

## A CASE STUDY IN PERSONAL PRIVACY

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### ABSTRACT

*While the Internet is a powerful and positive influence in many ways, it also raises ongoing ethical challenges. This paper examines individual perceptions about personal privacy as it relates to a genealogy website that received greater attention after the publication of a 2017 article in the Washington Post. A survey of more than 100 undergraduates revealed that very few respondents were aware of this website, and they overwhelmingly recognized the potential for misuse of the information it provides. While most subjects agreed that this website's practices are legal, opinion was largely divided about a range of ethical issues that appear to be raised by this site. For example, more than one-half of respondents indicated that they thought this website invades personal privacy, and only about one-third of participants had no problem with this website. This exploratory study raises a number of issues about Internet privacy that have potential implications for educators, researchers and lawmakers.*

**Keywords:** Legal and Ethical Issues in IT, Privacy of Information

### INTRODUCTION

In the information age, information privacy is considered one the most important issues of our times from an ethical, legal, social, and political standpoint (Mason, 1986; Culnan and Bies, 2003). Privacy may be defined as “the claim of an individual to determine what information about himself or herself should be known to others” (Westin, 1967). Interestingly, a 2015 Pew Research Center survey found that 93% of U.S. adults said that being in control of *who* gets information about them is important, with 74% saying it is “very important” and 19% “somewhat important” (Madden and Rainie, 2015). This study also found that 90% of participants said that controlling *what* information is collected about them is important, with 65% responding that this is “very important” and 25% “somewhat important” (Madden and Rainie, 2015).

Yet, in the age of social media and the internet of things, information privacy is a greater challenge than ever before (Ward, Bridges, and Chitty, 2005). The Internet disseminates an unprecedented amount of information about individuals often without their knowledge or consent. It is, therefore, understandable that the loss of control over personal information may trouble many people. The focus of this study is to gain insight about individual privacy perceptions based on a detailed exploration of a website that has seemed to provoke a degree of controversy based on media reports.

### BACKGROUND

This study will assess individual perceptions about the practices of the website, familytreenow.com, particularly with respect to privacy. This website was created in 2014 so that individuals can locate relatives and construct their family tree. Unlike some related websites, familytreenow.com provides free access to users and it does not require users to register at the site to use its services. Users can locate relatives or anyone else for whom they desire to search, by entering the first and last name of a person and their state at the website's home page. This search returns a list of matching entries and then the user can “drill down” to the details of a specific person. The detailed entry that results typically shows a person's first and last name, year of birth, age and “possible relatives,” i.e., the complete name, birth year, and age of “immediate family members, current & previous spouses, stepparents, and current & previous in-laws”. It also displays the person's “possible associates,” i.e., the complete name, birth year, and age of “current & past roommates and second level relatives (relatives of in-laws, etc.)”; their current and past addresses

(that may go back more than 20 years); and “all current and previously known phone numbers for the subject.” (familytreenow.com, 2017).

This website came to the attention of the authors through a *Washington Post* article published early in 2017 (Ohlheiser, 2017). After the release of this article, there were more than 60 news stories about this website within a few short weeks. Most of these news reports were by local television stations or local newspapers (e.g., Stanton, 2017) across the nation and they were largely critical of this website. For example, in one report, a representative from the Crisis Center of Tampa called this website “dangerous” (WFLA, 2017) while the news outlet Daily Dot referred to the website “a stalker’s dream come true” (Daily Dot, 2017). However, the number of news stories about this website fell dramatically shortly thereafter.

## METHODOLOGY

Since it was expected that few students had prior awareness of familytreenow.com, and that participants needed a foundation of knowledge about it to complete this study’s survey, the researchers provided a short (approximately five minute) PowerPoint introduction to this website prior to the administration of the survey. This presentation included screen captures of several representative screens that a user would see when using the website. The presentation identified the purpose of the website, how it works, and it displayed the information this website provides in response to a search (with detailed names and other personal information blocked out). The researchers followed a careful script to make sure the presentation of this website was as neutral as possible to avoid any statements that might otherwise bias respondents. Following the presentation, the participants were requested to complete a survey to express their thoughts and feedback about this website. The first survey item about prior awareness of this website was in a yes/no format. The other seven items were answered using a five-point Likert scale ranging from “strongly agree” to “strongly disagree.” The order of “positive items” that expressed support for the website’s operations were rotated with “negative items” to avoid respondent bias. The survey also contained an open-ended question that invited respondents to express any other thoughts they had about the issues raised by this survey. Overall, the survey was structured to assess awareness, legality, and privacy concerns about this website, since based on its apparently controversial practices it serves as an important medium to assess these issues. Additionally, since the survey contained both quantitative (closed-ended items) and a qualitative measure (an open-ended item), it represents a “mixed methods” research approach as described by Creswell (2014).

The survey was administered in early February 2017 in one section of a required class for Information Systems majors and minors, BIS 420 Systems Analysis and Design (SAAD), and two sections of a core undergraduate business course, BIS 255 Information Systems. The total sample size was 103. The participation rate was 97% (32 of 33 students) enrolled in the SAAD course and about 99% (71 of 72 students) enrolled in the core Information Systems course. The overall sample was comprised of 67% males and 33% females. By class level, the participants were 47% sophomores, 28% juniors and 25% seniors. While no age information was available about the sample, based on the observation of the researchers, the subjects were composed predominantly of traditional-aged undergraduates.

## RESULTS

**Awareness.** The survey revealed that subjects had a very low level of prior awareness of the website, familytreenow.com. Less than 4% of participants (4 of 103) indicated that they had ever heard of this website before the class session where this website was presented and the survey was subsequently administered.

**Perceived legality.** More than half of the respondents (57%) thought the practices of this website are legal, which in fact appears to be congruent with current United States law. It is notable however that there was a degree of uncertainty about this issue. A total of 29% of respondents indicated a “don’t know/no opinion” response whereas 14% thought the website’s practices are illegal.

The overall results for the other six survey questions are presented in Figure 1. For reporting purposes, the responses for “strongly agree” and “agree” are collapsed into a single “agree” category, and the “strongly disagree” and

“disagree” responses are classified into one “disagree” category. The captions to the left of each bar in the figure represent paraphrased survey items to allow these entries to fit within the figure. The full text of these survey items are identified in the discussion below. The first three items of the figure might be referred to as “supportive items,” since they support the practices of this website, whereas the last three items represent “non-supportive items.”

**No Problem with Website.** Respondents were sharply divided about the statement, “I have no problem with this website making this information available.” Only 36% agreed, 41% disagreed, and 23% indicated “don’t know/no opinion.”

**Current operation OK.** Participants were equally divided on the survey item, “I think this website should be allowed to operate as it currently does.” A total of 35% agreed, 35% disagreed, and 30% indicated “don’t know/no opinion.”

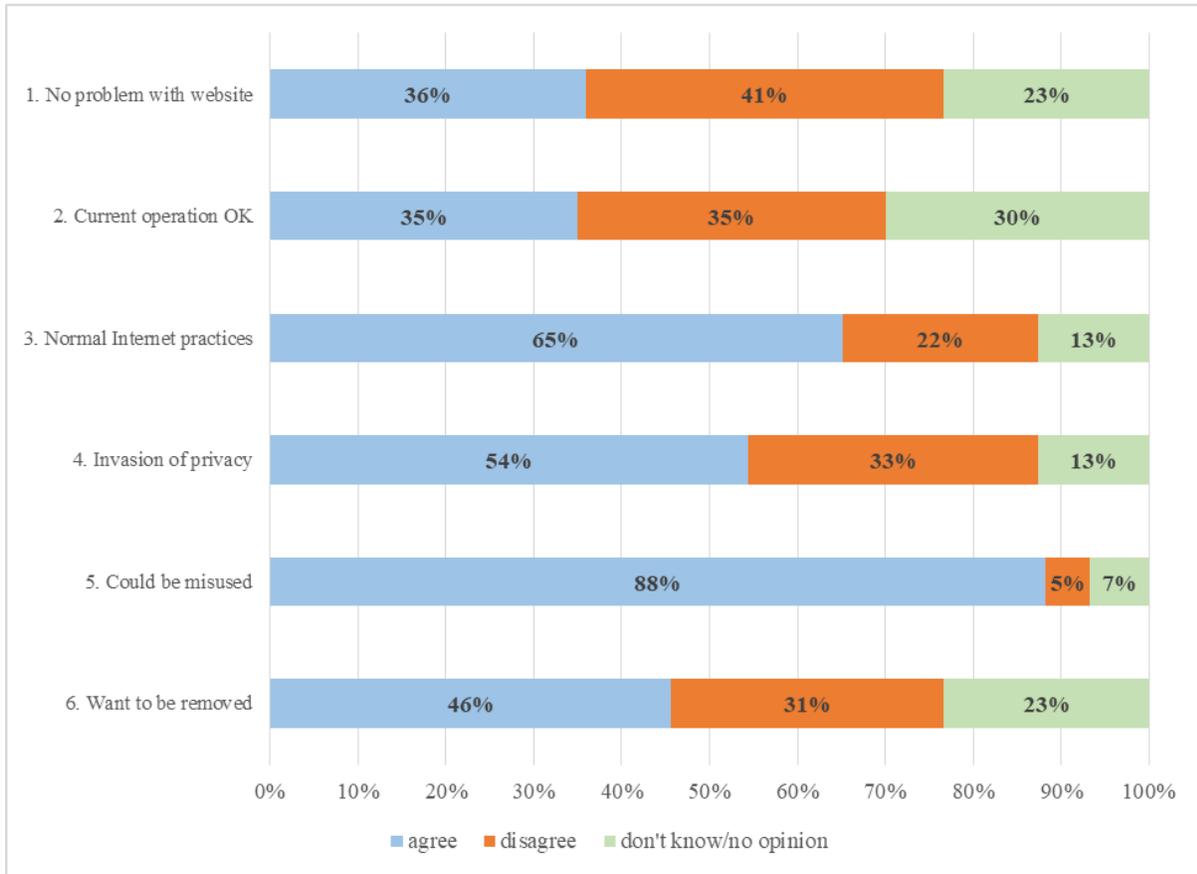
**Normal Internet Practices.** The results for the third item in the figure are to the statement: “The practices of this website are normal in the age of the Internet where there is no privacy.” Almost two-thirds of respondents (65%) agreed with this statement, 22% disagreed with it, and 13% indicated “don’t know/no opinion.”

**Invasion of Privacy.** More than half of the participants (54%) indicated agreement with the statement: “I think the information this website provides invades personal privacy.” One-third of respondents (33%) disagreed with this statement, and 13% provided a “don’t know/no opinion” response.

**Could be Misused.** An overwhelming majority (88%) of respondents (91 of 103) agreed with the statement: “The information this website makes available could be misused.” Only 5% disagreed, and 7% answered “don’t know/no opinion.”

**Want to be Removed.** The last item in the figure shows the results to the survey item: “If I saw my personal information on this website. I would try to remove it if I knew how.” Approximately 46% of participants agreed with this statement, 31% disagreed, and 23% indicated “don’t know/no opinion.”

According to the ethical decision-making model of Bommer, Gratto, Gravender, and Tuttle (1991), “demographic” and “life experience” factors are among the possible influences on a person’s ethical decision making. The sample of this study consists of two sub-samples, students in BIS 420 and students in BIS 255, who have a somewhat different demographic and life experience profile. Students in BIS 420 are Information Systems majors and minors primarily at the senior level with some juniors, whereas BIS 255 is a core college class taken primarily by sophomores and some juniors by a variety of majors throughout the college of business. Thus, students in BIS 420, generally speaking, are older and somewhat more sophisticated in their knowledge and use of technology than BIS 255 students.



**Figure 1.** Opinions about this Website

For these reasons, the authors explored whether there were any differences between students in the two courses using t-tests assuming unequal variances since the sub-samples were of different sizes. The results are reported in Table 1 where the BIS 420 class is referred to as the “upper-level” class, and BIS 255 is classified as the “lower-level” class based on their respective course numbers. Table 1 presents the means by class for the same six survey items presented earlier in Figure 1 based on student responses to the five-point Likert scale where 5 is highest, and 1 is lowest. In addition, a summated mean based on all six survey items is included at the bottom of the table. To calculate the summated measure, it was necessary to reverse code some survey items to ensure that all items were in the same direction for reporting purposes. Thus, the means in the table should be interpreted as the higher the value; the less supportive respondents were to the practices of this website. The direction of this assumption is arbitrary; it would have been equally valid to make an assumption in the opposite direction.

**Table 1.** Inter-Class Comparisons

Survey Item	Class 1 Mean (upper-level)	Class 2 Mean (lower-level)	T-value	P-value
1. No problem with website	3.44	2.85	2.65	0.005 **
2. Current operations OK	3.22	2.92	1.47	0.072
3. Normal Internet Practices	2.72	2.38	1.61	0.055
4. Invasion of Privacy	3.44	3.18	1.11	0.134
5. Could be misused	4.34	4.06	1.95	0.027 *
6. Want to be removed	3.34	3.14	0.88	0.189
7. Summated scale	3.42	3.09	3.42	0.0003 ***

\*p < 0.05 \*\*p < 0.01 \*\*\*p < 0.001

As indicated in the table, every item shows a difference in the direction of the “upper-level” class being less supportive of the practices of this website than the “lower-level” class. These differences are statistically different for three of the seven items (items 1, 5, and 7). The results for item 1 show that students in the “upper-level” class had a greater problem with the practices of this website than students in the “lower-level” class. The results for item 5 indicate that students in the “upper-level” class were also more likely to recognize that the information presented at this website could be misused. Finally, the results for the summated measure (item 7) indicate that students in the “upper-level” course were overall less supportive of the practices of this website than students in the “lower-level” course. It should be noted that significance tests were also performed for the two other survey items not shown in the table (“awareness” and “perceived legality”). This analysis revealed no significant differences between the classes on these measures.

Lastly, Table 2 presents examples of open-ended survey comments from respondents about this website. Overall, fewer “supportive comments” were received from respondents than “non-supportive comments,” so more items are presented in the second category of this table than the first. These comments in many ways were insightful and they raised salient issues on both sides associated with the practices of this website. The specific items chosen for inclusion in this table were based on how effectively the points were articulated and the extent to which they represented a diversity of viewpoints.

**Table 2.** Open Ended Survey Comments

<p><b>Selected comments supporting this website’s practices:</b></p> <p>“I can see why people might have issues with this website, but they need to put their big boy pants on.”</p> <p>“I really don’t see any issues with this information as most of it is public record anyways.”</p> <p>“I love how it is free as other services such as ancestry.com require payments.”</p> <p>“People could search my Facebook and find more info about me, including who is in my immediate family.”</p>
<p><b>Selected comments not supporting this website’s practices:</b></p> <p>“Seems like a big invasion of privacy. Some of the facts about the people are too detailed, such as address/age/etc. I don’t believe a website should be able to do this.”</p> <p>“I think this website gives out too much information.”</p> <p>“This makes me nervous about stalkers or people with vendettas.”</p> <p>“I believe legislators should put more regulations protecting privacy first.”</p> <p>“The information on this website could contribute to identify theft.”</p> <p>“I feel like information (personal) shouldn’t be this easy to obtain.”</p> <p>“This website is probably used as often for wrong reasons as it is the right reasons. Very easy for stalkers/pedophiles to gain access to your home via this information. I know I would not want my family to be accessed on some site that has gained information that should be illegal to use without permission.”</p>

## **DISCUSSION AND CONCLUSIONS**

In this study, the website familytreenow.com served as a medium to gain greater insight into the larger issue of how individuals think about personal privacy on the Internet. Given its “free of charge” and “no registration required” characteristics, this website provides easy access to a wealth of personal information that can be used for legitimate

or illegitimate purposes. Thus, it was anticipated that this website would provoke a divergence of perspectives about personal privacy and this appears to be borne out by both the closed-ended and open-ended results of this study. An overwhelming number of respondents (88%) recognized that the easy availability of this information over the Internet could result in abuse. It is also notable that more than half of respondents (54%) considered this website's practices an "invasion of privacy." Perhaps the most thought provoking finding is for the survey item, "Normal internet Practices" which states: "The practices of this website are normal in the age of the Internet where there is no privacy." Nearly two-thirds of the participants agreed with this statement, which seems to indicate that many of us have become resigned to the notion that we cannot expect privacy in the age of the Internet where so much information is publicly available. The "bottom line" is that this exploratory study seems to have fulfilled its role by raising a number of issues that are in need of further consideration by lawmakers, educators, and researchers.

The current practices of familytreenow.com can be described as "opt out" only. That is, an individual can only choose *not* to have their personal information displayed at this site by taking action to remove it. But to do so requires that a person first is aware of this website. The results of this study suggest that few people know about this website. Barring a public outcry that could result from a tragedy associated with the use of this site or a very high profile news story such as from *60 Minutes*, familytreenow.com will likely continue to operate and display the personal information of millions of Americans without their permission or in most cases their knowledge.

It can be argued that the information this website provides is perfectly legitimate since it is culled from publicly available records and it is no different from what is provided by other similar websites. However, two important distinguishing features of familytree.com are notable: this website is free to use, and it does not require any type of user registration. That, in some ways, is its beauty. Undoubtedly this website has helped some users to locate family members and construct a family tree. However, this website's "low barriers to entry" also appear to open up a world of opportunity for people with nefarious purposes. That may include stalkers, child abusers, identity thieves, people with vendettas, and others who choose to perpetrate harm. In this way, familytree.com is a good example of how a technology (in this case, a website) can be a double-edged sword. Just as fire is useful to heat our homes and cook our food yet it can also cause harm in burning down our house, there are also positive and negative consequences associated with a website like familytreenow.com. These impacts should not be ignored but carefully weighed by lawmakers. They need to consider whether personal information should continue to be freely and publicly available or whether any parameters should be introduced over its use. Some public policy alternatives are to place greater limitations on what records are publicly available (such as addresses) or to require that websites obtain the prior consent of individuals before their records are disclosed (referred to as "opt in"). These are no easy answers to these issues.

To its credit, familytreenow.com honors user requests to "opt out." When one of the authors of this paper chose to remove his personal record from this website, it was deleted. The problem with this website's "opt out" option is that not only must a user be aware of this website, he/she will also be somewhat challenged to find it. The user must first notice the "privacy" link in tiny font in the last line of the home page, click it, and then find the "opt out here" link (again in small font) in the middle of a paragraph at the bottom of the second screen of the "privacy policy" page. Besides lawmakers, the results of this study also have potential implications for Information Systems educators and researchers. To educators, the findings appear to suggest the importance of educating students about information privacy and protecting their personal information. Note that the results of this study showed that students in the "lower-level" class were less likely to recognize the potential dangers of this website than slightly older students who were somewhat more experienced with technology. Instructors could use this website in the classroom as an example to demonstrate the kind of information that is publicly available on the Internet and how a person might better protect his/her personal privacy.

Finally, there is a need to understand individual privacy perceptions more clearly from a research perspective. This exploratory study is useful in raising some important issues about how individuals think about personal privacy. This issue needs to be elucidated through further studies. For example, the authors are currently extending this study by exploring the possible impact of factors such as gender or age on differences in privacy perceptions.

**REFERENCES**

- Bommer, M., Gratto, C., Gravender, J. & Tuttle, M. (1991). A Behavioral Model of Ethical Decision Making. In *Ethical Issues in Information Systems*, Dejoie, R., Fowler, G. and Paradice, D. eds., Boston, MA: Boyd & Fraser Publishing Co., 6-26.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 4<sup>th</sup> ed. Thousand Oaks, CA: Sage Publications.
- Culnan, M. J., & Bies, R. J. (2003). Consumer privacy: Balancing economic and justice considerations. *Journal of Social Issues*, 59(2), 323-342.
- DailyDot.com website. (2017). Available at: <https://www.dailydot.com/layer8/family-tree-now-opt-out-privacy-dox/>
- Electronic Frontier Foundation website. (2017). Available at: <https://www EFF.org/>
- Familytreenow.com website. (2017). Available at: <http://www.familytreenow.com/>
- Madden, M. & Rainie, L. (2015). American attitudes about privacy, security, and surveillance. Pew Research Center. Available at: <http://www.pewinternet.org/2015/05/20/americans-attitudes-about-privacy-security-and-surveillance/>
- Mason, R. O. (1986). Four ethical issues of the information age. *MIS Quarterly*, 5-12.
- Ohlheiser, A. (2017). You've probably never heard of this creepy genealogy site. But it knows a lot about you. *Washington Post*, (January 12). Available at: [https://www.washingtonpost.com/news/the-intersect/wp/2017/01/12/youve-probably-never-heard-of-this-creepy-genealogy-site-but-its-heard-all-about-you/?utm\\_term=.71aff901d104](https://www.washingtonpost.com/news/the-intersect/wp/2017/01/12/youve-probably-never-heard-of-this-creepy-genealogy-site-but-its-heard-all-about-you/?utm_term=.71aff901d104)
- Stanton, S. (2017). Does this website make it too easy to find someone? *Sacramento Bee*, (January 13). Available at: <http://www.sacbee.com/news/local/article126534709.html>
- Ward, S., Bridges, K., & Chitty, B. (2005). Do incentives matter? An examination of on-line privacy concerns and willingness to provide personal and financial information. *Journal of Marketing Communications*, 11(1), 21-40.
- Westin, A. F. (1967). *Privacy and freedom*. New York: Atheneum Publishers.
- WFLA.com website. (2017). Available at: <http://wfla.com/2017/02/06/genealogy-website-causes-privacy-concerns-crisis-center-of-tampa-bay-calls-is-dangerous/>