

Re-examining User Perceptions of Online Privacy Notices: The Value of Real-Time Observation

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1. INTRODUCTION

Online privacy has been identified as a significant factor in consumer trust and is increasingly being viewed as essential for maximizing e-business success. Many consumers use the Internet for informational purposes, but then return to brick-and-mortar establishments to actually complete a purchase. Forrester Research found that 61% of online consumers cited concerns with privacy as one of the reasons they do not like to provide their credit card information to online retailers [5].

In response to consumer and regulatory pressures, the practice of publicly posting privacy policies on web pages is becoming pervasive. The Progress and Freedom Foundation recently surveyed a sample of highly visited websites and found that 77% of those websites posted a privacy policy [1]. With the increased use of the privacy policy as a conduit for communication, it is vital to both the companies that post them and online users who rely on them, that these notices have high usability.

2. MOTIVATION

Many studies have examined users' concerns regarding privacy and their perceptions of the usefulness of posted privacy notices; some have even addressed the usability of the actual policy itself [3, 4, 6]. The majority of the studies rely heavily on survey data or expert review of privacy notices, yielding conflicting findings on people's perceptions and actions. Quantitative methods best answer questions of frequency, duration and magnitude of perception. However, to understand the nature of these perceptions one must rely on more qualitative measures. Insight into emerging mental models is ephemeral, and cannot be accurately captured by after-the-fact inquiry (e.g., interviews) or self-report techniques (e.g., semi-structured questionnaires). The user needs to be observed "in the moment" while they are parsing and evaluating a privacy policy to truly understand their natural behavior and perceptions.

3. METHOD

We used a mix of qualitative techniques in this study; specifically, using the think-aloud protocol while directly observing the participant reviewing an online privacy policy. Prior to starting the task we used a questionnaire to obtain demographic data along with an idea of the participant's sensitivity to privacy issues. We then observed the participant reviewing an online policy while employing the think-aloud protocol, and concluded with a semi-structured interview to clarify our observations. The think-aloud session and interviews were audio recorded and transcribed. Observation notes of the participant's facial expressions and actions were overlaid on the

transcript. A content analysis of the transcript was performed in an effort to discover emergent patterns of use, behavior, or attitude.

The study population (N=7) was purposively sampled on the key socio-economic factors of age (22-55) and education level (completed 4 years of higher education) to reflect the Internet user population at large and the sub-population most likely to make online purchases [7]. All seven participants were familiar with Amazon.com and visited the site occasionally; three were frequent users. Five of the seven participants had actually made a purchase. However, none had read the posted privacy policy.

When selecting a target privacy policy to review, we wanted to limit as many potential biases as possible. Based on prior research the key factors influencing whether or not users read online privacy notices are familiarity with the company [4] and display of a privacy seal [2]. With this in mind, we chose Amazon.com as our target website. Amazon.com ranks 4th in the U.S. as the most trusted site [8], however, it does not display a privacy seal. (Earlier research suggests that users do not read privacy policies on sites with a displayed seal [2].) In addition, the Amazon.com web site is not P3P-enabled. P3P is an alternative, automated approach to having consumers read the posted privacy policy. We believed that if the site was P3P enabled, our findings might be obscured by user perceptions that their preferences were already being addressed by the P3P agent, paying less attention to the policy itself.

4. FINDINGS

The observational setting allowed us to capture both verbal feedback and the non-verbal cues of participants while navigating through the target policy in real-time. Using an elemental grounded theory approach to analysis, several themes emerged which portrayed a clearer picture of not only what they do, but how and why they do it. Examples of our early themes follow.

4.1 On-screen location and perceived value

The placement of the hyperlink to the privacy notice at the very bottom of the page and in the tiniest print sparked a bit of suspicion and created a general air of mistrust. Four of seven participants had difficulty finding the link to the policy and commented, "They probably don't really want you to read it." "Anytime they give you something that is difficult to find, it's something they don't want you to do." The remaining three did not have too much difficulty finding the link because they were already of the mindset that this is something "They (the organization) probably don't want us to know, so it will probably be at the bottom." Three of the seven participants went into MY ACCOUNT from the top menu bar. When asked why they did

that, they answered “it has to do with my privacy, so it is probably in MY ACCOUNT.”

4.2 Endurance and decay

Most participants began by diligently reading the policy word for word; but soon after the first paragraph, they began skimming, and then scanning. Some scanned the bolded topic headings and stopped where they found data of interest; however, this occurred more at the start of the document, and occurred less and less as they got to the end of the document.

Many of them missed important links and data the first time through, and only when they were directed to those portions during the interview, did they notice them. For example the ability to change one’s information is one of the Fair Information Practices. Though the Amazon policy did allow for that choice, the hyperlink to the actual MY ACCOUNT feature was missed by a majority of the participants. The reason for this, it was suggested, is that the link is embedded within a long wordy paragraph, and not easy to dig down to.

4.3 Mistrust and apathy

Throughout the observation a tone of mistrust and apathy was apparent from the participant’s statements and non-verbal overtures. They attributed that to a general feeling of helplessness and loss of control.

Almost all participants said they were concerned about privacy, yet most of them showed complacency with regard to the posted privacy notice. They skimmed the policy with general disdain. They commented that they were helpless once they chose to come online, and they had no control – no matter what the policy said. Many participants believe the policy was not written for them, but rather was written for the organization in an effort to protect itself. This attitude was fed from the beginning with the placement of the hyperlink for the policy, and then continued to be fed by the manner in which the policy was written.

For those that actually read through portions of the policy, often times signs of sarcasm were notably displayed giving a sense that they didn’t believe that the organization was being totally truthful. “We are not in the business of selling our information to others. We’re *sharing*.” “I mean, how do they know – how do they know that you’re not a child, that you’re older than 18?” These inconsistencies were termed ‘doublespeak’ by some of the participants, and continued to fuel their skepticism, and support their reasoning for not reviewing policy notices. “See, that’s why I don’t read these things.”

4.4 Desire for reflexive visibility

Their privacy concern is not with the data collected for personalization, but with their financial or personally identifiable data. Four of the seven had a strong interest in viewing their personal data. “I really just want to see my personal information, what they have about me.”

4.5 False cues

There was a general lack of knowledge and misunderstanding. Many participants actively looked for the SSL or encryption key at the bottom of the screen and found it important to tell us that they felt comfortable providing data as long as these were present. Many expressed surprise at the amount of information captured,

and became upset to find out that it was captured before they could do anything about it.

5. IMPLICATIONS

The results of this study suggest that direct observation coupled with the think-aloud protocol can be very powerful in uncovering and capturing users’ perspectives. It provides the researcher with a visual awareness of details and the ability to more convincingly correlate perception, expectations, and action. This leads to a richer explanation of user’s actions which is critical in studies that examine such an abstract concept as ‘privacy’. This methodology may be effective in providing a clearer perspective for policy designers to work from.

6. FUTURE WORK

While our small, purposive sample may limit the transferability of these findings, this research did demonstrate the value of pursuing a complementary methodology in the quest to better understand user perceptions and behavior regarding online privacy policies. We anticipate replicating this study with a larger, more representative sample in the near future.

7. REFERENCES

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