

Association for Information Systems

# 26<sup>th</sup> International Conference on Information Systems

ICIS 2005

“Forever New Frontiers”

December 11 – 14, 2005  
Las Vegas, Nevada, USA

Volume 1 of 2

Printed from e-media with permission by:

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571  
[www.proceedings.com](http://www.proceedings.com)

ISBN: 978-1-60423-523-4

Some format issues inherent in the e-media version may also appear in this print version.



## **TABLE OF CONTENTS**

### **VOLUME 1**

#### ***BREAKTHROUGH IDEAS IN INFORMATION TECHNOLOGY***

<b>Understanding the Role and Transformation of the Information Technology Function in Organizations .....</b>	1
<i>Manon G. Guillemette, Guy Pare</i>	
<b>Computer Art: A New Agenda for Information Systems Research.....</b>	11
<i>Briony J. Oates</i>	
<b>IT Service Climate: A Definition and Research Model.....</b>	22
<i>Ronnie Q. Jia, Blaize Horner Reich</i>	
<b>Profit Maximization with Data Management Systems .....</b>	27
<i>Adir Even, G. Shankaranarayanan, Paul D. Berger</i>	
<b>The Application of the Viable Systems Model to Information Technology Governance.....</b>	42
<i>Joe Peppard</i>	
<b>Software Versioning and Quality Degradation: An Exploratory Study of the Evidence.....</b>	56
<i>Anindya Ghose, Arun Sundararajan</i>	

#### ***GLOBAL INFORMATION TECHNOLOGY MANAGEMENT***

<b>Autonomy, Procedural Justice, and Information Systems Planning Effectiveness in Multinational Firms .....</b>	68
<i>Dinesh A. Mirchandani, Albert L. Lederer</i>	
<b>Antecedents of Onshore and Offshore Business Process Outsourcing .....</b>	81
<i>Jonathan Whitaker, Sunil Mithas, M. S.Krishnan</i>	
<b>Impact of Information Technology on Agricultural Commodity Auctions in India .....</b>	93
<i>Rajiv D. Banker, Sabyasachi Mitra</i>	
<b>Of Governance and the BPO Paradox: The Impact of Information Capabilities on Service Satisfaction .....</b>	104
<i>Deepa Mani, Anitesh Barua, Andrew B. Whinston</i>	

#### ***ALTERNATIVE APPROACHES TO INFORMATION SYSTEMS DEVELOPMENT***

<b>In the Age of the Humanchine.....</b>	118
<i>Chris Atkinson, Laurence Brooks</i>	
<b>A Human Capital Perspective of Organizational Intention to Adopt Open Source Software .....</b>	131
<i>Yan Li, Chuan-Hoo Tan, Hock-Hai Teo, Alex Siow</i>	
<b>A Review of Component-Based Software Development .....</b>	144
<i>Jason H. Sharp, Sherry D. Ryan</i>	

<b>Not All Innovations Are Created Equal: A Survey of Internet Computing as Disruptive Innovation in Systems Development Organizations.....</b>	155
<i>Jessica Luo Carlo, Kalle Lyytinen, Gregory M. Rose</i>	
<b>Intelligent Agents as a Modeling paradigm .....</b>	159
<i>Kafui Monu, Yari Wand, Carson Woo</i>	
<b>Coordination of Free/Libre Open Source Software Development.....</b>	172
<i>Kevin Crowston, Kangning Wei, Qing Li, U. Yeliz Eseryel, James Howison</i>	

## **KNOWLEDGE MANAGEMENT**

<b>Knowledge Management as an Autonomous Venturing Process: A Process Model of Establishing Knowledge Management.....</b>	185
<i>Annette Kjaergaard, Karlheinz Kautz</i>	
<b>Mobilizing Informational Social Capital in Cyber Space: Online Social Network Structural Properties and Knowledge Sharing .....</b>	197
<i>Siyuan Huang, Gerardine DeSanctis</i>	
<b>Knowledge Acquisition Through Computer-Mediated Discussions: Potential of Semantic Network Representations and Effect of Conceptual Facilitation Restrictiveness .....</b>	210
<i>Mohamed Khalifa, Vanessa Liu</i>	
<b>Casting the Net: A Multimodal Network Perspective on Knowledge Management.....</b>	222
<i>Gerald C. Kane, Maryam Alavi</i>	
<b>A Structurationist Review of Knowledge Management Theories.....</b>	236
<i>Greg Timbrell, Patrick Delaney, Taizan Chan, Aaron Yue, Guy Gable</i>	
<b>Dual Networks of Knowledge Flows: An Empirical Test of Complementarity in the Prepackaged Software Industry .....</b>	249
<i>David Dreyfus, Bala Iyer, Chi-Hyon Lee, N. Venkatraman</i>	
<b>Developing Individuals' Transactional Memories of Their Ego-Centric Networks to Mitigate Risks of Knowledge Sharing: The Case of Professionals Protecting CyberSecurity .....</b>	261
<i>Sirkka L. Jarvenpaa, Ann Majchrzak</i>	
<b>Preferential Attachment and Mutuality in Electronic Knowledge Networks .....</b>	274
<i>Steven L. Johnson, Samer Faraj</i>	

## **PHILOSOPHY AND RESEARCH METHODS IN INFORMATION SYSTEMS**

<b>Information Systems Development as Inquiring Systems: Lessons from Philosophy, Theory, and Practice .....</b>	287
<i>Andrea Carugati</i>	
<b>Play as the Way Out of the Newspeak–Tower of Babel Dilemma in Data Modeling .....</b>	301
<i>Frederico Fonseca, James Martin</i>	
<b>Being Proactive: Where Action Research Meets Design Research .....</b>	311
<i>Robert Cole, Sandeep Purao, Matti Rossi, Maung K. Sein</i>	
<b>The Engineering of Software: Views from Technology Theory.....</b>	323
<i>Niels Jørgensen</i>	

## **SECURITY AND ASSURANCE**

<b>An Extreme Value Approach to Information Technology Security Investment.....</b>	333
<i>Jingguo Wang, Aby Chaudhury, H. Raghav Rao</i>	
<b>An Economic Analysis of the Software Market with a Risk-Sharing Contract .....</b>	346
<i>Byung Cho Kim, Pei-yu Chen, Tridas Mukhopadhyay</i>	

<b>A Protection Motivation Theory Approach to Home Wireless Security .....</b>	352
<i>I. M. Y. Woon, G. W. Tan, R. T. Low</i>	
<b>I Am Fine but You Are Not: Optimistic Bias and Illusion of Control on Information Security .....</b>	366
<i>Hyeun-Suk Rhee, Young U. Ryu, Cheong-Tag Kim</i>	
 <b>SOCIAL, BEHAVIORAL, AND ORGANIZATIONAL ASPECTS OF INFORMATION SYSTEMS</b>	
<b>Before, During, and After Face-to-Face Meetings: The Lifecycle of Social Ties in Globally Distributed Teams.....</b>	380
<i>Ilan Oshri, Julia Kotlarsky, Leslie Willcocks</i>	
<b>The Linkage Between Reporting Quality and Performance in Information Systems Projects .....</b>	393
<i>Charalampos L. Iacovou, H. Jeff Smith, Ronald L. Thompson</i>	
<b>Privacy Implications of Technology Innovation Processes .....</b>	407
<i>Karl Prince and Michael Barrett</i>	
<b>Making the Links: Domestication of ICTs in the Global Knowledge Economy .....</b>	418
<i>Helen Richardson</i>	
<b>Making Software Work: Producing Social Order via Problem Solving in a Troubled ERP Implementation .....</b>	429
<i>Erica L. Wagner, Sue Newell</i>	
<b>Information Technology and Organizational Learning: An Investigation of Exploitation and Exploration Processes .....</b>	441
<i>Gerald C. Kane, Maryam Alavi</i>	
<b>The Role of Habit in Information Systems Continuance: Examining the Evolving Relationship Between Intention and Usage .....</b>	453
<i>Christy M. K. Cheung, Moez Limayem</i>	
<b>How Technology Shapes the Actor-Network of Convergence Services: A Case of Mobile Banking .....</b>	465
<i>Sangjo Oh, Heejin Lee</i>	
<b>New Frontiers in the Theorization of ICT-Mediated Interaction: Exploring the Implications of a Situated Learning Epistemology .....</b>	476
<i>Séamas Kelly</i>	
 <b>VOLUME 2</b>	
<b>Enacting E-Relations with Ancient Chinese Military Stratagem .....</b>	487
<i>Susanna Xin Xu, Joe Nandhakumar, Christine Harland</i>	
<b>Does ERP Provide a Cross-Functional View of the Firm? Challenging Conventional Wisdom for SMEs and Large French Firms.....</b>	500
<i>Frantz Rowe, Redouane El Amrani, Marc Bidan, Rolande Marciniak, Bénédicte Geffroy-Maronnat</i>	
<b>Interplay of Culture, Learning, Politics, and Institutions: A Structural Framework of Information Technology-Induced Organizational Change .....</b>	514
<i>Chee Wei Phang, Atreyi Kankanhalli,</i>	
<b>Understanding Digital Inequality .....</b>	525
<i>JJ Po-An Hsieh, Mark Keil, Arun Rai</i>	
<b>Being There Versus Being Wired: The Effect of Colocation on Social Capital in Distributed Teams .....</b>	540
<i>Priscilla Arling, Mani Subramani</i>	

## **VALUING IT OPPORTUNITIES**

<b>Negotiation of Investment Shares in Interorganizational Supply Chains: A Game-Theoretic Approach .....</b>	553
<i>Franz Schober</i>	
<b>Strategic and Operational Benefits of IOS-Enabled Interorganizational Integration .....</b>	564
<i>Yuandong Yi, Christina Soh, Lihua Huang</i>	
<b>The Role of Information Technology Business Alignment In Value Creation: A Multiple Case Study Among German Banks .....</b>	577
<i>Jochen Franke, Heinz-Theo Wagner, Tim Weitzel</i>	
<b>Assessing Customers' Value of Mobile Financial Information Services: Empirical-Based Measures .....</b>	591
<i>Jan Muntermann and Lars Janssen</i>	
<b>Changing Inside, Watching Outside: Understanding Business Model Adaptations to Guide Information Technology Decisions.....</b>	603
<i>Harminder Singh, Vijay Sethi, Vikram Sethi</i>	
<b>Economic Analysis of the Supplier–Reseller Symbiotic Competition in an Online Distribution Business .....</b>	618
<i>Ruhai Wu, Ling Xue, Andrew B. Whinston</i>	
<b>Understanding Information Technology Complementarities Using an Augmented Endogenous Growth Framework.....</b>	631
<i>Simon K. Poon, Joseph G. Davis, Byounggu Choi</i>	
<b>Optimal Rebating Strategies in Peer-to-Peer Content Distribution .....</b>	644
<i>Peng Han, Kartik Hosanagar, Yong Tan</i>	
<b>Make-or-Buy in the Age of Open Source: A Transaction Cost Analysis .....</b>	659
<i>Martina E. Greiner, Dale L. Goodhue</i>	

## **WEB-BASED INFORMATION SYSTEMS AND APPLICATIONS**

<b>An Investigation of Cognitive Antecedents to Satisfaction Using Web-Based Decision Support Systems.....</b>	681
<i>Jaeki Song, Donald Jones, Naveen Gudigantala</i>	
<b>Information Technology Mediated Customer Service: A Functional Perspective .....</b>	695
<i>Ronald T. Cenfetelli, Izak Benbasat, Sameh Al-Natour</i>	
<b>Cognition-Based Versus Affect-Based Trust Determinants in E-Commerce: A Cross-Cultural Comparison Study .....</b>	710
<i>Dan J. Kim</i>	
<b>An Exploratory Study of Before-Interaction Trust Transference in Multichannel Retailers .....</b>	723
<i>Huei-Huang Kuan, Gee-Woo Bock</i>	
<b>Price Cycles in Online Advertising Auctions .....</b>	737
<i>Xiaoquan (Michael) Zhang, Juan Feng</i>	
<b>An Empirical Investigation of the Auction Buyer's Choice to Buy Out or Bid: Cry of Regret or Laugh of Satisfaction? .....</b>	750
<i>Chuan-Hoo Tan, Xue Yang, Hock-Hai Teo, Grace Lin</i>	
<b>Virtual Interaction for Effective E-Learning .....</b>	763
<i>Jinwei Cao, Ming Lin, Janna M. Crews, Judee K. Burgoon, Jay F. Nunamaker, Jr.</i>	
<b>Content and Design Metrics for Web Sites: Combining Qualitative and Quantitative Results.....</b>	777
<i>Horst Treiblmaier, Andreas Pinterits</i>	
<b>Enhanced Reputation Scoring for Online Auctions .....</b>	787
<i>Bonnie R. Montano, Dawn C. Porter, Ross A. Malaga, J. Keith Ord</i>	

<b>Is Online Product Information Availability Driven by Quality or Differentiation?</b> .....	800
<i>Panos M. Markopoulos, Ravi Aron, Lyle H. Ungar</i>	
<b>Adverse Selection and Reputation Systems in Online Auctions: Evidence from eBay Motors</b> .....	812
<i>James R. Wolf, Waleed A. Muhanna</i>	
<b>An Empirical Investigation of Herding on the Internet: The Case of Software Downloading</b> .....	824
<i>Wenjing Duan, Bin Gu, and Andrew B. Whinston</i>	

## **HUMAN-COMPUTER INTERACTION**

<b>An Empirical Study of Online Trust and Consumer Behavior: Cultural Orientation, Social Norms, and Personal Innovativeness in Information Technology</b> .....	837
<i>Yujong Hwang</i>	
<b>The Effects of Real-Time Individual Performance Feedback and Goal Setting on Computer-Mediated Group Idea Generation</b> .....	849
<i>Jay J.H. Jung, Christoph Schneider, Joseph S. Valacich</i>	
<b>Predicting the Adoption of Location-Based Services: The Role of Trust and Perceived Privacy Risk</b> .....	861
<i>Heng Xu, Hock-Hai Teo, Bernard C. Y. Tan</i>	
<b>Social Networks and Transactive Memory in Human-Computer Interaction</b> .....	875
<i>Klarissa T. Chang</i>	
<b>User Profiles for Facilitating Conversations with Locked-In Users</b> .....	887
<i>Melody M. Moore, Veda C. Storey, Adriane B. Randolph</i>	
<b>Using Protocol Analysis to Understand the Effects of Web Site Design on Consumer Purchase Behaviors</b> .....	901
<i>Gek Woo Tan, Ernest Bryan Lee</i>	

## **PANELS**

<b>Cultural Bias in Information Systems Research and Practice: Are You Coming from the Same Place I Am?</b> .....	915
<i>Roberto Evaristo, David J. Pauleen, Robert Davison, Soon Ang, Sherif Kamel, Macedonio Alanis</i>	
<b>E-Mail Management: A Techno-Managerial Research Perspective</b> .....	918
<i>Ramesh Sharda, Nicolas Ducheneaut, J. Leon Zhao, Ashish Gupta, Ron Weber</i>	
<b>Information Systems Research That Really Matters: Beyond the IS Rigor Versus Relevance Debate</b> .....	920
<i>Kevin C. Desouza, Omar A. El Sawy, Robert D. Galliers, Claudia Loebbecke, Richard T. Watson</i>	
<b>Should Institutional Trust Matter in Information Systems Research?</b> .....	923
<i>Paul A. Pavlou, David Gefen, Izak Benbasat, Harrison McKnight, Katherine Stewart, Detmar W. Straub</i>	
<b>Investigating the “Knowledge” in Knowledge Management: A Social Representations Perspective</b> .....	927
<i>Richard Boland, Jr., Elizabeth Davidson, Suzanne Pawlowski, Ulrike Schultze, Emmanuel Vaast</i>	
<b>Information Technology-Enabled Transformation: Research That Bridges the Functional Divide</b> .....	930
<i>Hank Lucas, Ritu Agarwal, Michael Barrett, Sirkka Jarvenpaa, Bruce Weber</i>	
<b>How Shall We Manage Our Journals in the Future? A Discussion of Rick Watson’s ICIS 2004 Proposals</b> .....	933
<i>Paul Gray, Kalle Lytytin, Carol S. Saunders, Leslie P. Willcocks, Vladimir Zwass</i>	

<b>Interactive Digital Entertainment: A New Direction for Information Systems Research .....</b>	935
--	-----

*Andrew B. Whinston, Matti Hamalainen, Richard Garriott, De Liu, Xianjun Gent*

## **SENIOR SCHOLAR PAPERS**

<b>Securing the Future of Information Systems as an Academic Discipline.....</b>	938
--	-----

*Gordon B. Davis, Anne P. Massey, Niels Bjorn-Andersen*

<b>Information Technology and Organizational Contexts: Orienting Our Work Along Key Dimensions .....</b>	950
--	-----

*Ananth Srinivasan, Salvatore March, Carol Saunders*

<b>Offshoring and its Implications for the Information Systems Discipline .....</b>	961
---	-----

*Rudy Hirschheim, Claudia Loebbecke, Mike Newman, Josep Valor*

## **ABSTRACTS**

## **AUTHOR INDEX**