

from a Web site, which can be misleading if a user reads multiple pages or files on one visit. Tracking programs on the Web generally analyze data that is saved by the machine which the Internet service provider uses to put a user on the Web, also known as the server, in order to determine where the user comes from (both URL and thereby the actual city), preferred browsing times, sites visited, and even time spent on specific Web sites (Leftwich 1996). Marketers privy to this information can maintain a more sophisticated segmentation of the online market by developing multiple Web sites for the same brand of products to appeal to the different preferences of users. Thus allowing marketers to deliver different messages to different audiences without alienating any of them (Koprowski 1996). What more could marketer's ask for? How about an ongoing list of product purchases and past interests that detail user's shopping history...

Files known as "cookies", first developed by Netscape as Persistent Client State HTTP Cookies, enable marketers to actively maintain a listing of a user's online history. Whenever a user visits a site that employs the cookie method, cookies assigns the user a specific identification number for cataloging purposes which is transmitted to their Web browser for storage. The process, known as "passing a cookie", allows the marketer to lookup the customer's past purchases and other information in their database. Once a user accumulates a number of cookies, their tastes can be determined by taking a close look at the types of sites they visit.

For example, if the user visits a lot of sports sites, like (www.sportsline.com), then they one day enter the largest bookstore in the world, (www.amazon.com), the computer at Amazon could display only advertisements that offer discounts on sports stories by looking at the sports sites that the user's Browser holds in its "cookie jar". Even search engines, such as Infoseek at (www.infoseek.com), can employ cookies by reading them as the user enters the site and preparing search parameters so that, from our previous example, sports sites appear higher in the list of links the search turns up. Search engines also can display banners that relate to what the user has searched for in the past. Not only are cookies being used to display the banners the customer wants to see, but they are also being used to rotate advertisements so that a user who does not access the advertisement three visits in a row will not be shown that company's advertisement again thus saving valuable advertisement space (Gudmundsson 1997).

Cookies can be used for more than simply tracking past choices, in a cybermall environment cookies fill not only the cookie jar, but also the "shopping cart". The concept actually operates much like a shopper's cart, when they enter one cybermall Web site and wish to purchase an item, it sends a cookie that the item has been chosen for purchase, the process continues through all of the sites in the mall until the user has finished their shopping for the day. At this point, the cookies are collected from the user's Web browser for a final tally, much like running items from a cart through the checkout of a grocery store. By initializing only one transaction per visit, users need only enter vital credit information once and customers save even more time (Hunt 1997). The obvious implications of cookie files are that customers will be more likely to return to a site that is easy to use.

Cookies have not enjoyed the greatest success so far, Web users often become alarmed when they first learn about cookies tracking their movements in cyberspace. Their source of alarm lies in that personal information was taken from them without their knowledge or consent. Much to the dismay of marketers, the industry has responded by designing programs to destroy cookies and giving new versions of browsers the capability to turn them off. One example, Cookie Monster 1.5, enables users to filter the receipt of cookies or automatically clean them out so that they cannot be tracked. Although not many Web users know about cookies, much less cookie destruction programs, a wonderful tool of target marketing stands to become obsolete if these programs gain in popularity. Although this prospect may be disheartening, it is much preferable to losing privacy minded consumers.

All of the information collected by cookies and tracking programs does not provide marketers with specific personal information, they do not know exactly who their customer are unless they can encourage them to divulge the information. Many Web sites, such as (www.nytimes.com), provide free access, but with the catch that users must fill out a personal information registration form. From then on by reading a cookie the Web site sends, they can automatically log the user in. However, until they have filled out the form, the cookie to allow access will not be sent. Users who take their privacy seriously will probably not fill out the form or simply use an alias, but those who do not provide Web marketer's with the most personal information of all.

From the personal information submitted by users and various studies conducted, Web customers have been