

Trends Among Social Networking and Variable Data Printing

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Chapter One

Advertising is not just about billboard statements and flyers put into mailboxes anymore. Advertisements that are specifically targeted towards users with information that is shared publicly are being personalized and directed towards the consumer. Connoting that the mail someone receives can be advertisements or coupons relevant to their interests such as a sports enthusiast, a wine connoisseur, or a website designer. Advertisers increase revenue by isolating demographics that society shares with the public. This way advertisement companies can see where statistics lie in terms of whom or what they target that increases their revenues most often. Demographics can be defined as any statistical data that cannot be defined by location. An example of this would be pertaining to something such as gender or age. This study analyzed that advertising through printed personal data influenced the consumer in a positive way.

Social networking sites, such as Facebook or Twitter, have advertisements on their sites that are personalized to the person logged on to their account. Social networking is made up of a group of individuals who provide a structure of organization tied together by common interests, friends, and relationships that are personal to interpersonal. Social Networking is gaining influence with many Internet users. Even though social networking is a newer attraction for the Internet, many find it as a useful tool in networking and communicating with individuals.

The world has become an ingenious place of which nearly most of the world uses the Internet as more of an efficient way of communicating. However, society is starting to become a little cautious of information being gathered on the Internet, because of a lack of privacy. People like to receive mail, and when it is personalized, whether they are male, female, young or old; the consumer pays more attention to the material they receive. It catches their eye knowing that something is being directed and personalized for them.

Too much information about oneself on the Internet however, can create privacy issues. Advertisement companies monitor the television shows people choose to watch, information they choose to post about themselves on the Internet, or even items they purchase with their credit cards. Though people want to receive personalized advertisements, it can cause a conflict when combining it with information from social networking sites, even though it is thought to be beneficial for advertising revenues.

Another useful tool that will help advertisement companies is variable data printing (VDP). VDP is a form of printing technology that allows data content to be changed from one printed piece to the next, using information from a database, without slowing or stopping the press. VDP can be used to reach out to companies who deal with marketing, advertising, or for personal use; which provides a flexible personalized manufacturing system using computer databases to print customized graphics, images, and text. The benefits of VDP are gaining a customers interest to the mail personalized for them, increasing the companies return on investment (ROI), and imputing specific information into advertisements that are directed at a particular recipient that makes for valuable selling.

The purpose of study was to identify the trends between social networking and variable data printing. After researching this trend, readers should know how social networking and VDP work together, where privacy issues come to into affect with the way companies interact with their consumers by using advertisements, and how VDP connects with the consumer to target the information given to advertisers based on what Internet users bear about themselves.

Chapter Two

The future of advertising looks promising with corporations compiling demographics and building up a status of being effective in targeting the consumer. However, does the consumer want to be targeted? Advertising companies throughout generations have responded to changes in industry demands, innovating technology, and cultural context. What began as Benjamin Franklin's Pennsylvania Gazette, as a way of advertising consumer goods, has transformed into a "market revolution" since then and resulted in expedited advertisements towards shaping segments for consumer demands, and appeals. According to William M. O'Barr, author of A Brief History of Advertising in America,

Advertising has been very innovative in the past in finding ways to communicate promotional messages. As technology has evolved, it has revolutionized advertising techniques as well as changing the social landscape. There is no reason to suspect that advertising will not continue to reinvent itself, discover new media, and develop new techniques (O'Barr).

As technology heightens, advertising is not just seen on television and outside stores, but on the Internet as well. Revenues from Internet advertisements, according to David Silverman, partner of the firm PricewaterhouseCooper, have increased since 2009. When conducting the Internet Advertising Revenue Report, Silverman noted, "Internet advertising revenue in the United States totaled to \$6.2 billion in the second quarter of 2010, which was an increase of 4.1 percent from the 2010 first quarter total of \$5.9 billion, and an increase of 13.9 percent from the 2009 second-quarter total of \$5.4 billion." However, while revenues are increasing for advertisers, general consumer mistrust towards their information being used by advertisers on the Internet is not so appealing (Silverman).

Privacy issues are a concern when information that users put onto social networking sites such as Facebook or Friendster, becomes part of the public domain. Susan Barnes, author of the

article A Privacy Paradox, uses a metaphor of “panopticon,” meaning a prison that does not allow prisoner’s to know that they are being watched by observers. She referred to privacy in social networks as an “architectural design that allowed prisoners to be monitored by observers.” Implying that social networks become a repository for data that can cross privacy boundaries for some individuals. Barnes also went on to say that social networking sites also have much to do with setting the flow of how information is transferred around by individuals, and how databases are being used to store personal information that can later be used for the public. One example Barnes gave was that of police using Facebook as a way to find college students involved in inappropriate behavior. Society is wondering how the government and companies are gathering information about citizens and consumers, although the facts are right at their fingertips as they give up information about themselves on the Internet (Barnes).

Privacy, according to Simon Garfinkel, author of Database Nation: The Death of Privacy in the 21st Century, is the “right of people to control what details about their lives stay inside their own houses and what leaks to the outside” (Garfinkel 4). Society will always want to get mail, whether it is from the mailbox outside their home, or in their mailbox on the Internet, but they do not necessarily want Big Brother looking over their shoulder. “It is not necessarily about hiding things. It’s about self-possession, autonomy, and integrity” (Garfinkel 15). Garfinkel believes that individual liberty is under attack, even though individuals are those who control what information is generated and distributed to the public. In a way, unrestrained technology ends up destroying privacy. “Technology by itself does not violate our privacy or anything else, it is the people using this technology and the policies they carry out that create violations” (Garfinkel 21). At a cost we must relinquish some of our privacy; for instance when purchasing something with a credit card, or Google mapping a destination. An article in Time magazine written by James Snyder had raging questions about the street views capturing people either on

the street or within their homes. This quickly became an issue due to the concept of free speech, and personal privacy with Googles unmarked camera van driving around and taking pictures that has captured people in them. However, with Google having an indefinite amount of trust with the public, the computational problem should be fixed quickly without controversy (Snyder). With some of these habits such as a “tell all” about ones life, is out of control as to how much personal information gets amassed into databases. Garfinkel instead, suggests that the only way to protect personal information is to not make mistakes, be a well-informed consumer, and watching the government. He noted that “technology is not autonomous; it simply empowers choices made by government, business, and individuals (Garfinkel 41). By shaping these choices through the political process, the government will be restricted on the involvement of informational autonomy (Garfinkel).

No one likes the idea of being watched, though advertising companies have found a way to use personal information in a positive way to individualize the mail a consumer receives with the use of variable data printing (VDP). VDP, as a form of on demand printing, can use personal data in a positive way, according to Jeanne Patterson, and Cindy Marks, authors of the Client as a Consumer. Production and consumption refers to the fact that the consumer not only uses the services, but also participates in various ways with the production of the service. “There is a required interaction between the customer and service provider, which may be critical to the quality of service performance” (Patterson, Marks 3). When a piece of mail is more directly personalized to the reader they are more like to respond. The reader may not feel as though their privacy is being exposed as much if they are a reoccurring client of the consumer who frequently receives mail or advertisements from a particular company. Craig Sheer, principal of New York City-based LP Digital Inc. observed that personalized printed pieces can “bring the response rate from 2 to 5 percent up to 20 percent, enabling reduced costs, rapid turnaround, and increased

efficiency of communications.” By using VDP, as a way to send out personalized messages, advertisements and mail, individuals will gain interest, cause credibility to increase, while response rates and cost per response goes up (5 Benefits). Using VDP is also an indication that segmentation is becoming a norm. “The average response rate for mass-marketed direct mail is 1%, while the average response rate for personalized print offers is 14%,” says Michael Jackson, senior vice president of Pulp and White Paper for Federal Way in Washington. By segmenting consumers, into categories such as age, or gender companies can specialize their advertisements to build more targeted pieces that will also slim down costs for them (Weinstien).

An example of using VDP is when people often order from a certain business, and receive coupons, magazines, and special offers with their name on it, telling them what they had bought previously, and giving them other incentives to purchase another product. This would be like using FedEx every time you went to ship something. For example buying a box to ship a birthday gift by paying for the box with a credit card, and using VDP as an incentive to look up how many times you have used FedEx and send you customized coupons. VDP can also be used to send address labels personalized with a persons name on it for when they use FedEx to carry out their packages again. Using VDP benefits the consumer because it lets them know that the company they are doing their business with takes the initiative to deal with customers one by one to ensure the best customer care and service. VDP organizes databases with ease, without having to manually look up a customer, and creates personalized communications with elements that appeals to the targeted audience.

Although, as VDP is an eminent standard for advertisement companies to build recognition with their consumers, a lack of privacy still makes people feel uncomfortable. However, VDP yields great benefits to deliver personalized pieces to the masses, as advertising companies relate more to interacting with the consumer rather than interrogating their freedom of

speech.

Chapter Three

Although advertisers have been successfully watching consumers for some time, by directing personalized advertisements to them to increase company sales, many people have become weary of the idea that their privacy is being misused. Many aspects such as how social networking and VDP work together, and how advertisers used VDP to connect with the consumer based on what Internet users state about themselves all played a role in how much personal data was used to be successful for companies, and how much of it was an invasion of

privacy. This purpose of study was to identify the trends between variable data printing, and social networking using a descriptive research survey study, and content analysis.

Evaluating social networking sites, companies' can see who, and what kind of data is being put onto the Internet. By correlating VDP with user data, advertisers can get a better glimpse at consumer's interests, and personalize mail or any websites containing advertisements. To determine how privacy was viewed in society, one can look at different college students and professors on social networking sites at California Polytechnic University using data from personal interests, and information the user has created about themselves. By using the method of descriptive research, the study showed where privacy issues came into affect of how much personal information is too much depending on the networking site, VDP, and the input of data onto the Internet.

The descriptive method of research according to James P. Key, author of *Research Design in Occupational Education* at Oklahoma State University, is "a method in which research is used to obtain information concerning the current status of the phenomena to describe what exists with respect to variables or conditions in a situation." The different methods involved can range anywhere from survey, correlation, or developmental studies that make up descriptive methods of research. "Survey Studies assess the characteristics of whole populations of people or situations, the correlation study investigates the relationship between variables, and developmental studies seek to determine changes over time" (Key).

By using the survey study, a sample population of college students from 18 to 25 years of age were asked a series of questions of different images that could be found on networking sites. These images were given to fifty subjects around campus, with questions on printed-paper. Questions related to privacy about the image would be asked to see if they would be affected if

the subject was in the image, or if the image pertained to them. Other questions such as personalized mail, VDP advertisements, and posting personal data on the Internet were also asked in the survey. For example a question asked under an image read “What if this person was you, if this house was yours, would you feel that your privacy could be an issue according to this picture,” or “if you came across this picture and you did not know it was available for others to see, would it bother you?” Images could potentially portray the subject as if it were really them, just example of houses, or a group of friends walking in a park could also be examples pertaining to the subjects as if the images were actually related to them. The survey also included questions concerning credit card use, and opinions about *Google Map* and whether captions of street views that included people in their everyday lives created tension between the concept of free speech and an invasion of privacy. This survey relates to VDP in a way that it asks students about customization, and asking how many are familiar with variable data printing. To see the survey, please go to appendix A.

After the survey was conducted and collected, I used content analysis; a method in the social sciences for studying the content of communication, as another method of research to count the answers on the multiple choice answer survey and conclude my study. Through the gathering of this data from different subjects at California Polytechnic University, this study was able to provide information on how VDP used with personal data from networking sites is a positive attribute for advertising companies.

Chapter Four

The purpose of this study was to identify the trends between social networking and variable data printing using descriptive research and content analysis. I conducted a study that consisted of fifty Cal Poly students majoring in graphic communications and other major as well. However, the majority of student's who were surveyed were graphic communication majors and nine of these students were various majors who attended my English class. The data was collected, tallied up, and analyzed. Each answer was given a percentage according to what letters the surveyors' chose. The following paragraphs will provide further insight and analysis from the data collected.

The primary survey vehicle was a multiple-choice three-page survey that required the selection of one answer. The surveys were distributed by hand, in hard copy form, and none were given electronically. The first question surveyed the type of mail participants preferred to

receive. Thirty percent reported that they liked to receive mail from their mailbox, twenty-two percent preferred to receive mail from the mailbox on the Internet, twenty-four percent liked seasonal mail such as catalogs or coupons for the holidays. The following two questions analyzed variable data printing and whether or not the participants knew what VDP meant and , consequently, what it does. Given that most students I surveyed were graphic communication students, the survey results for these two questions were skewed slightly due to the fact that most of the participants (70%) knew what Variable Data Printing is, and seventy-six percent knew conceptually how it works. One participant who answered “yes” to knowing what VDP does reported that VDP was made to make programs for the internet. Other participants reported that VDP made each print different and personalized within a run, was essentially personalized mail, and printed pieces that are personalized for the consumer.

Questions four through six surveyed to personal data and how much personal data one posts on the Internet. When asked how much personal data one posts on the Internet, sixty-six percent reported that they post only a little and primarily on Facebook. Some participants had reported that they have blog’s that they write. Others said they use they email to send information. Additionally, one reported they only post a little information on their Facebook to avoid stalkers.

Question five asked “Do you feel like posting personal data on the Internet could sacrifice your job or schooling?” Fifty percent chose the answer, “Maybe, depending on what I post, or what my friends post.” Thirty-eight percent chose “Yes, if I did something bad, more than likely someone would find out about it in minutes.” While only twelve percent chose “No, I do not post personal data on the internet.” For question six, the graph below (Figure 1) shows

what participants consider being personal data. See Figure 1.

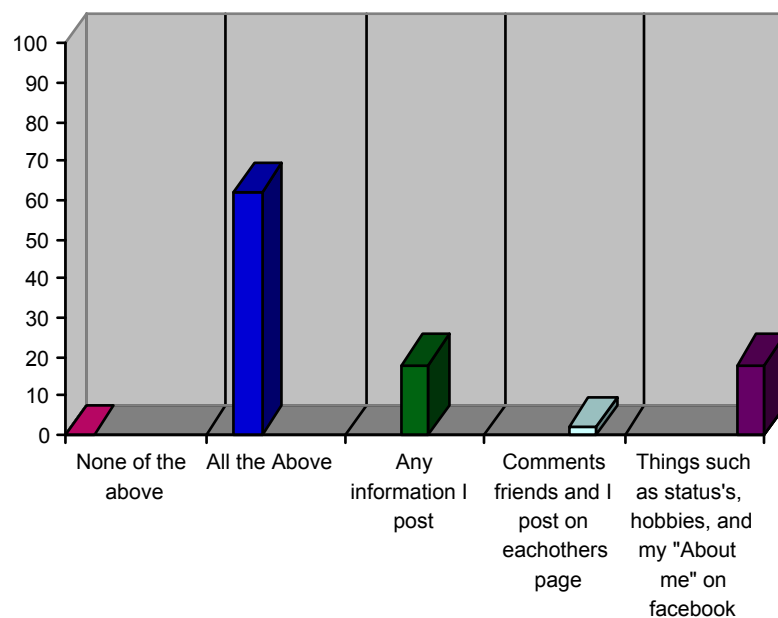


Figure 1. Personal Data on the Internet

Sixty-two percent of the participants surveyed said that they consider personal data to be all the above; interests, status's, hobbies, and "About Me" on my Facebook or Myspace. This also includes any information posted on the Internet about themselves, as well as comments one posts on each other's social networking pages. Finally, the remaining eighteen percent reported that anything you post on the Internet about yourself, no matter what site is personal data.

Questions eight and nine pertain to advertisements on the Internet. The participants were asked if they became bothered by advertisements posted on Facebook or any other site. Question nine pertained to why certain advertisements on the Internet are different than other advertisements that their friends receive. Seventy-eight percent of participants reported that advertisements on the Internet did in facet bother them, while thirty-three percent reported that advertisements on the Internet do not bother them. This was interesting because there were such a high percentage of participants who reported that advertisements distract them on the Internet

even though the information that one puts on the Internet results in the advertisements they receive. This leads into the next question which asked “are you aware that the data you put on the Internet that pertains to your personal interests, and content you put onto data networking sites and in databases searches can lead to what advertisements you get?” Seventy-eight percent reported “yes,” fourteen percent had no understanding that was even possible, and eight percent responded no. With more than half of the participants knowing that they get advertisements according to the information they put on the Internet, it shows that even though advertisements bother them, they still want to put personal information about themselves on the Internet whether they get the advertisements or not. This will be discussed further in chapter five.

Questions ten through twelve analyzed the participants perception of visual pictures on the Internet. Given a picture, each participant was asked to determine if this person in the picture represented the participant, would they be aggravated if they found it on iStock photo, or *Google* and did not know it was there. Eighty percent responded yes, because they did not have their consent, and twenty percent responded no. When the question was asked if there was a picture of a friend or family member on the Internet, and you didn’t know if it was available for other to see, eighty-four percent responded yes, and sixteen percent responded no. For question twelve, the participants were asked if the picture were their house (shown below) appearing on the cover of a local real estate magazine for world’s nicest places to live, would they be bothered by it?

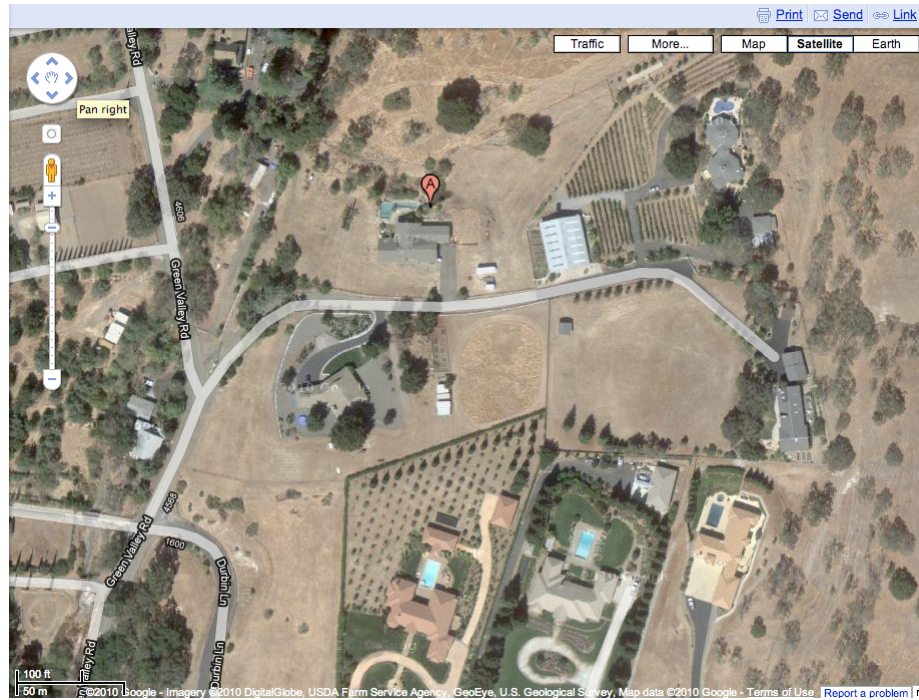


Figure 3. House on Real Estate Magazine

Sixty percent responded with a “yes,” twenty-four percent responded with a “no,” and sixteen percent responded “other.” For the sixteen percent that said “other,” two people noted that it would be okay as long as they were notified about it, and their name was not connected to it. One person noted that they were not sure about how they felt about it. One person noted that it would be frustrating due to all the Internet traffic around the area.

Overall, the data that I have collected from the survey provide an insight into the trends between variable data printing and social networking. Therefore, from the analysis of data gathered, there are themes that can be concluded which are discussed further in chapter five.

Chapter 5

When looking for trends between variable data printing and social networking, the data I obtained and analyzed provides sufficient evidence to deduce that a correlation exists between

VDP and the consumers' interests. Given the survey, the participants responses concluded that receiving mail and advertisements that were personalized to them was acceptable and encouraged. A reoccurring theme that arose was that people like personalized email transactions regardless of the information used on the Internet. People are interested ways of technology and especially when directed personally to them.

It was found that seventy-six percent of participants like to receive personalized mail regardless if it is hardcopy, electronic, or its seasonal mail from catalogs or coupons. The data shows that VDP is beneficial to gaining personal interest for customized mail and is also an excellent way to connect with consumers that target a variety of companies based on consumer interests. Although the VDP related questions resulted in slightly skewed answers many people still don't have the knowledge about VDP and how it works. By relating VDP to the consumers and getting the idea of VDP out to the public, there will be more the interaction between the consumer and advertiser. This will lead to growth in advertisement companies because the consumer will be more likely to respond, and the quality performance for the advertiser will increase.

Next, the data shows that people will keep posting personal information on the Internet because it is the fastest way to communicate with one another. Advertisements companies will use this personalized data to deliver customized advertisements to the consumer to target their interests. However, with more than half of the participants finding displeasure with Internet advertisements, seventy-eight percent of the participants revealed that they knew that their was given to advertisers to connect with the user. This can illustrate that advertising, with the intent of increasing profit margins should supplement social networking objectives with Variable Data Printing initiatives. Additionally, if consumer complains increase because of their frustration

with excessive advertisements on the Internet, VDP eventually will decline in value and will not promote awareness in other areas of personalized mail and advertisements.

Last, it can be deduced that society is in fact disturbed by the openness of consumer information cast about so frivolously throughout cyberspace. Although more than eighty percent of the participants would be bothered if they found a picture on the Internet of themselves or someone they knew used without appropriate permission, one still, cannot but help to keep connected with social networking and post information about themselves. People also like mail, and anything directed to them, so VDP is a way to market and advertisements to industry demands, technology and of course the consumer. Networking sites such as Facebook, Twitter, or even email has reinvented the social landscape for people to communicate. Advertising and marketing, using VDP to direct specifically towards the consumer, is an innovative way to start a positive trend towards social networking sites and the people who use them.

Survey

1. What kinds of personalized mail do you like to receive?

- A. Mail from my mailbox
- B. Mail from my mailbox on the Internet
- C. Seasonal Mail, such as catalogs or coupons for holidays
- D. None of the above
- E. All of the above

2. **Do you know what VDP stands for?**

- A. Yes, VDP stands for _____
- B. No

3. **Do you know what VDP does?**

- A. Yes, VDP is when _____
- B. No

4. **How much personal data do you post on the Internet**

- A. Enough to where everyone always knows what I am doing, and can find me
- B. A little; Explain:

- C. I keep to myself, and do not post any information about myself

5. **Do you feel like posting personal data on the Internet could sacrifice your job or schooling?**

- A. Yes, if I did something bad, more than likely someone would find out about it in minutes
- B. Maybe, depending on what I post or what my friends post
- C. No, I do not post personal data on the Internet

6. **What do you consider to be personal data?**

- A. Things such as interests, status's, hobbies, and my About Me on my Facebook or Myspace
- B. Comments my friends and I post on each other's page
- C. Any information I post on the internet about myself no matter what site I am on
- D. All the above
- E. None of the above

7. **Do advertisements bother you when you are on the Internet?**

- A. Yes
- B. No

8. **Do you wonder why certain advertisements are directed towards you on the Internet that might be very different from your friends?**

- A. Yes
- B. No
- C. Never really noticed

9. **Are you aware that the data you put on the Internet that pertains to your personal interests, and content you put onto data networking sites and in databases searches can lead to what advertisements you get?**

- A. Yes
- B. No, I had no clue
- C. What are you talking about?

10.



If this person was you, and you found it on an image site such as iStock photo, or *Google* and you did not know it was there, would it bother you?

- A. No
- B. Yes, they did not have my consent

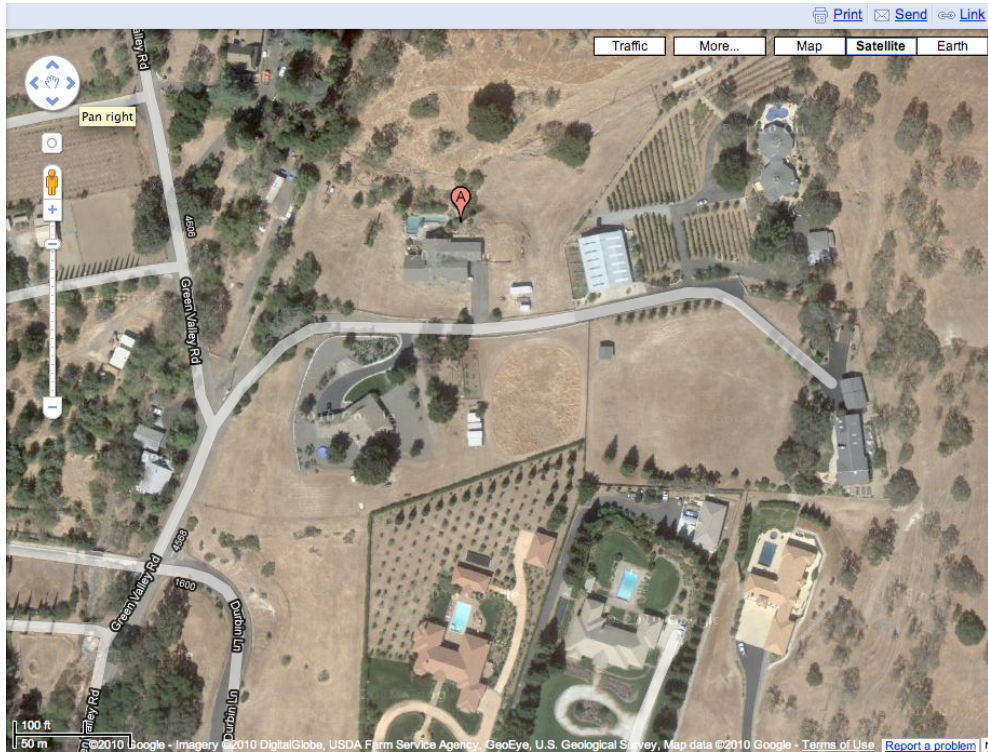
11.



If you came across this picture of a friend or family member and you didn't know it was available for others to see, would it bother you?

- A. No
- B. Yes

12.



If this house was yours (Flagged A) and it was put on the cover of a local real estate magazine for worlds nicest places to live, would you feel as though your privacy was invaded?

A. Yes

B. No

C. Other: _____