SIGHCI Newsletter

Volume 3 Issue 1 **Three-Year Anniversary Special Issue** **July 2004**

Inside

Words from SIGHCI New Chair: Dr. Fiona Nah

Fellow SIGHCI members,

On July 1, I took over as Chair of AIS SIGHCI from Ping Zhang. AIS SIGHCI was co-founded by Ping Zhang and me in July 2001, and I have served as the Executive Vice Chair of SIGHCI from July 2001 to June 2004. During these three years, SIGHCI has grown to a membership of more than 250. During Ping Zhang's term of office, tremendous progress has been accomplished, from identity building by making SIGHCI known to AIS members and other related SIGs, promoting HCI-related research within the MIS community, to providing HCI resources to SIGHCI members (see the 3-year report for more information). We thank SIGHCI members for their interest and support in SIGHCI-sponsored activities, and SIGHCI officers and advisors for their hard work in developing SIGHCI, which has allowed SIGHCI to become one of the largest SIGs, if not the largest SIG, within AIS.

The advisors, officers and I will continue to work hard to bring to SIGHCI members an environment that promotes, develops and advances HCI-related research and teaching by facilitating the exchange, communication and dissemination of ideas within the MIS community. We also thank you for your continuing participation and look forward to seeing you at SIGHCI-sponsored conferences and meetings such as HCI track at AMCIS and Annual Pre-ICIS HCI/MIS Workshop.

If you are not a SIGHCI member yet, be sure to join us! If you have comments or suggestions for SIGHCI, please feel free to email me (fnah@unl.edu) or any other officers of SIGHCI. To find out more about SIGHCI, please refer to the SIGHCI home page at http://melody.syr.edu/hci.

Lastly, I would like to take this opportunity to thank Ping Zhang for her outstanding service as Chair of SIGHCI during the last three years. We have witnessed the remarkable progress and growth of SIGHCI and we welcome new members to the SIG.

I look forward to serving you as AIS SIGHCI Chair and meeting you at SIGHCI-sponsored activities and events.

Sincerely,

Fiona Fui-Hoon Nah

Chair, AIS SIGHCI

3 SIGHCI Chairs:

Ping Zhang (July 2001 – June 30, 2004)
Fiona Nah (July 1, 2004 – June 30, 2005)
Scott McCoy (July 1, 2005 – June 30, 2006)

Created from pictures taken by John Mathew & Dennis Galletta

AIS SIGHCI Three-Year Report

Three-Year Report: 7/2001- 6/2004

(http://melody.syr.edu/hci)

Ping Zhang, Founding Chair
With the Assistance of SIGHCI Advisors and Officers

June 30, 2004

SIGHCI is the Special Interest Group on Human-Computer Interaction affiliated with the Association for Information Systems (AIS). Ping Zhang and Fiona Fui-Hoon Nah prepared a proposal that was approved by the AIS council in Spring 2001. SIGHCI was one of the first six SIGs announced in ISWORLD in July 2001.

1. MISSION & TOPICS

SIGHCI provides a forum for AIS members to discuss, develop, and promote a range of issues related to the history, reference disciplines, theories, practice, methodologies and techniques, new developments, and applications of the interaction between humans, information, technologies, and tasks, especially in the business, managerial, organizational, and cultural contexts.

SIGHCI's mission is twofold:

- To facilitate the exchange, development, communication, and dissemination of information among AIS members;
- To promote research related to human-computer interaction within business, managerial, and organizational contexts among AIS members and to the larger community of practitioners and scholars.

Possible topics include, but are not limited to, the following:

- The behavioral, cognitive, motivational, and affective aspects of human/technology interaction
- User task analysis and modeling
- Digital documents/genres and human information seeking behavior
- User interface design and evaluation for B2B, B2C, C2C commerce, mobile commerce, e-marketplace and supply chain management, group collaboration, negotiation and auction, enterprise systems, intranets, and extranets
- Integrated and/or innovative approaches, guidelines, and standards for analysis, design, and development of interactive devices and systems
- Design of computer interfaces for single-user or collaborative decision support, including design of standard computer interfaces, as well as design for small-screen mobile devices and pervasive computing
- Development and applications of multi-dimensional information visualizations
- Usability engineering metrics and methods for user interface assessment and evaluation
- Usability studies for end-user computing in work or non-work environment, especially in the Internet era
- Information technology acceptance and diffusion issues from cognitive, affective, motivational, cultural, and user interface design perspectives
- The impact of interfaces/information technology on attitudes, behavior, performance, perception, and productivity
- Issues in software learning and training, including perceptual, cognitive, and motivational aspects of learning
- Gender and technology
- Issues (such as accessibility) related to the elderly, young, and special needs populations
- Issues in teaching HCI courses

2. GOVERNANCE & OFFICERS

During the initial stage of establishment (July 2001 to December 2003), the chair and executive vice chair governed SIGHCI with the assistance of the other officers and under the guidance of the advisory board. The bylaws, approved by AIS council in December 2003, guide the operation of SIGHCI starting January 2004. The following is the first SIGHCI office and the appointment duration. The second (new) office follows and has been in place since July 2004.

First SIGHCI Office (July 2001-June 2004)

Advisory Board (formed 10/02)
  Izak Benbasat, UBC (10/02-6/04)
  Jane Carey, ASU, West (10/02-6/04)
  Fred Davis, U. Arkansas (10/02-6/04)
  Dennis Galletta, U. Pittsburgh (10/02-6/04)
  Sirkka Jarvenpaa, U. Texas, Austin (6/03-6/04)
  Diane Strong, WPI (10/02-6/04)
Chair
  Ping Zhang, Syracuse U. (7/01-6/04)
Executive Vice Chair & Secretary
  Fiona Fui-Hoon Nah, U. Nebraska-Lincoln (7/01-6/04)
Treasurer
  Diana Gant, Syracuse U. (1/03-1/04)
Vice Chair for Conference Planning
  Scott McCoy, College. William & Mary (7/03-6/04)
Vice Chair for Membership
  Tom Roberts, Kansas U. (8/03-6/04)
Vice Chair for Research Resources
  Richard Downing, Rockhurst U. (6/03-6/04)
Vice Chair for Teaching Resources
  Jinwoo Kim, Yonsei U. (6/03-6/04)
Newsletter Editor
  Na (Lina) Li, Syracuse U. (5/03-6/04)

Second SIGHCI Office (July 2004-June 2005)

Advisory Board
  Izak Benbasat, UBC
  Jane Carey, ASU, West
  Fred Davis, U. Arkansas
  Dennis Galletta, U. Pittsburgh
  Sirkka Jarvenpaa, U. Texas, Austin
  Diane Strong, WPI
  Jane Webster, Queen's U.
Chair
  Fiona Fui-Hoon Nah, U. Nebraska-Lincoln
Past Chair
  Ping Zhang, Syracuse U.
Chair-Elect
  Scott McCoy, College of William & Mary
Conference Planning Chair
  Mun Yi, U. South Carolina
Conference Planning Chair-Elect
  Andrea Houston, Louisiana State U.
Secretary and Treasurer
  Matt Germonprez, Case Western Reserve U.
Vice Chair for Membership
  Tom Roberts, Kansas U.
Vice Chair for Research Resources
  Richard Downing, Rockhurst U.
Vice Chair for Teaching Resources
  Jinwoo Kim, Yonsei U.
Newsletter Editor
  Na (Lina) Li, Syracuse U.

3. ACTIVITIES & ACCOMPLISHMENTS

Since its inception in July 2001, SIGHCI has undergone significant and steady development, which is made possible by the collaborative efforts of many individuals – specifically, the guidance and support from a number of senior MIS scholars, the high level of interest and support from enthusiastic SIG members, and the hard work of the organizing team. In this limited space, we report a condensed version of some activities and accomplishments (up to June 2004).

3.1. Identity and Community Building

In the proposal for establishing SIGHCI, we stated that one of the motivations for establishing the SIG on HCI within AIS was to build a community of scholars who can share common interests and appreciate each other's work. Our membership has grown rapidly over a period of less than two years (AIS opened the SIG memberships in 2002). Here is a series of snapshots of the membership data over the years: 64 by Nov. 2002, 73 by Feb. 2003, 186 by June 2003, and 292 by May 2004. Members represent academic (faculty and doctoral students) and a variety of industry and service sectors. The membership has a global impact representing over 30 countries and six continents. Our discussion listserv is open to non-members as well and has 370+ subscribers (as of June 2004) from all over the world.

3.2. Communications and Outreach

In order to promote the awareness of SIGHCI, extend the identity and reputation of SIGHCI, and to promote dialogs with the MIS community and other related external parties, four levels of communications have been rigorously designed and implemented: SIG-wide communication, promotion of HCI in the MIS community, dialog with other HCI associations, and connections with industry.

(i) Establish SIG-wide communication on areas of mutual interests including research, teaching, community building, and other related discussions. This includes providing specific services such as listserv, newsletters, and conference meetings. The rest of the report provides more details on these services.

(ii) Promote HCI as an important sub-discipline within the MIS discipline. Specific methods are conference minitracks, tracks, panels, tutorials, and workshops at AMCIS and ICIS, and theme articles and journal special issues in top ranked IS journals. Details of these events are presented later.

(iii) Dialog with other global HCI associations and communities. Efforts include (1) sending information about SIGHCI to related listservs, organizations, websites, magazines, etc., (2) helping disseminate information about other related associations to our members via SIGHCI newsletters, website, and listserv, (3) publishing special issues in journals that have high visibility to these associations (such as IJHCS – International Journal of Human Computer Studies, BIT – Behaviour & Information Technology, IJHCI – International Journal of Human Computer Interaction, whose readership includes the ACM SIGCHI community), and (4) organizing panels that involve people from closely related disciplines (e.g., the panel on "Finding Common Ground on HCI Research in Multiple Disciplines" at the 2nd pre-ICIS workshop). Two primary associations we have been targeting are ACM (mainly SIGCHI) and the American Society for Information Science and Technology (ASIS&T) which is the international society for scholars in Information Science, Library Science, and Information Studies. One of the goals of the Common Ground panel at the 2nd workshop was to establish a greater level of communication with other associations and disciplines to develop greater synergy. Panelists represented a variety of views from different disciplines and associations including Psychology, Information Science, Computer Science, SIGCHI, Information Systems in an Engineering school, and MIS in B-Schools.

(iv) Establish connection with people in the industry. A number of measures have been set to achieve this goal. (1) The "Industry Voice" section in our newsletter has published two voices in the past three newsletter issues. (2) The second panel at the 2nd annual workshop strived to bridge academia and industry research interests in HCI where academia and industry people share their views and perspectives, and explore collaboration opportunities. (3) The workshops and minitrack/tracks have benefited from the industry's perspectives by having reviewers from the industry.

3.3. SIGHCI Sponsored Conferences/Meetings

SIGHCI participates in two main conferences on a regular basis, AMCIS (Americas Conferences on Information Systems) and ICIS (International Conferences on Information Systems), both of which are organized and sponsored by AIS. The characteristics of these SIGHCI-organized meetings are consistent with those of AMCIS and ICIS. At AMCIS, the HCI track facilitates broad participation

and strives to be encouraging and inclusive; thus it has a relatively lenient acceptance rate of about 60%. At pre-ICIS workshops, we solicit rigorous research studies that are theoretically sound and methodologically solid, thus the acceptance rate is much lower. So far, these meetings included peer reviewed research papers, panel debates/discussions, tutorials, and invited speakers. Starting from 2003, the pre-ICIS HCI workshops award one best paper and one best reviewer at each meeting. Table 1 summarizes these conferences/meetings.

Table 1. Summary of Meetings	
AMCIS 2002, Dallas, TX	
Format	Minitrack (2nd largest at AMCIS)
Chairs	Zhang, Nah, S. Davis
Acceptance Rate	67%
# of Sessions	6
Special Event	1 Panel
AMCIS 2003, Tampa, FL	
Format	Minitrack (largest at AMCIS)
Chairs	Nah, Zhang
Acceptance Rate	68%
# of Sessions	10
Special Event	1 panel, 1 round table
AMCIS 2004, New York City, NY	
Format	Track with 7 minitracks
Chairs	McCoy, Nah, Zhang
Acceptance Rate	67%
# of Sessions	16
Special Event	1 tutorial, business meeting
Pre-ICIS 2002, Barcelona, Spain	
Format	Workshop (1 day)
Chair	Zhang
Program Chairs	Nah, S. Davis
Local Committee	Juristo, Ferre
Advisors	Benbasat, Carey, F. Davis, Galletta, Strong, Whinston
# PC Members	25
# Submissions	16
# Accepted	8
Acceptance Rate	50%
# Participants	42
Special Event	4 invited presentations
Pre-ICIS 2003, Seattle, WA	
Format	Workshop (2 days)
Chairs	Zhang, Lazar, McCoy
Program Chair	Nah
Local Committee	Hess, Jeff Kim
Advisors	Benbasat, F. Davis, Galletta, Jarvenpaa, Webster, Zwass

Table 1. Summary of Meetings	
# PC/reviewers	60
# Submissions	42
# Accepted	17
Acceptance Rate	40%
# Participants	80
Special Events	1 best paper award, 1 best reviewer award, 2 panels, 1 reception, executive meeting
Pre-ICIS 2004, Washington, DC	
Format	Workshop (2 days)
Chairs	McCoy, Hess
Program Chairs	Nah, Yi, Houston
Local Committee	Everard, Jones
Advisors	Benbasat, Carey, Galletta, Jarvenpaa, Zhang, Zwass
# PC/reviewers	TBA
# Submissions	TBA
# Accepted	TBA
Acceptance Rate	TBA
# Participants	TBA
Special Events	1 best paper award, 1 best reviewer award, 1 panel, 1 reception

3.4. Special Issues of Refereed Academic Journals

To date, SIGHCI has sponsored six special issues of top academic journals based on expansions of the best completed research papers from six SIGHCI sponsored meetings. We hope to make this a tradition for all SIGHCI meetings. Table 2 is a list of the journals and special issues generated since the first SIGHCI meeting in 2002.

Table 2. Summary of Journal Special Issues			
Journal	Based on	Editors	Status
IJHCS	AMCIS 2002	Zhang, Dillon	Oct. 2003
BIT	AMCIS 2003	Zhang, Nah, Preece	May-June, 2004
IJHCI	AMCIS 2004	Nah, Zhang, McCoy	In progress
JAIS	Pre-ICIS 2002	Benbasat, Jarvenpaa, Zhang	Jan. & March, 2004
JMIS	Pre-ICIS 2003	Benbasat, Zhang, Nah	In progress
JAIS	Pre-ICIS 2004		Planning

3.5. SIGHCI Panels, Round Table, Tutorial and Papers Generated

SIGHCI has organized five panels, one round table, and one

tutorial at six meetings. Table 3 summarizes the events (chairs were underlined) and corresponding papers generated (marked with *).

Table 3. Panels, Round Tables, Tutorial		
Event		**Key Participants**
Panel: "The Role of HCI Research in the MIS Discipline" *	AMCIS 2002	Zhang, Benbasat, Carey, F. Davis, Galletta, Strong
Panel: "The Role of HCI in the IS Curricula" **	AMCIS 2003	Carey, Galletta, Kim, Te'eni, Wildermuth, Zhang
Round Table for doctoral papers	AMCIS 2003	F. Davis, Guo, Sun, Zhou
Tutorial: "Integrating HCI Development into SDLC: A Methodology" ***	AMCIS 2004	Zhang, Carey, Te'eni, Tremaine
Panel: "HCI Research Transfer to Practice: Better Together"	Pre-ICIS 2003	Czerwinski, Ratner, Benbasat, Santhanam, (Todd)
Panel: "Finding Common Ground Among HCI Reference Disciplines"	Pre-ICIS 2003	Galletta, Lazar, Olson, Te'eni, Tremaine, Webster
Panel: "Publishing HCI Research in IS Journals"	Pre-ICIS 2004	Galletta, Benbasat (JAIS), Kemerer (ISR), Weber (MISQ), Zwass (JMIS)
* Published in CAIS 02; ** Published in CAIS 04; *** To be submitted to CAIS		

3.6. Establishment of the Bylaws

The Bylaws of AIS SIGHCI were developed during Fall 2003. They were approved by the SIGHCI advisory board and the SIGHCI officers on December 12, 2003, and approved by the AIS council on December 17, 2003. They became effective January 2004.

3.7. First Election of SIGHCI

Dennis Galletta and Jane Carey were appointed as the nominating/election committee by SIGHCI Chair Ping Zhang to help administer the first SIGHCI election for the positions of SIG Chair-Elect, Conference Planning Chair, and Conference Planning Chair-Elect. The election was completed in time for the new SIGHCI office to take effect on July 1, 2004. The current Vice-Chair, Fiona Nah, becomes the Chair for the new term. The Chair-Elect elected this year will be the Chair for the next term. The new office (July 1, 2004 – June 30, 2005) is listed in Section 2.

4. SERVICES TO MEMBERS & COMMUNITIES

4.1. SIGHCI Website (http://melody.syr.edu/hci)

Created on 10/15/2001 by Ping Zhang, the website is the hub for information related to SIGHCI. It is updated frequently to reflect timely information that may be of interest to SIG members, scholars and practitioners at large. One can find information about every aspect of SIGHCI, including the mission, bylaws, membership, listserv, conferences, news, photo gallery, HCI related journals, research resources, teaching resources, other HCI associations, and SIG officers and contacts.

4.2. Listserv

Established in July 2001 at Syracuse University, the list is used for SIGHCI members and other interested people to exchange information and discuss interesting issues. An archive of past postings was set up in January 2002. A policy of list use was established in December 2002 by Ping Zhang and Fiona Nah, and is available from the listserv page.

4.3. Member Directory

The AIS SIGHCI Member Directory contains members' contact information, academic record, teaching interests, research interests, on-going projects and publications. It is meant for members to get to know one another, exchange common interests in teaching and research, and to find possible collaborators. Murali Mohan Katna Munuswamy, a graduate student in Information Management major at School of Information Studies, Syracuse University, implemented the first directory under the supervision of Ping Zhang. It had been available online since 12/4/2002. A team under the supervision of VC for Membership, Tom Roberts, has developed the 2nd version of the member directory that has been running since June 2004.

4.4. Newsletters

The 1st newsletter (v1n1) was published in November 2002 and was designed by Ping Zhang. Na (Lina) Li was appointed as the newsletter editor in May 2003 and edited the 2nd newsletter (v2n1) in July 2003, the 3rd (v2n2) in November 2003, and 4th (v3n1) in July 2004. There are two newsletter issues in each year/volume, published in July (before AMCIS in August) and November (before ICIS in December) respectively. Starting from the July 2004 issue (v3n1), a new section is created to publish short essays/ opinions/research studies. These papers will be editorial reviewed. Newsletter items should be sent to the newsletter editor by early June for the July/no.1 issue and early October for the November/no.2 issue.

4.5. Photo Gallery

To preserve the excitement and memory of SIGHCI activities (including meetings and other social events), this gallery website collects and stores the true moments captured by SIGHCI members. Ping Zhang set up the gallery on 9/28/2002. and edited the photos pages for AMCIS 02, 03, and pre-ICIS 02. Traci Hess from Washington State University contributed to the organization of the gallery pages for the pre-ICIS03 workshop.

4.6. Research Resources Website

Rick Downing, VC for Research, launched the website on 7/15/2003. The website provides information on Internet resources, relevant conferences, research centers, funding sources, SIG sponsored journal issues and papers, HCI journals, and other HCI associations.

4.7. Teaching Resources Website

Jinwoo Kim, VC for Teaching, announced the website of teaching resources on 1/13/2004. It includes syllabi, cases project materials, textbooks, and other related teaching materials. It also has a search function to facilitate easy retrieval of information from the website.

5. FINANCIAL MATTERS

Table 4. Financial Data				
	Yr 1	**Yr 2**	**Yr 3**	
	7/01-4/02	**5/02-4/03**	**5/03-4/04**	**Total**
Income				
Startup Fund	4000			**4000**
Membership		1528	1920	**3448**
Workshop Regis.		3175	9315	**12490**
Sponsorship		4154	2000	**6154**
Expenses				
Newsletters		591	2246	**2837**
Workshop Cost		7071	7964	**15034**
Workshop Regis. Fee		250	315	**565**
Balance	**4000**	**945**	**2711**	**7656**

AIS office maintains all accounting information of SIGHCI. The main incomes and expenses are listed in Table 4. Over the last three years, SIGHCI has made a surplus of $7,656. We are grateful to our sponsors, especially Syracuse University School of Information Studies and University of Washington Information School.

6. LOOKING FORWARD

It has been three exciting and rewarding years since the inception of SIGHCI. On behalf of the entire SIGHCI office, I want to thank everyone who contributed to SIGHCI in various ways. SIGHCI would not be where it is now without the advisors' strong support and guidance, officers' creative and diligent work, members' enthusiastic reaction and participation, AIS office's cooperation and support, journal editors' strong beliefs in us, many individuals' candid assistance in reviewing, sponsoring, and several other capacities.

SIGHCI is well on its way to be a great intellectual forum for scholars with broad interest in human interaction with technologies. With the continuity and new blood in the new SIGHCI office and under the leadership of Fiona, I firmly believe that SIGHCI will be even better and more exciting in the future. I enthusiastically call more people to join us and play important roles in SIGHCI related activities and events.

Reflection from Members

Time to Think

Gary Schmidt, Assistant Professor, Business/MIS, Simpson College

gschmidt@mail.simpsonca.edu

I am in a hurry. Most of us are. I need to get this done so that I can move on to other pressing matters. Ironically, it is this very lack of time that provokes me to write this piece in the first place, so as to address the following question: "Do I set aside the time to really think about HCI reflectively?" I think it is important that I do. I think it is important that we all do.

HCI involves two fairly complex entities, with the more complex of the two being responsible for the behavior of both. And where there is complexity, especially when the recipe incorporates wide variance in multiple parameters, comprehension takes time.

It behooves us to set aside substantial portions of time to reflect: to process, to integrate, to decipher, to assimilate and to communicate. This means time without others breathing down our necks or standing at our doors. It means time without specific milestones or objectives that must be reached. We really do need help to make the time and to have the time to think.

This leads me to express my appreciation for the time I had at the SIGHCI meetings in Seattle. Those days in Seattle were sandwiched between hectic days of travel and speaking which gave little time for contemplation. But the pace, format, and content of our time together there were such that my mind blossomed with ideas for rumination and research.

Of course it helps to be surrounded by those who both share a passion for the subject matter and bring to the forum plenty of ideas and a solid understanding of the arena. The panel discussions in particular seemed to provide the kind of interchanges where sparks of intellectual fire began to ignite ideas and burn off a few misconceptions. Iron sharpened iron.

There were also the huddles after the sessions, where ideas and business cards were traded like shares in the NYSE. And on a personal note, I was able to put some faces to names I knew only as citations in the literature.

This was my first experience with the SIGHCI. I pray that there will be many more.

Review: The Pre-ICIS'03 Workshop

Summary: The 2nd Annual Workshop on HCI Research in MIS

Seattle, WA, Dec. 12-13, 2003

Ping Zhang, Jonathan Lazar, Scott McCoy & Fiona Fui-Hoon Nah

Workshop participants listened to panelist Mary Czerwinski's presentation – Picture taken by Ping Zhan

The Second Annual Workshop on HCI Research in MIS was well attended and it extends the success of the first workshop held in Barcelona last year. Eighty people participated in the 2-day workshop. The number of paper submissions represents a 163% increase over last year (42 vs. 16); the number of accepted peer-reviewed presentations increased by 113% (17 vs. 8); the size of the Program Committee (PC) increased by 108% (52 vs. 25, plus this year, we have a larger number of additional reviewers). The acceptance rate has decreased from last year's 50% to 40% this year, despite the fact that we received much higher quality submissions overall this year. Last year, six papers were invited for consideration in the *Journal of the Association for Information Systems (JAIS)* special theme on HCI in MIS. This year, nine papers were selected for consideration in the *Journal of Management Information Systems (JMIS)* special section devoted to the workshop. In addition, there were several new items at this year's workshop: two high profile panels, an evening reception, a best paper award, and a best reviewer award. There were lots of stimulating discussions and synergy developed during the workshop. It was a truly fun event! Please visit the photo gallery (http://melody.syr.edu/hci/sig_photos) for the various snapshots.

The two panels raised very intriguing and important issues concerning research in HCI. The themes for the two panels were "HCI Research Transfer to Practice: Better Together" and "Finding Common Ground Among HCI Reference Disciplines." In the first panel on transferring HCI research to practice, problems were raised from both the academic and practice communities and solutions were proposed to bridge the gaps between them. In the second panel on finding common ground, each panelist first presented their views of HCI research in their respective fields and then proposed a common ground to bridge HCI research between their fields and MIS.

The six sessions of research paper presentations covered topics from interface design and evaluation to human factors issues in mobile technology and systems analysis and design. Of the 17 papers presented, 9 papers were recommended as a best paper by at least one reviewer, and the top 4 papers were nominated as candidates for the best paper. Each presentation stimulated much discussion that benefited not only the authors but also the participants who showed tremendous interest and enthusiasm in the presentations.

The best paper award was determined by a committee comprising Dinesh Batra, Jane Carey, Vance Wilson, Mun Yi and Scott McCoy, and was given to the paper "*Development of a Framework for Trust in Mobile Commerce*," co-authored by Keng Siau, Hong Sheng and Fiona Nah, all from the University of Nebraska-Lincoln. The best reviewer was selected by Fiona Nah and Ping Zhang, and the award went to Mun Yi from University of South Carolina. The reception was well attended and provided the opportunity for participants to mingle in a relaxed atmosphere.

Workshop participants enjoyed the reception following the conclusion of the workshop – Pictures taken by Ping Zhang

We would like to thank the following individuals and parties who have contributed to the success of the workshop in their unique ways:

- Dean Ray von Dran of the School of Information Studies at Syracuse University and Dean Michael Eisenberg of the Information School from The University of Washington generously sponsored and participated in the workshop.
- Members of the Workshop Advisory Committee, Izak Benbasat, Fred Davis, Dennis Galletta, Sirkka Jarvenpaa, Jane Webster, and Vladimir Zwass, provided support and suggestions for the workshop.
- Vladimir Zwass, editor-in-chief of Journal of Management Information Systems (JMIS), provided his support and confidence in us by fast tracking the best papers from the workshop to form a special section of the JMIS.
- Dennis Galletta worked very closely with the organizing team on many aspects of the workshop.
- The fifty-two program committee members and eight additional reviewers (Stefan Holmlid, Geoffrey Hubona, Jeroen Kraaijenbrink, Liping Liu, Hong Sheng, Xin Tan, Yuhong Tian, and Wei Zhang) played an important role in quality control of the peer review process as well as provided constructive comments and suggestions on all the submissions. Their outstanding review efforts have truly aided the advancement of HCI research in MIS. Of the 42 submissions, two papers received four reviews, 38 papers received three reviews, and two papers received two reviews. We have received several email requests from authors (including the authors of rejected papers) to thank the reviewers for their quality reviews.
- The local organizing committee members, Traci Hess and Jeff Kim, managed the video equipment and videotaping, photo taking, lunch information, and some logistics of the workshop.
- The best paper selection committee, Dinesh Batra, Jane Carey, Scott McCoy, Vance Wilson and Mun Yi, worked diligently to assess and evaluate the best papers submitted to the workshop.
- The student volunteers, John Mathew, Charles Naumer, Hong Sheng, Suzi Soroczak, Olga Yatsenko and Meliha Yetisgen-Yildiz, helped out with various aspects at the workshop site.
- The AIS headquarters office handled the registration for the workshop and provided timely information on registrations. Special thanks go to Samantha Spears and Taliah Givens.
- The ICIS meeting management consultant, Kim Forbes, worked diligently and efficiently to take care of the facility needs and arrangement, making this year's meeting planning so much easier.
- And, finally, the participants who demonstrate their confidence and support in our effort and results, and their tremendous interest and enthusiasm in HCI research in MIS.

This workshop represents the importance of HCI research in the MIS discipline, highlighted by the enthusiastic support and efforts, excellent insights, long hours of hard work, and great cooperation and collaboration among so many people. With the exceptional support of the many individuals involved and the significant level of interest exhibited by the MIS community in HCI research, we have put together a high quality program and are glad that the workshop participants were able to enjoy the results of such great collaborative efforts. We hope that these efforts have and will continue to influence research, teaching, and actual practice in industry. We look forward to your continued interest, support, contribution, and involvement in future AIS SIGHCI organized meetings!

Sponsors:

Raymond von Dran, Dean of the School of Information Studies at Syracuse University

Michael Eisenberg, Dean of the Information School at the University of Washington

Picture taken by Dennis Galletta

From left to right:

Izak Benbasat, Julie Ratner, Ping Zhang, Radhika Santhanam, & Mary Czerwinski

Picture taken by Dennis Galletta

Back: Jonathan Lazar, Dennis Galletta, Dov Te'eni

Front: Judy Olson, Marilyn Tremaine, & Jane Webster

Taken by Andrea Everard (using Dennis Galletta's camera)

Keng Siau, Hong Sheng and Fiona Nah received the Best Paper Award for their paper - Development of a Framework for Trust in Mobile Commerce

Picture taken by Traci Hess

Fiona Fui-Hoon Nah, Workshop Program Chair, presented the best reviewer award to Mun Yi.

Picture taken by Traci Hess

The 3rd Annual Pre-ICIS Workshop on HCI Research in MIS

December 10-11, 2004 in Washington, D.C.

Workshop Co-Chairs:
Scott McCoy, College of William and Mary (scott.mccoy@business.wm.edu)
Traci Hess, Washington State University (thess@cbe.wsu.edu)

The objective of the workshop is to provide an open and constructive discussion forum of important HCI research in Information Systems that addresses the ways humans interact with information, technologies, and tasks – especially in the business, managerial, organizational, social and/or cultural contexts. HCI in MIS is concerned with the macro level (versus the micro level) of Human-Computer Interaction analysis. The purpose of the workshop is to identify important HCI/MIS problems and innovative research approaches.

A panel on "Publishing HCI Research in MIS Journals":

This year's workshop will include a panel of editor-in-chiefs and senior editors from premier MIS journals, who will discuss the unique issues associated with publishing HCI research in these journals. The panelists are:

Izak Benbasat, Senior Editor, JAIS
Chris Kemerer, Editor-In-Chief, ISR
Ron Weber, Editor-In-Chief, MIS Quarterly
Vladimir Zwass, Editor-In-Chief, JMIS
Dennis Galletta, Moderator

Topics:

The organizing committee is looking for interesting and novel research ideas as well as studies that address important HCI problems in today's organizations by drawing upon theories and/or methodologies from all relevant reference disciplines. Possible topics include, but are not limited to, the following:

- The perceptual, behavioral, cognitive, motivational, and affective/emotional aspects of human and their interaction with IT
- User task analysis and modeling
- Digital documents/genres and human information seeking behavior
- Informed user interface design and evaluation for all types of business and organizational applications such as:
  - B2B, B2C, C2C E-Commerce
  - E-marketplace and supply chain management
  - Group collaboration
  - Negotiation and auction
  - Enterprise systems
  - Intranets
  - Extranets
  - Small-screen mobile devices and pervasive computing
  - Multi-dimensional information visualizations
- Integrated or innovative approaches and guidelines for analysis, design, and development of interactive devices and systems
- Usability engineering, metrics, and methods for user interface assessment
- Evaluation of end-user computing in work or non-work environment
- Information technology acceptance and diffusion issues from cognitive, behavioral, affective, motivational, cultural, and user interface design perspectives
- The impact of interfaces/information technology on attitudes, behavior, performance, perception, and productivity
- Issues in software learning and training
- Gender and technology
- Issues related to the elderly, the young and special needs populations
- Other human factors issues related to human interaction with technologies

Submissions:

Authors are encouraged to submit high quality research papers (completed or research in progress papers) that are original. The submissions should not be currently under review elsewhere and the papers should have not appeared elsewhere. Full papers are preferred (with a limit of 5,000 words including references), although extended abstracts of at least 2,500 words (must include references) will also be considered. Submissions will undergo a double-blind review process. Manuscripts should be in MS Word format and be submitted as email attachments to the workshop program co-chairs: Fiona Nah at fnah@unl.edu and copied to Mun Yi (myi@moore.sc.edu) and Andrea Houston (ahoust2@lsu.edu), with the subject heading "HCI/MIS workshop submission."

Publication:

Extended abstracts of all accepted papers will be published in the workshop proceedings. This inclusion should not affect full versions of the papers to be published later in journals.

Special Issue of JAIS:

Dr. Sirkka Jarvenpaa, editor-in-chief of Journal of the Association for Information Systems (JAIS) (http://jais.isworld.org), has agreed to fast track successful expansions of the best completed research papers from the workshop for a special issue devoted to the workshop. The special issue is to be published in 2005. It will be co-edited by senior editors from JAIS and the SIGHCI workshop organizing committee.

Key Dates:

Submissions due: September 3, 2004.
Acceptance Notification: October 22, 2004
Extended Abstracts Due for Proceedings: November 5, 2004
Workshop: Friday and Saturday, December 10-11, 2004

For more details please visit
http://business.wm.edu/scott.mccoy/hci.html.

CFP: IEEE Transactions on Professional Communication Special Issue

Special issue of IEEE Transactions on Professional Communication:
Communication Issues in User-Database Interaction

Special Issue Editor:
Hock Chuan Chan, National University of Singapore
Keng Siau, University of Nebraska-Lincoln

User-database interaction is a special case of user-computer interaction. As the name implies, user-database interaction focuses on the communication issues between users and database systems, and the communication process between users and database designers during database design and development. Specifically, user-database interaction is the study of how users, who are interested in business needs, can communicate and interact with database systems and designers, who are interested in technical specifications. The ability to interact effectively and efficiently will enhance the productive usage of database systems, which are vital components of any organizational information systems. Effective communication between users and database designers will help to reduce the maintenance costs and the number of instances of project failures.

Despite its importance, current user-database interaction is still far from ideal. Better understandings of the communication problems between users and database systems and designers can help us select and design better data models and query languages. With the emergence of Internet and the exponential increase in the number of novice users surfing the Internet, designing effective and efficient user-database interaction for web databases is a burning and imperative issue.

This special issue focuses on addressing the communication issues in user-database interaction and the philosophical perspectives of database modeling. For example, how to identify communication barriers and issues between user and database systems? How can we use communication theories and models to help us design and evaluate effective database query languages? How can we design better database models to facilitate the communication between end users and database designers? What are the constructs in database modeling techniques that facilitate or inhibit communication? What are the communication barriers between end users and database designers? Do experts and novice database users face different communication problems? What are the learning difficulties for database users? How do we assess "naturalness" of database query languages and database models?

Topics of interest in this special issue include, but are not limited to, the following:

- application of communication theories and models to user-database interaction
- integration of business and technical communications in data models and queries
- empirical studies on the communication processes in the design of database models and query languages
- evaluation of the expressiveness of data models and query interfaces, particularly from the communications perspectives
- designing effective query languages for the Web
- empirical studies on query comprehension and specification
- studies of user characteristics and interaction with databases
- practical reports of user experiences

Submission deadline: October 1, 2004

Please see journal web page for submission details: http://www.ieeepcs.org/activities_publications_transactions_call.php#commissues

Conference Preview: AMCIS'04

HCI Track at AMCIS, New York City, NY, Aug. 5-8, 2004

This year, SIGHCI will host a track on HCI Studies in MIS. Inside this track, there are seven minitracks and one tutorial. The first 6 mini-tracks focus on specific aspects of HCI, and the 7th is for papers that do not fit well into any of the first 6 minitracks but are within the broad HCI coverage. These minitracks and the tutorial are listed below:

1. *Accessibility;*
2. *Personalization Systems;*
3. *Pervasive Information Systems;*
4. *IT Implementation and Use: Going Beyond Intentions and Perception;*
5. *Information Retrieval and Human Language Technologies;*
6. *Emergency Response Information Systems (Co-sponsored by SIGDSS);*
7. *Human-Computer Interaction Studies in MIS.*
8. *Tutorial: Integrating HCI in SDLC* by Zhang, Carey, Te'eni, & Tremaine

For more details please visit http://melody.syr.edu/hci/amcis04/index.cgi.

In Progress: SIGHCI Sponsored Journal Special Issues

1. JMIS Special Section based on the 2nd Pre-ICIS HCI/MIS Workshop Papers

Among the seventeen accepted papers in the 2nd pre-ICIS HCI/MIS Workshop, nine of the complete research papers were invited for expansion and submission to the special section of the *Journal of Management Information Systems*, a top ranked MIS journal. The expansions of these papers are going through a rigorous review process that is consistent with JMIS' process and standard. The special section is co-edited by Izak Benbasat, Ping Zhang, and Fiona Nah. It is to be published in 2004.

2. IJHCI Special Issue based on AMCIS'04 HCI Track Papers

A special issue of *International Journal of Human-Computer Interaction*, a high quality refereed HCI journal, will publish the expansions of the best papers from the HCI track at AMCIS'04. These best papers have been invited and the expansions are due shortly after the AMCIS'04 conference. The guest editors for this special issue are Fiona Nah, Ping Zhang, and Scott McCoy.

For more details please visit http://melody.syr.edu/hci/amcis04/index.cgi.

Completed: SIGHCI Sponsored Journal Special Issues

JAIS Special Theme based on the 1st HCI/MIS Workshop Papers

January and March 2004

Special Senior Editors:
Sirkka Jarvenpaa, Izak Benbasat, & Ping Zhang

The special theme of *Journal of Association for Information Systems* was published in 2004. The two papers in this special theme are expansions of the best papers from the First Annual Workshop on HCI Research in MIS, held in Barcelona, Spain, December 2002. Papers in the JAIS Special Theme are:

1. *Web Site Delays: How Tolerant are Users?*
   Dennis F. Galletta, University of Pittsburgh
   Raymond Henry, Clemson University
   Scott McCoy, College of William & Mary
   Peter Polak, University of Miami

2. *Knowledge-based Support in a Group Decision Making Context: An Expert-Novice Comparison*
   Fiona Fui-Hoon Nah, University of Nebraska, Lincoln
   Izak Benbasat, University of British Columbia

Abstracts of these papers are available at http://melody.syr.edu/hci/jais04/index.cgi.

BIT Special Issue Based on AMCIS'03 HCI Minitrack papers

Vol.23, No.3, May-June 2004

Guest Editors: Ping Zhang, Fiona Nah, & Jenny Preece

Behaviour & Information Technology special issue on HCI in MIS was published in 2004. Papers in this BIT special issue are:

1. *HCI in MIS, Editorial Introduction*
   Ping Zhang, Syracuse University
   Fiona Fui-Hoon Nah, University of Nebraska, Lincoln
   Jenny Preece, University of Maryland, Baltimore County

2. *Size and Structure Matter to Mobile Users: An Empirical Study of the Effects of Screen Size, Information Structure, and Task Complexity on User Activities with Standard Web Phones*
   Minhee Chae and Jinwoo Kim, Human Computer Interaction Lab, Yonsei University, Seoul Korea

3. *The Impact of Web Page Text-Background Color Combinations on Readability, Retention, Aesthetics, and Behavioral Intention*
   Richard H. Hall, University of Missouri - Rolla
   Patrick Hanna, Matrikon Corporation

4. *A Study on Tolerable Waiting Time: How Long Are Web Users Willing to Wait?*
   Fiona Fui-Hoon Nah, University of Nebraska, Lincoln

Abstracts of these papers are available at http://melody.syr.edu/hci/bit04/index.cgi.

Call for Essays for the SIGHCI Newsletter

SIGHCI newsletter has a new section: Essays and Opinions. Articles in the length of 800 to 2700 words on any aspect of HCI studies or teaching are welcome. These articles will be editorial reviewed. For more details on submitting articles, please refer to the AIS SIGHCI Three-Year Report Section 4.4 on page 5, or contact the newsletter editor Na (Lina) Li at nli@syr.edu.

Teaching HCI

Teaching HCI within the Context of Information and Library Science

Barbara M. Wildemuth
School of Information and Library Science, University of North Carolina at Chapel Hill
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Human-computer interaction is a critical element within many curricula in information and library science. The graduate curriculum at the School of Information and Library Science (SILS) at the University of North Carolina at Chapel Hill (UNC-CH) is one example. After the students have taken a prerequisite course introducing them to systems analysis (using an approach based on contextual inquiry and design), they may take the SILS course in User Interface Design (the syllabus for the most recent offering is available at <http://www.ils.unc.edu/classes/inls257_sp04/257-syll.S04.htm>). This course is focused on individual student design projects. It first considers humans as users of information systems (requiring the students to analyze the characteristics of their project's target audience, in relation to the design), and the task to be supported by the system (requiring the students to analyze the task in detail). The students then develop a design and instantiate their design decisions in a prototype. The course then moves to a consideration of evaluation. Students conduct usability inspections of each other's prototypes and also design a usability test plan for their own prototypes.

One of the goals of the User Interface Design is consciousness-raising. It is intended that students become aware that much of their professional life is devoted to design of artifacts of various kinds, chief among them being information systems. To help achieve this curricular goal, each class session begins with 5-10 minutes of "show and tell". Students are asked to bring in examples of good and/or bad design of an artifact. Examples that have appeared in recent years have varied from Web sites to wine bottle openers to TV remote controllers, from databases to chopsticks to umbrellas. In each case, the student presents a critique of the design, trying to identify the design tradeoffs made by the original designer and alternatives that might have improved the overall design. This exercise, regularly repeated, has the potential to open students' eyes, making them look at the "artificial" world more critically.

After completing the User Interface Design course, students may take the HCI Seminar (the most recent syllabus is available at <http://ils.unc.edu/%7Emarch/courses/357_f03/syllabus.html>). This course varies in focus from semester to semester, usually engaging the entire class in design and evaluation of some type of user interface that supports information seeking and information use. The fall 2003 offering of this course focused on the nature of interactivity, browsing and interactive search, learning and explanation, and digital libraries, with particular emphasis on video retrieval and use.

During both semesters, design is closely linked to evaluation (including traditional methods for usability testing and more advanced data collection techniques such as eye tracking). The fact that interface design is an iterative process, with evaluation results in each iteration influencing the design during the next iteration, is an important aspect of each course.

These two HCI courses fit into SILS' curriculum as part of a design emphasis in a 48-credit master's degree program. All information science students are required to take the introductory systems analysis course. They may then take one or two of the HCI courses. They may also take one or more in a series of database design courses. These two design tracks allow students to specialize on one or the other, or allow them to develop some depth of knowledge in each.

In conclusion, I hope that you will feel free to examine the syllabi for the two SILS HCI courses and use them to further develop your own curriculum and teaching in the field of HCI. Questions about these courses may be addressed to Barbara Wildemuth at wildem@ils.unc.edu.

News about SIGHCI Members

Barbara Wildemuth Named McColl Professor at SILS UNC – Chapel Hill

Dr. Barbara Wildemuth, professor and associate dean for undergraduate programs at the School of Information and Library Science, has been named the Frances Carroll McColl Professor for 2004-2006 at UNC-Chapel Hill School of Information and Library Science (SILS).

Every two years, SILS selects a full-time tenured faculty member who has demonstrated significant contributions in the areas of research, teaching and service.

Wildemuth's research focuses on information-seeking behaviors and information use, design and evaluation of information systems and adoption and use of information technologies.

For more details please visit http://www.ils.unc.edu/ils/releases/RELEASE04_mccollprofessor.html.

Well He's Done It Again

Richard F. Bellaver, Ball State University

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The fourth Edition of Ben Shneiderman's, *Designing the User Interface Strategies for Effective Human-Computer Interaction (DTUI)*, this time with co-author Catherine Plaisant, has just been published. Both authors are faculty members and Founding Director and Associate Director respectively of the Human-Computer Interaction Laboratory, at the University of Maryland at College Park. I don't imagine anyone in the usability field has missed Ben's earlier editions. I have used one for my graduate Human Factors class for 15 years. Catherine adds a very extensive publishing experience lately in the information visualization field.

Before I get into the details of the book let's have a reality check on the concepts of Human-Computer Interface. The premise of this book is that designers and developers need to understand and incorporate the principles of a user centered design into their hardware and software products. There are many definitions of human centered design but let's consider an old one. Each chapter of this edition is led by a quotation. The Introduction is from T. H. Nelson taken from The Home Computer Revolution, written back in 1977.

> "Designing an object to be simple and clear takes at least twice as long as the usual way. It requires concentration at the outset on how a clear and simple system would work, followed by the steps required to make it come out that way – steps which are often much harder and more complex than the ordinary ones. It also requires relentless pursuit of that simplicity even when obstacles appear which would seem to stand in the way of that simplicity."

I think Nelson's time estimate is a little extreme, but his point about designing things to be "simple and clear" is the reason for this book. It will help the reader concentrate on the needs of the user, provide some steps to lead to meeting those needs, and to explain some methodologies to determine if the needs have been met. Dr. Shneiderman spells out in a different way in *Leonardo's Laptop* that future design must be: Usable – reliable & comprehensible, Universal – for diverse users & varied equipment, Useful – in harmony with human needs. To add to Usable he wants what I think we all want – fewer errors and explainable error conditions resulting in less frustration for users. Universal technically means supporting a broad range of hardware, software, and network access. By Universal Dr. Shneiderman thinks designers need to accommodate users with different skills, knowledge, age, gender, disabilities, disabling conditions (mobility, injury, noise, sunlight), and even literacy, culture, and income. He even thinks designers should address user knowledge by bridging the gap between what users know and what they need to know.

DTUI has been one of the leading textbooks in the field of human-computer interaction since it first appeared in 1987. The book lays the groundwork examining the whole field with guidelines, principles and theories. It then goes from developmental processes, through interaction styles, and ends with design issues. There is much detail in the Interaction Styles area nicely explained with web site examples. Since this book has been a seminal text, I will give an idea of the basic concepts, but aim most of my remarks to the areas of update. Overall this edition is "slicker" and reads easier than the previous. Color is used much more through out the book instead of just in grouped locations. The colored pictures are now located closer to the meaningful text. As in the past the reference section, located at the end of each chapter is voluminous and up to date.

The thing I have always liked best about this book is its practical nature. I admit I use it as a textbook, but I teach a very hands-on course. Also with each chapter is a "Practitioner's Summary" and a "Researcher's Agenda".   The Summary emphasizes the main points of the chapter, but gives additional advice on how to make the concepts practicable. The Agenda points to where more work needs to be done, suggesting possible exercises for students.

Not surprising with the new author, although it is one of Ben's favorites, the "Information and Visualization" chapter is about ten pages longer in this edition and one of the best for colored pictures and diagrams. Length however, is not a determinant of change. The "Direct Manipulation (Ben gets the credit for inventing that term) and Virtual Environments" chapter isn't much longer, but contains additional material on 3D Interfaces and Teleoperation.   Even plain old usability testing has been updated to include a couple of new techniques including the web oriented Remote Usability Testing.

It is nice to have a place for authors to be able to go on record for truth and justice. This book has that under "Societal and Individual Impact of User Interfaces." The new wording tends to be more forward thinking than in the past.   In fact, if you are considering buying this book I recommend you start with this final chapter. It gives the reasons for reading the rest of the book.

This new edition is a valuable addition to the study of Human Computer Interface. It contains the latest work in the field and links it to the classical studies of the past. The logical organization linking text, diagrams, pictures and references aids the reader and an instructor in understand and presenting the material. It is a good update to the classical literature of the Human-Computer Interface field.

Richard F. Bellaver is a Professor and Associate Director of the Center for Information and Communication Sciences at Ball State University. He is also Vice President of the Usability Professionals' Association.

Technology Transfer of User Interface Research

Delia Grenville, Ph.D.
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Over the past few years, I have worked on a user interface (UI) research project that most people would term "high risk." The project required us to predict the hardware, software, and telecommunications market three years out and plan a research project based on our predictions. That's risky business! The good news is that the research was successfully completed. What was tricky, however, was that we did not have a clear way to transfer our UI research to the development organizations. Believe it or not, our market predictions, in some cases, should have been on a much lengthier time horizon. Looking back, there were a number of strategies that we implemented correctly that positioned us for incremental UI technology transfer.

Incremental technology transfer is not the "dream scenario" that most research teams have in mind when researchers propose and develop a project. What we hope is that the research will be innovative, timely, and completely absorbed by a target development organization. But, in fact, the reality may be that the research project can be divided and repackaged for the appropriate level of consumption by the development teams.

So you may ask: *How did we divide the research so it can be repackaged for consumption?* And, *How did we know that the development teams were ready for new UI research?* In a high-risk project like mine, I took a multi-strategy approach to minimize risk and maximize probability of future uptake. This involved grouping a number of technologies together into a single research test environment. What was easy to recognize was that it would be a challenge to group future technologies together. What was more difficult to predict was that it would also be a challenge to know when and for whom to decouple these strategies for technology transfer. The challenge on the research side is to remember that the technologies were integrated for futuristic prototyping; but, the level of integration needed for prototyping may not reflect business needs, market needs, or real-world technology capabilities.

Describing how any research can be divided and repackaged for consumption is actually a topic of lengthier discussion. However, let's assume that the research product is ready to deliver in the right order of magnitude to be easily digested by the development team. Then the question is: *How do we know the development team is ready to accept the idea and integrate it?*

The Energy Research Center at the University of Kansas (Schoeling, 1993) described technology transfer as a three-level process consisting of:

- **Technology Development** based on research by a scientist in the laboratory or field.
- **Technology Acceptance** from a technology user, such as, a development team in the UI research scenario. The development team not only understands and accepts the technology but also has the resources to consume it.
- **Technology Application** into a business process so that the integrated research product is brought to the marketplace and increases the organization's profit.

Schoeling also identified requirements and impediments to technology transfer. In his large organization, he recommended an entire team to manage the technology transfer process, i.e. maximize successful transfer and minimize barrier and impediments. Based on my experience, metrics and management of the technology development and technology application phases of the process are rather well developed. Organizations tend to be strong at developing metrics and goals that are well contained within their own organizational boundaries. The management methods and metrics for the technology acceptance phase of the process, in my experience, are far less developed. Technology acceptance tends to be a bridge phase, heavy in communication, and 'handshakes' between teams that often have differing agendas and timelines (Schoeling, 1993).

I think we can help teams on both the research and the development sides of the house by developing metrics for the technology acceptance phase that define levels of success with more granularity. Since, I was unable to find details about how to measure success within the technology acceptance phase, I decided to take my own cut at it. Much like the software development testing maturity models (Paulke et al, 1993; Krause, 1994), the level of success during the technology acceptance phase can depend on the readiness of the development team to accept a UI research product and integrate the product into their software development cycle.

Thus far, I have noted 4 levels of acceptance:

- *Level 0*: *No technology transfer to a development team. The research team consumes the research product internally.* This happens when the research idea does not have a home in any external development organization. I have noted that although these research products tend to "sit-on-the-shelf" or never find themselves within product offerings that go to the marketplace, we still need to address them at a technology-transfer level. Often, these ideas go unmerited because all of the processes within the technology transfer cycle occur within the organizational boundaries of the research team. You might ask, why should these ideas be considered in the technology acceptance cycle? Well, quite frankly, because they are good for the development of the research team. They are often needed to deepen research knowledge. They allow the research team to continue to energize and to grow. They also impact profitability in the organization by providing fodder for research products that will eventually go to market.

- *Level 1: The development team explores the research product and uses the idea to change existing technology.* In this scenario, the technology application tends to be more on the scale of small changes or tweaking based on the research product. This type of technology transfer is often regarded as "small potatoes." Although the research product finds a place within a development organization, these types of ideas are successfully integrated because they are "easy" in terms of their resource needs in the development organization. The fact that these research products make the user's experience of the product better is often an added bonus compared to the ease of implementation from the development team's perspective.

- *Level 2: The development team explores the research product and uses the idea in an upcoming product plan. The development team does not need the research team to implement the idea.* Like all of these levels of acceptance, negotiating across the boundaries of the research and accepting team's organizations is the least predictable part of the process. In some cases, the development team independent of any 'pitching' from the research team can actually discover the research products by searching intranet web sites. Or, in other cases, the research product may come to fruition when the development team can easily integrate it into the early requirements phase of their product development cycle. All in all, once the communication and negotiation takes place for the technology to be accepted, the development team has the resources to take total ownership of further development and implementation of the research product.

- *Level 3: The development team explores the research product and decides to implement the technology in a product for market. The development team engages the research team throughout the product's implementation.* Research products transferred at this level of acceptance are as Schoeling (1993) described "like making a fishing pole better while fishing". Acceptance at this level often has as much to do with the distribution of resources and expertise across the research and development teams, as the importance of the product itself. Whether the need for collaboration is market-driven or product-driven, this type of technology transfer often allows the research team to grow further as they learn how to tailor the research product for the development organization. More so than at other levels of acceptance, this level represents the place where users' needs and platform limitations are topics of regular debate. Both the research team and the development team frequently discuss how to bridge any gaps.

Technology acceptance is a critical phase of the overall technology transfer cycle. Both research and development teams must communicate across organizational boundaries to maximize success, minimize barriers, identify requirements, and reduce impediments. In UI research, technology acceptance may be even more critical because the acceptance phase must marry well with the software development cycle. Success in this arena requires openness from development teams to sometimes accept UI research products at non-traditional points in the development cycle. In the same vein, UI research teams also need to plan well so that their products can be inserted easily into product development at various phases of the software development cycle.

If done well, technology acceptance is one of the areas of organizational process that albeit fraught with hard work, can be easily taken for granted as all eyes are focused on the prize of technology application. I believe that both research and development teams have the opportunity to grow in their abilities to work well with each other, if we can more clearly articulate the technology acceptance phase with useful and representative metrics.

References

1. Paulk, M. C., Curtis, B., Chrissis, M. B., and Weber, C. (1993). Capability Maturity Model for Software, Version 1.1, Software Engineering Institute, CMU/SEI-93-TR-24, DTIC Number ADA263403, Feb. 1993.
2. Krause, M. H. (1994). A Maturity Model for Automated Software Testing, Medical Device and Diagnostic Industry Magazine, Dec. 1994, p. 103.
3. Schoeling, L.G. (1993). A Model Technology Transfer Program for Independent Operators; Kansas Technology Transfer Model. Technology Transfer Series 93-10. DOE Grant. DE-FG22-92BC14856.

Helpful URLs and Listserv Addresses

AIS website: http://aisnet.org

ISWORLD website: http://www.isworld.org/

ISWORLD listserv webpage (how to subscribe to the list): http://disc-nt.cba.uh.edu/isworldlist/index.htm

ISWORLD listserv: isworld@lyris.isworld.org

AIS SIGHCI website: http://melody.syr.edu/hci

AIS SIGHCI listserv webpage (how to subscribe to the list): http://melody.syr.edu/hci/sig_listserv.cgi

AIS SIGHCI listserv: ais_hci@listserv.syr.edu

AIS SIGHCI Research Resources Site: http://cte.rockhurst.edu/sighci/

AIS SIGHCI Teaching Resources Site: http://ysb.yonsei.ac.kr/aishci/

AIS SIGHCI Membership Database: www2.business.ku.edu/sighci

AIS SIGHCI Newsletter: http://melody.syr.edu/hci/newsletters/

AIS SIGHCI Photo Gallery: http://melody.syr.edu/hci/sig_photos/

Special Issue of Interests

Computers in Human Behavior

Special Issue on the Compass of Human-Computer Interaction
Volume 20, Issue 2, 2004

Editor: Henry H. Emurian, Univ. of Maryland, Baltimore County

1. *Information Systems: An Interdisciplinary Perspective*
Henry H. Emurian, Univ. of Maryland, Baltimore County (UMBC)

2. *An Assessment of Human-Computer Interaction Research in Management Information Systems: Topics and Methods*
Ping Zhang & Na Li, Syracuse University

3. *Twenty Guidelines for the Design of Web-Based Interfaces with Consistent Language*
A. Ant Ozok, UMBC
Gavriel Salvendy, Purdue University

4. *Task Management Support in Information Seeking: A Case for Search Histories*
Anita Komlodi, UMBC

5. *Identifying Expertise Markers in Routine Work Artifacts: Exploring Micronote Taking Behavior*
Wayne G. Lutters, UMBC

6. *The Top 5 Reasons for Lurking: Improving Community Experiences for Everyone*
Jennifer Preece, UMBC
Blair Nonnecke, University of Guelph
Dorine Andrews, University of Baltimore

7. *Fostering Constructive Cognitive and Metacognitive Activity in Computer-Based Complex Task Training Environments*
Haydee M. Cuevas, Stephen M. Fiore, Clint A. Bowers, & Eduardo Salas, University of Central Florida

8. *Self-Service Systems: New Methodology Reveals Customer Real-Time Actions During Merger*
Regina Colonia-Willner, Practical Intelligence, Work®, Inc

9. *Improving Web Accessibility: A Study of Webmaster Perceptions*
Jonathan Lazar, Alfreda Dudley-Sponaugle, & Kisha-Dawn Greenidge, Towson University

10. *Interaction in Collaborative Computer-Supported Diagram Development*
Jeffrey D. Campbell, UMBC

11. *Distributed Interactive Communications in Simulated Space-Dwelling Groups*
Joseph.V. Brady[1,3], Robert.D. Hienz[1,3], Steven.R. Hursh[1,2,3], Leonard.C. Ragusa[2], Charles.O. Rouse[3], & Eric.D. Gasior[3]
[1]The Johns Hopkins University, [2]Science Applications International Corporation, and [3]Institutes for Behavior Resources

12. *Commentary: Revisiting Information Systems as an Interdisciplinary Science*
Deborah A. Boehm-Davis, George Mason University

Announcements

SIGHCI Teaching Resources Site Launched

Jinwoo Kim, SIGHCI Vice Chair for Teaching Resources
jinwoo@yonsei.ac.kr, http://hci.yonsei.ac.kr

I am glad to announce that the homepage for Teaching Resources at AIS SIGHCI is now up and running. You can access the Resources via the SIGHCI homepage (http://melody.syr.edu/hci), or directly at http://ysb.yonsei.ac.kr/aishci/.

I appreciate the comments provided by AIS SIGHCI members since the initial announcement about this site. Please let me (jinwoo@yonsei.ac.kr) know if you have additional information on teaching resources of HCI so that we can update the Resources.

SIGHCI Membership New Database Created

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SIGHCI has a new membership database website that contains names of all the current members of SIGHCI. The website is located at www2.business.ku.edu/sighci, which can also be accessed via the SIGHCI homepage (http://melody.syr.edu/hci).

The website will be updated on a monthly basis. With the SIG's rapid growth, this will be an invaluable tool for members to contact others. Please let us know if you want additional information on the site. We are currently using only information concerning SIG membership provided by AIS. Additional fields and search capabilities can be easily added.

Acknowledgement