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# Bridging AIS SIGHCI and ACM SIGCHI: Obstacles and Opportunities

## Noam Tractinsky

Ben-Gurion University of the  
Negev  
Beer Sheva, 84105, Israel  
noamt@bgu.ac.il

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## Abstract

I outline some of the challenges that face attempts to bridge the AIS SIGHCI and ACM SIGCHI communities. The challenges include differences in culture (e.g., publication outlets and review process), research foci (designers vs. users), research methods, and size of the community. Yet, there are also opportunities for IS researchers to tackle important but underresearched HCI topics (e.g., aspects of user experience, organizational and economic aspects of usability).

## Author Keywords

Bridging research communities; research focus; publication culture; users; designers.

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## Introduction

The three-horned problem identified by the workshop organizers can also be posed in terms of the ubiquitous tension between internal validity and external validity, or as the problem of relevance vs. rigor. Both the ACM SIGCHI (henceforth CHI) and the AIS SIGHCI (henceforth IS-HCI) communities struggle with this tension, with the former probably leaning more towards

### **A note on the acceptance/adoption divide**

Grudin ([3], Section 8.3) notes the differences in approach which have set the IS and CHI communities apart. IS research originates from a managerial perspective and thus TAM deals with (passive) acceptance of IT, whereas the CHI community deals with the more active “adoption”. I tend to disagree with Grudin here. For example, seminal works in HCI, e.g., [5, 6] explicitly use the term “system acceptability” as the ultimate goal of usability and the context within which usability research and practice takes place. In fact, both streams of research have originated in an era of limited user discretion, and both have developed to account for both types of usage. Thus, I do not see this as a major reason for the gap between the two communities.

relevance and practice whereas the latter tends to emphasize scientific rigor.

I have been a member of the two communities and, similar to Grudin [3], my assessment of the prospects of bridging the two communities is quite bleak. It is also my feeling that the desire for bridging is asymmetrical, in that the CHI community is not equally eager for cross-fertilization with the IS-HCI community. This may be due to the differences in size between the communities or perhaps due to cultural and institutional differences as discussed below. I have also noticed that it has been difficult to establish HCI tracks at ECIS. It is not clear whether this is due to the limited number of AIS people in Europe who are interested in HCI, the relatively well integrated HCI and IS research in Europe (i.e., researchers may feel comfortable publishing in both communities), or for other reasons.

Nevertheless, there is much to gain by bridging the two communities. Hence, I would like to offer some thoughts about the obstacles, challenges, and opportunities that lie ahead.

### **Obstacles and Challenges**

It is quite surprising to see the disconnect between the IS and the HCI communities, given that they both deal with similar issues. Yet, whereas the idea of bridging the two communities makes perfect sense, the fact that this has not happened despite efforts in the past suggests that the idea has to overcome some major challenges. These challenges involve institutional and cultural forces.

In his account of the evolution of the field of HCI, Grudin ([3]) suggests several factors that have

prevented the merging of the numerous disciplines that deal with various aspects of HCI. One such obstacle is the different publication culture in the two communities. In CHI, the major conferences in the field are considered a top publication. For IS-HCI, even the most selective conferences only serve as milestones towards journal publications.

Grudin also suggests that the IS community has been devoted to non-discretionary use, whereas CHI has dealt mainly with discretionary use. I do not think that this is any longer the case, especially given the fast diffusion of web-based sites and applications in the early 21<sup>st</sup> century, which have shifted much of IS research into studying aspects of discretionary use.

### *Case Study: TAM vs. Usability*

Grudin has identified common goals of the two communities, including the parallel research on groupware (e.g., GDSS and CSCW) and on system acceptance (e.g., TAM and usability). He also notes differences between the communities (see side bar). It seems to me that there are two notable differences between the two communities in handling of the acceptance/adoption issue. The first is that the IS-based TAM research stream has concentrated on rigorous theoretical development of user-centric perceptions (perceived ease of use, perceived usefulness, intentions to use), to the extent of being almost a scientific truism. On the other hand, usability theorizing has been relatively weak, disorderly expanding the construct until it has become a meaningless umbrella term [7]. At the same time, the practice of usability engineering has developed countless methods and techniques purported to help

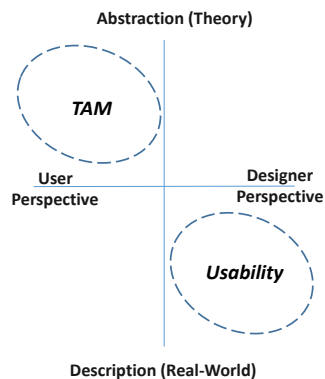


Figure 1: Different approaches to the problem of system acceptance/adoption. HCI emphasizing abstraction and user perspectives. CHI emphasizing description and designer perspectives.

usability professionals, albeit with very little scientific evidence to their usefulness (e.g. [4]).

The second difference, one that might reflect the origins of CHI in disciplines that emphasize efficiency (e.g., Human Factors, Cognitive Science and Computer Science), is that its approach to usability puts larger focus on performance issues (i.e., efficiency and effectiveness), whereas TAM and many IS-HCI models emphasize users' perceptions.

#### *Design Perspective vs. User Perspective*

Another difference between the communities appears to be the emphasis of the IS-HCI community on the user and how technology influences users, whereas the CHI community seems to shift its attention gradually towards those who design interactive products and their needs. An informal perusal of CHI outlets (e.g., the CHI conference, Interactions) suggests increased interest in the process of developing new artifacts and in the qualities of such artifacts as seen from the designers' point of view as opposed to studying the effects of those artifacts on users. In the world of smartphone applications and websites, putting the designer first may have huge benefits on few occasions but in general, businesses aim at satisfying their customers (users), not at providing carte blanche to designers. Obviously, attempts to reconcile both points of view (e.g., [2]) may attract the interest of both camps and provide important insights to the field. Figure 1 depicts the different approaches of the two communities along the two dimensions discussed above.

#### *Publication Outlets and Editorial Boards*

One manifestations of the gap between the communities is that only few researchers publish in both CHI *and* IS-HCI journals and conferences. There is also very little overlap between the editorial boards of HCI journals and the AIS-THCI board, let alone with other AIS journals. It is difficult to tell whether this is a result of lack of interest in the other discipline, or due to institutional forces such as P&T policies. Yet, this state of affairs does not help the bridging effort. Hence, IS-HCI members who are interested in the bridging effort should engage more in publishing and in editorial positions in CHI journals and conferences.

Finally, the publication of IS-HCI, THCI, is hardly recognized in the CHI community. We need to improve its visibility and accessibility, e.g., by adopting an open access model and increasing exposure through CHI mailing lists.

#### *Research Methods*

CHI research usually does not use survey-based correlative techniques, such as SEM, which are used extensively by IS researchers (e.g., in developing and testing TAM). This means that these methods are difficult to evaluate by CHI people, are less welcome, and have lower probability of being accepted for publication and of making impact.

#### **Opportunities**

As mentioned above, one of the relative strengths of the IS community is dealing with more rigorous user-related construct development, survey-based research (including SEM-based analysis), and, in general, more emphasis on users' reactions to interactive artifacts. Given these strengths, study in the area of UX may be

a good opportunity to contribute to CHI research. Currently, this area faces considerable challenges [1]. UX, a fuzzy umbrella term, is used in the CHI community to denote the whole gamut of people's reactions to interacting with products or digital services. As opposed to Usability's emphasis of efficiency and other objective use qualities, UX is decidedly subjective. Hence, constructing the relevant user reactions and their nomological network is an important research objective, which I think can appeal to many IS-HCI researchers and correspond to their research methods.

Another opportunity for IS scholars is the study of organizational and managerial issues related to core HCI activities such as usability engineering and design, their contribution to business, their role in the development of systems, products, applications, websites, etc. Organizational and business issues are underresearched in CHI. This may be due to the relatively small presence of design and usability professionals in organizations or the lack of background in organizational and managerial research in the CHI community. However, it is my impression is that the CHI community would value quality research on those issues, and IS scholars are again well equipped for doing such research.

The field of HCI is evolving continuously, and so are the opportunities for IS-HCI researchers to identify and lead new research areas that may later become mainstream and of interest to the CHI community as well. Such areas may include the HCI aspects of new large-scale technologies (e.g., cloud computing, blockchain technology). Similarly, some IS-HCI researchers may be better familiar with the use of

machine learning and AI techniques for application in various HCI domains.

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