not privy too, and most of which the casual end-user is typically unfamiliar with. In a world where technology gives users many conveniences, one must weigh the benefits of those conveniences against the potential intrusions of personal privacy. Google’s main stream of revenue is their content-targeted “AdWords” program. AdWords—while not a direct instance of personal privacy breach—marks a growing trend in invading personal space in order to deliver personalized content. Gmail, Google’s free Web-based e-mail service, marked a new evolution in these procedures, scanning personal e-mail messages to deliver targeted advertisements. Google has an appetite for data, and their hundreds of millions of users deliver that every week. With their eyes on moving into radio, television, print, establishing an Internet service provider; furthering yet the technology of AdWords, as well as creating and furthering technology in many other ventures, one must back up and examine the potential privacy and intrusion risks associated with the technological conveniences being provided.
INTRODUCTION: THE WORLD OF SEARCH ENGINES

Now more than ever, the casual consumer is letting their guard down on the Internet because of the level of comfort gained over the past decade. The Internet has become a norm of society and a staple of culture. Many end-users accept the potential risks of unveiling their credit card number online, even at the most respected of retailers. While having a credit card number compromised could certainly cause a headache, the future of privacy on the Internet does not have much to do with those 16 magic digits. Instead, privacy, or lack thereof, on the Internet has to do with something all Internet users employ in their daily lives: the search engine.

Privacy and general consumer protection on the Internet is no longer exclusively limited to the safeguarding of personal financial information such as credit card numbers and bank accounts. Other personal information is being given out each and every day simply by using any major search engine. Google, for instance, logs much of what their users search for and then use that information to their advantage. With hundreds of millions of logged searches each day, a search engine like Google can analyze everything from cultural and economic trends right on down to what a given user is thinking or feeling based on their search queries. This collection of information is a smoking stockpile of marketing data that can then be utilized to build or better render other personalized, content-targeted services.

Search engines provide the enormous service of indexing billions of pages of data so that the end-user can mine for a given query. To end-users, this indexing and search service is the ultimate convenience put out by the major search engine companies. It allows us to locate documents, images, videos, and more among billions of Web pages in a matter of milliseconds. An Internet without search engines would be an unorganized, uncharted, unmeasured wilderness of Web pages. Rather than having to shuffle through a floor full of crumpled up, torn notebook pages, search engines put everything into finely labeled, organized notebooks—an invaluable service no end-user would ever sacrifice.

Web sites are typically archived, or indexed, using advanced Web crawling “bots” or “spiders” that run off of servers and seek out new Web pages or recently updated pages. A search engine’s business is built entirely on the practice of collecting data—as much of it as possible. Search engines began as simple, small listings of useful Web sites in the 1990’s. One decade later, these simple listings have turned into one the most phenomenal collections of organized data in history. Google, for instance, claims to have over 10 billion pages of content indexed in their search engine, with millions of more pages being added each day.

It is because of the search engine’s easy access to requested information that they have become second-nature to Web users. People flock to search engines without thinking twice. Google has become a part of everyday society and a verb in modern linguistics. When someone needs to find something online, they simply “Google” it. End-users enter names, addresses, phone numbers, interests, health ailments, questions, fantasies, and virtually anything imaginable into search boxes. Every search is logged and saved. Every user has a search engine “fingerprint trail.” The data that search engines such as Google amount from logging search queries is astronomical, and the uses for such data are endless.

The value alone for such precise data to be sold to advertisers is priceless. Imagine an advertiser who obtained the search data—in its entirety—that Google has. They could immediately reconfigure their marketing efforts with pinpoint precision. Google’s data reservoir is the Holy Bible of the marketing universe. All the same, one could call these piles of data some of the most dangerous weapons in the world: identifying, damming, incriminating search queries are logged by the