VALUE SENSITIVE DESIGN OVERVIEW

INSC 543/CSE 599P
Value Sensitive Design

Email Discussion Question: 5 PM Tuesday, October 6
Email Values Madness Slide: Noon Wednesday, October 7
For Class: Wednesday, October 7

PART I: VALUES DESIGN LITERATURE MADNESS

In class you received a card with a title of a paper that addresses human values in the design of information technology. Your challenge is to read this paper, decide what is interesting about it from the values perspective with respect to design and technology, and prepare a 60-second talk in the style of CHI madness to inform the rest of us about this work. You are allowed 1 PowerPoint slide if you would like it. Please email your slide to Alan no later than noon on Wednesday, October 7. Alan will assemble the slides into one deck so that we can move quickly (madly?) through these short talks.

PART II: OVERVIEW OF VALUE SENSITIVE DESIGN

On Wednesday October 7, we'll begin to discuss the key components of Value Sensitive Design. To provide a background for this discussion, we'd like you to read an article that provides an overview of Value Sensitive Design and reports on three case studies.

Friedman, B., Kahn, P. H., Jr., and Borning, A. (2006). Value Sensitive Design and Information Systems. In P. Zhang and D. Galletta (eds.), *Human-computer interaction in management information systems: Foundations* (pp. 348-372). Armonk, NY: M. E. Sharpe.

As you read this article, keep in mind the following questions: What aspects of Value Sensitive Design were employed here? How were they used? How did they impact the design process? What, if anything, do you think might be different if Value Sensitive Design hadn't been used?

PART III: CONCEPTUAL INVESTIGATIONS

Conceptual investigations involve philosophically informed analyses of the central constructs and issues under investigation. Questions include: Whose values should be supported in the design process? How should these key values be defined? How should we engage in trade-offs among competing values in the design, implementation, and use of information systems?

Conceptual investigations also focus on how some values may vary in nature and priority across time and place, while other values may be universally shared. As an example of variation across time, note that during the 1960's at the MIT AI laboratory, people viewed their files as open to others online (mostly other researchers in the AI lab). But now most academic researchers, at MIT and elsewhere, keep their files private from colleagues at their own institutions and beyond. Similarly, as an example of variation across place, note that even while living in an igloo, Inuits have conventions that ensure some forms of privacy; yet such forms of privacy are not maintained by separated rooms, as they are in most Western cultures. Generally, the more concretely (act-based) one frames a value, the more one will be led to recognizing cultural variation; conversely, the more abstractly one frames a value, the more one will be led to recognizing universals.

Finally, conceptual investigations take seriously the impact of designs on direct and indirect stakeholders. Direct stakeholders refer to individuals who interact directly with the computer system. Indirect stakeholders refer to all other individuals who are otherwise affected by the use of the system. Often the latter are ignored in the design process. Computerized medical records systems, for example, have been designed with many of the direct stakeholders in mind (e.g., insurance companies, hospitals, doctors, and

nurses) but with too little regard for the values (e.g., the value of privacy) of a rather important group of indirect stakeholders: the patients.

Conceptual investigations do not by themselves involve costly empirical analyses (e.g. user studies), but thoughtful consideration of how stakeholders might be socially impacted by one's technological designs. Social impact statements represent one attempt to provide guidelines for conducting conceptual investigations albeit along with implementation plans.

For Wednesday please also read the following articles, one that provides some background on privacy and a second on social impact statements. As you read, consider the following questions: Are any important elements missing from these conceptual investigations? How far can you get with a conceptual investigation toward the goal of value sensitive design? At what point do conceptual investigations in isolation fall short? Methodologically, how could these limitations be addressed?

Warren, S. D., & Brandeis, L. D. (1890, December 5). The right to privacy. *Harvard Law Review 4*(5), 193-220.

Blythe, M. A., and Wright, P. C. (2006). Pastiche scenarios: Fiction as a resource for user centered design. *Interacting with Computers, 18*, 5(Sep., 2006), 1139-1164.

If you have, time you might also consider reading the following articles, one on trust, on informed consent, and one social impact statements for information systems.

Baier, A. (1986). Trust and antitrust. *Ethics 96,* 231-260.

Friedman, B., Millett, L., & Felten, E. (2000). *Informed consent online: A conceptual model and design principles*. (UW-CSE Technical Report 00-12-2). Seattle, WA: University of Washington, The Department of Computer Science and Engineering.

Shneiderman, B., & Rose, A. (1997). Social impact statements: Engaging public participation in information technology design. In B. Friedman, (Ed.), *Human values and the design of computer technology* (pp. 117 – 133). New York: Cambridge University Press and CSLI, Stanford University.

WRITE a question that you would be interested in discussing which follows from the readings. As before, your writing should be concise, grammatically correct, and, as appropriate, draw on (and at times quote from) the reading.

Please EMAIL your question to Alan at borning@cs.washington.edu and Batya at batya@u.washington.edu in the BODY OF AN EMAIL MESSAGE no later than 5 PM Tuesday afternoon, October 6. We will use your questions to structure some of the discussion on Wednesday.

No late questions will be accepted.