
Values, Value and Worth: Their Relationship to HCI?

David Gilmore

Logitech
Fremont, CA
USA
dgilmore@acm.org

Gilbert Cockton

University of Sunderland
Sunderland
United Kingdom
gilbert.cockton@sunderland.ac.uk

Sari Kujala

Tampere University of Technology
Tampere
Finland
sari.kujala@tut.fi

Austin Henderson

PitneyBowes
Shelton, CT
USA
austin.henderson@pb.com

Elizabeth Churchill

Yahoo! Research
Santa Clara, CA
USA
echu@yahoo-inc.com

Monty Hammontree

Microsoft
Redmond, WA
USA
montyh@microsoft.com

Abstract

This workshop explores the territory of 'value-centred HCI' with the intention of freeing us from the tricky complexity of this topic and the multiple meanings of the words 'value' and 'values'.

Keywords

Value, HCI, value-centred HCI, design, business, usability, usefulness, stakeholders

ACM Classification Keywords

H.1.2 User/Machine Systems; D.2.9 Management

Introduction

This workshop addresses the idea of 'value-centred HCI', recognising that this is both a complex area with complicated semantics, as well as an area that many people see as increasingly relevant to their own work.

There are, however, several interpretations of what should be understood by 'value-centred':

- are we talking about the relationship between HCI and human values?
- are we talking about the economic value to the business using HCI?
- are we talking about the value to the end-user of the product being designed?
- are we talking about the embedding of user values in a designed product?

Copyright is held by the author/owner(s).

CHI 2008, April 5 – April 10, 2008, Florence, Italy

ACM 978-1-60558-012-8/08/04.

One possible response to this complexity is to shrug and say it is too hard. Another is to feel that there is something that might unify all these different interpretations, even if we cannot yet be certain what the best unifying structure will be. For example, we might at least notice that many of these perspectives try to move the conversation beyond usefulness.

Our intention for this workshop is to bring together a group of people who hold well-articulated views on this subject, or who have relevant data to share, or who clearly see a set of research questions that should be tackled - but not who all already agree on how this all fits together. Then, while striving not to throw any point of view out, we hope to create a more clearly defined description of the relationship between values, value, worth and HCI. This definition may be of "value-centred HCI", or it may clearly articulate two or three distinct areas (for example, 'values-sensitive design', 'worth-centred HCI' and 'delivering value to end users').

Perspectives

HCI and human values?

Friedman [6] coined the term 'value-sensitive design' to encourage reflection on the fact that our methods, as well as any tool or system that we design, embodies human values, whether deliberate or not. Value-sensitive design is characterized as a theoretically grounded approach to technology design that takes account of human values in a principled manner.

In this approach, the kinds of values that are being addressed are the right to privacy, the requirement to be non-discriminatory, or the need for autonomy and control. Light et al [9] linked values, ethics, social

responsibility, justice and politics in a CHI2005 Workshop on 'Quality, Values and Choice'.

the business value of using HCI?

A wholly separate thread within HCI is the delivery of business value through the application of HCI. Bias and Mayhew [1] wrote the classic text on return on investment from usability work. Donoghue [2] offers a less economically driven perspective, but it is still clearly in the economic space of justifying investment in user-centred design.

This can easily seem as completely at odds with other meanings of value in the context of HCI, but in fact the primary difference is simply which beneficiary we choose to focus on. One element that does make it more different is that the focus of much of this work has been on persuading people of the value of HCI, rather than on understanding how HCI does or does not deliver business value.

the end-user value of the product?

The concept of a 'value proposition' has long been around in the marketing literature, but there has been much less written about the concept of how HCI delivers value to the end-user.

Gilmore [7] argued that there are occasions where HCI's focus on usability can be antithetical to delivering the desired benefits of a product. The example he examined was educational software, where educational value is about successful learning of something through the software, rather than learnability or usability of the software itself. Practitioner work in HCI has paid more attention to this area, since their success is often dependent upon end- users choosing and buying the

product. Perhaps the best-known exponents of this point of view are various executives from Procter & Gamble, including CEO A. G. Lafley, when they talk about the critical 'moments of truth.'

"He has boiled this mantra down to three phrases, which employees now frequently use:

The consumer is boss.

The first moment of truth (how the consumer reacts to the product on the shelf).

The second moment of truth (how the consumer reacts when actually using the product)." [8]

Embedding user values in a product?

Finally, there is another angle on values, which suggests that part of HCI's task is to understand the values of the users of a system and design those values into the product. It isn't clear to us that this is very different from 'value sensitive design'. But, whereas that approach can get stuck in debate about who decides which values we should embody, this approach gets stuck in the problem of how we should determine a group's values. That said, traditional participatory design would certainly claim that it is capable of addressing the delivery of this kind of value.

"Value-centred HCI"

Cockton [3] proposes the term 'value-centred HCI' after reviewing the history of HCI and offering us a view of the "System-centred 70s", "User-centred 80's" and "Context-centred 90's" with the shift between these eras being triggered by the introduction of a new discipline. Thus computer science was the strong player initially, followed by psychology during the user-centred

years, with sociology / anthropology being the dominant force in the context-centred 90's.

Answering the implicit question 'where next?' Cockton [2] offers value-centred HCI as the important next step forward, with design as the new discipline. A key part of his argument for design as the new driver is that "HCI cannot deliver value as an objective, applied science" (p.149).

However, an alternative view could offer business as the new discipline, embracing the importance of economics in understanding and measuring value.

Although the adoption of the ideas of 'value-centred HCI' do not require there to be a newly dominant discipline, it is a tempting analysis – especially given the past history.

Nevertheless, underpinning all these developments and discussions is a more critical, deeper question – "what is the purpose, the underlying goal, of HCI?" Light et al [9] proposed that most people see the answer as "make better products", which seems undeniably true, but maybe rather bland.

But taken together we can start to see a theme of making better products, where we explicitly state whom they are better for and how we intend to measure that 'better'ness.

Traditionally HCI has concentrated on Lafley's second moment of truth (the moment of use), but as Cockton [4] notes, this second moment is only relevant if you can get the person successfully past the first moment. Even more striking is that fact that most P&G products

(e.g. toothpaste, dog food, bathroom cleaning supplies) have a single, simple first moment of truth and often only a single second moment of truth (i.e. most of the products are used repeatedly, but in much the same way each time).

By contrast, technology product experiences exhibit many varieties of each moment of truth. For the first moment of truth, there is the moment of decision to buy, the moment of decision about exactly what to buy, the moment of deciding where to buy as well as the moment of purchase itself! And, the whole of HCI has been concerned with all varieties of moments of use.

Conclusions

This is clearly a complicated and difficult topic, but just as the move from usability to usefulness and user experience was difficult but productive, so (we believe) will the move to value-centred HCI.

The purpose of this workshop is to explore all these different and complicated perspectives and their possible boundaries. The goal is to identify a framework (or frameworks) that enable the broader HCI community to better understand and discuss this territory. We also hope that we will be able to articulate a research agenda for further developing our understandings.

References

- [1] Bias, R. G. and Mayhew, D.J. (2005). "Cost Justifying Usability: 2nd Edition". Elsevier, Oxford, UK.
- [2] Cockton, G. (2004), "Value-Centred HCI", Proceedings of the Third Nordic Conference on Human-Computer Interaction, ed. A. Hyrskykari, 149-160.
- [3] Cockton, G. (2005) "A Development Framework for Value-Centred Design," in CHI 2005 Extended Abstracts, ed. C. Gale, ACM, New York, 1292-95.
- [4] Cockton, G. (2006) "Designing Worth is Worth Designing," in Proceedings of NordiCHI 2006, eds. A.I. Mørch, K. Morgan, T. Bratteteig, G. Ghosh, and D. Svanæs, 165-174, ACM, New York.
- [5] Donoghue, K. (2002). "Built for Use: Driving Profitability Through The User Experience". McGraw-Hill, New York.
- [6] Friedman, B. (1996) "Value-Sensitive Design". Interactions, Nov-Dec, 1996, pp 16-23.
- [7] Gilmore, D. J. (1995). "Interface Design: Have We Got It Wrong?" Proceedings of IFIP Interact'95, Lillehammer, Norway, 1995.
- [8] Lafley, A. G. Business Week: Get Creative. (http://www.businessweek.com/magazine/content/05_31/b3945423.htm)
- [9] Light, A., Wild, P.J., Dearden, A. & Muller, M. J. (2005). "Quality, Value(s) and Choice: Exploring deeper outcomes for HCI products". In CHI2005 Extended Abstracts (Workshops), ACM, New York.