

## Is Ignorance Bliss?: Informed Consent Online

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#### ABSTRACT

In this panel, we explore: (1) the impacts of electronic media on informed consent; (2) how electronic media can be designed and used to preserve informed consent; (3) the relationship between protecting privacy and informed consent; (4) the relationship between cultivating trust online and informed consent; and (5) proposed relevant standards and brokering systems. This panel fits within the emerging field of Value-Sensitive Design.

#### Keywords

Customer relationship management, data mining, e-business, e-commerce, ethics, human values, informed consent, interface design, personalization, privacy, social computing, social impact, tracking, trust, Value-Sensitive Design, World Wide Web.

#### INTRODUCTION

The concept of "informed consent" arose in the context of conducting specific time-limited experiments or treatments. Data from such experiments were typically analyzed in a limited number of ways. And because the experimenter was concerned with generic human behavior, there was no reason not to report results anonymously.

Now we live in a vastly different world. With remarkable advances in computing power and storage capacity as well as data mining techniques, many of our online interactions become, in effect, "experiments" in which we are often the unwitting participants. We may not know data is being collected; which institutions are privy to the data; what kinds of inferences are being made based on our behavior; or what specific individual is responsible for the use or misuse of the data.

In many instances, these data are being collected and analyzed in an honest attempt to help end users or consumers. Such data, however, may also find their way into other hands and other uses, some of them unacceptable to the general public. Thus, an overarching issue emerges: How can we use the principles of human computer interaction to provide for user protections and still enjoy the potential benefits of a greater understanding of online behavior? Toward stimulating discussion on this question, we propose a panel to explore: (1) the impacts of electronic media on informed consent; (2) how electronic media can be designed and used to preserve informed consent; (3) the relationship between protecting privacy and informed consent; (4) the relationship between cultivating trust online and informed consent; and (5) various proposed standards and brokering systems to address these issues.

**PANEL FORMAT**

We will first provide an overview of informed consent. Then we will ask the panelists seven provocative and fundamental questions concerning electronic media and informed consent:

1. What's your most pessimistic (and optimistic) vision of what the wired future might hold with respect to informed consent?
1. There is much discussion about Internet privacy, trust, and accountability. How might policy with respect to informed consent online impact these issues?
2. How completely do people need to be informed about not only the current but also the future uses of their data?
2. In what ways might it make sense to apply informed consent in e-commerce?
3. How can we use electronic media to enhance informed consent?
4. Electronic media offer unprecedented invisibility and archiving. How do these relate to informed consent?
5. Is it possible to obtain informed consent in a robust sense when the only communication for most online interactions is through electronic media and often automated?

For the last half hour, we will elicit questions and debate from the audience on these and related issues.

**SUMMARY OF PANELISTS' POSITIONS****Batya Friedman**

Friedman provides a conceptual model for informed consent comprised of five components: (1) disclosure, (2) comprehension, (3) voluntariness, (4) competence, and (5) agreement. She brings these five components to bear in assessing and developing informed consent in online interactions, particularly in the design of Web browsers.

**Mark Lucente**

E-commerce faces two fundamental challenges: (1) helping on-line shoppers to find what they want, and (2) helping Web site owners to understand the shoppers. Lucente (at Soliloquy, Inc.) has developed software products that solve these two problems: (1) software "Experts" communicate with shoppers using natural language conversations, and (2) "Dialogue Mining" allows site owners to analyze these conversations to derive insights into shopper psychology. Because this technology is based on natural conversation,

Soliloquy addresses the issue of informed consent by applying the same basic principal used in the real world: Ask, but be accepting of non-answers.

**Mark Ackerman**

Privacy protections constantly play catch-up with digital environments, where new technologies allow even more personal data to be collected, collated, and resold without visible notice. Heavily ubiquitous and context-aware environments, such as MIT's Project Oxygen, will strain informed consent and privacy in yet new ways. As a result, new safeguards -- some technical, but others social and regulatory -- will be required. Indeed, the HCI of privacy protections will be critical.

**Nancy Willard**

Technically proficient young people use the Internet before they have the cognitive ability to appreciate the possible consequences of disclosure of personal information. In turn, Internet companies routinely ask children to disclose personal information that can be used to influence the child's consumer behavior. When such violations repeatedly occur, young people may fail to develop an understanding of the appropriate boundaries of personal privacy.

**Ulrike Lechner**

As online consumers increasingly search out sellers and form communities, users may employ software agents to represent themselves online and to conduct transactions autonomously. But can one trust the interaction between human users mediated by software agents? How can we obtain "informed consent" when agents begin to take on roles previously reserved for humans? And what light can be shed on these issues by examining formal models of such systems and components?

**John Thomas**

Imagine a world in which computing devices are embedded invisibly and networked into the surrounding physical infrastructure. In addition, this computing network knows where you are, your goals, and the activities that you are engaged in. In such a scenario, no one may actually foresee all the consequences of collecting data. Under such circumstances, what mechanisms, attitudes, laws, or cultural practices can guarantee that the promise of technology serves the goals of humanity rather than a handful of powerful and greedy individuals?

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