**Andrew Dykman - Composition I w/ Instructor Newland - Lab 4 - Importance of Privacy**

Many, many things can be said about the importance of privacy and the "bads" of data mining on the internet. First off, people expect that when they are using the internet, especially when they are doing activities such as shopping and the like, that their information, including their address, phone number, credit card information, and other information such as what they are buying is protected. We as people assume this, just as we assume that if we go to the store to buy clothes or groceries that nobody is taking our information for personal or corporate gain without our explicit permission. It is one of our basic fundamental rights we have as human beings, and we expect to be given that respect, and also that we don't have to worry about being snooped on, having our information sold to third parties, or even worse, have our information stolen and used for criminal reasons.

I would say that this all falls under the ethical category of Kantianism, and under the subcategory of duty, and that we have the duty, and right to respect other people in our society. Having said this, we can say that using these principles any sort of "data mining" or privacy snooping is bad, and so everything I am about to list in the next long paragraph that companies and hackers do to take away that privacy will fall under that assumption that this is morally wrong by Kantian ethics standards, if not others.

Data mining is the process of gathering information on what the user is doing on the internet, such as their shopping habits, what they are surfing, their user information, etc, through the use of "cookies", "keyloggers" and other similar spyware or malware especially in the case of hackers. The way this works, in the case of cookies (and the user is usually unaware of what is going on), is that when you visit a site, the site leaves a bit of code on your computer in the computer's temporary internet cache that says where you were, and also whatever else they feel like leaving in that piece of data, such as user information, shopping habits, etc. Because a web server has no memory of your tracking habits, this piece of information is pulled up and reused to figure out who you are and what you have been doing on the internet, and can be used by other sites seperately from the one that left the cookie on your computer. For example, you may be given ads from Hewlett Packard for a new laptop when you go to Ikea.com to look for a computer table because they know you are looking for a laptop thanks to the cookie Dell.com left on your computer when you were browsing the Dell Inspiron laptops on their website.

The darker side of data mining, would be along the lines of getting a keylogger on accident and not knowing it was there when you were surfing the internet. This happens commonly when an infected file is opened, or email attatchment, or anything of the like that is seemingly harmless. As soon as the infected file is opened, they keylogger deploys itself to the computer and then begins to copy every single keystroke and will send it off to interested hacking parties who will almost always use the information for criminal activities such as identity theft. There are also other forms of spyware that will do the same thing, which aren't necessarily keyloggers, such as Trojan viruses which sneak in on the same manner, and open a "backdoor" to the computer at which point a keylogger can be deployed back the hacker onto the victim computer.

There are several ways to prevent these forms of privacy invasion on the internet, such as installing anti-virus and anti-malware / anti-spyware software. Many times they will find the keylogger, Trojan or other virus that the user has no idea is there and remove it for them after notifying them that they were infected. Cookies can be dealt with by turning the option to collect them off in the browser, although many sites require cookies in order to operate, so it may come down to a point where you have to decide if you even want to visit that site at all, and if it is necessary then you would have to enable and then disable them afterward to protect your privacy.