

NEWSLETTER

E-COMMERCE 2000

First CRITO Conference Is a Success

E-COMMERCE 2000: COMPETING IN THE DIGITAL ECONOMY

Developing and implementing successful e-commerce strategies was the focus of the E-Commerce 2000 conference on Friday, April 14, 2000, at the Beckman Center on the University of California, Irvine campus. Over 225 business professionals from San Francisco to San Diego attended the event presented by the UCI Center for Research on Information Technology and Organizations (CRITO), the Graduate School of Management (GSM), and the law firm of Stradling Yocca Carlson & Rauth.

The first annual conference served as an opportunity to create a premiere e-commerce discussion forum on the "Tech Coast" by bringing together the experiences of e-commerce business leaders, the legal expertise of Stradling, Yocca, Carlson & Rauth, and the academic excellence of the University of California, Irvine. During the day-long program, e-business executives and academic researchers from across the U.S. addressed the following topics:

- New business models enabled by e-commerce
- Strategies for keeping ahead of the competition in the digital economy
- International regulatory, security and privacy considerations
- Financial and legal structuring, leveraging and protection of corporate assets

- Marketing strategies to better reach and serve customers and increase customer loyalty over the Internet
- Integrating the value chain to achieve efficiency and effectiveness
- Next generation technologies and how they will impact businesses

The conference featured academic speakers from UC Irvine, New York University, and the University of Rochester, as well as speakers from companies such as AdForce, Autobyte.com, Bear Stearns & Co., BroadVision, Cisco Systems, Flashcom, Ingram Micro, Lyon & Lyon LLP, Microsoft, Osborne & Clarke OWA, and SourceFile. The keynote speaker was Bobby Lent, co-founder and Senior Vice President, Strategic Alliances of Ariba.

It was ironic that the successful program took place on a day when many Internet companies lost much of their value due to one of the largest point losses for the Dow Jones Industrial Average and the Nasdaq Composite Index. While the speakers did make a few light comments about the situation, the audience remained enthusiastically interested in e-commerce issues.

For more information about the program, including topics and participating speakers, please visit the CRITO website at:
www.crito.uci.edu/ecommerce

FOCUS ON FACULTY ASSOCIATES – ALLADI VENKATESH

Alladi Venkatesh, Professor of Management and Computer Science at the UC Irvine Graduate School of Management and Primary Investigator on the National Outlook for Automation in the Home (NOAH) Project for CRITO, has recently returned from a sabbatical in Sweden. As a visiting professor at the Stockholm School of Economics, Professor Venkatesh was associated with the School's Center for Communication & Information Technology. He was also a Research Fellow at the Marketing and Technology Center (MTC), an autonomous research foundation that brings together academic researchers and members of industry.

While in Sweden, Professor Venkatesh conducted a study of 1200 Swedish households on the use of new media and technologies. A sister study to the NOAH project being conducted in the U.S., the Swedish study, known as the Milennihome Project, was supported through the MTC by the companies Ericsson, Electrolux, and Vattenfall. A similar study is in progress in India with support from the same sponsors. We asked Professor Venkatesh to tell us a little about the differences between Swedish and American technology usage patterns:

The computer ownership patterns in both countries are very similar. The proportion of households with computers is roughly the same (between 55% and 60%). Three quarters of the households in both countries have an Internet connection. Sweden is the most advanced nation in Europe in terms of computer ownership and usage. Although the proportion of households with computers is the same in both countries, fewer Swedish households are likely to buy computers outright because of the high tax rate (25%). Rather, they have them donated by their employers or acquire them through some other arrangements to avoid the tax burden.

In terms of the actual use patterns among households and consumers, there are some similarities and differences. In both countries the predominant uses of computers are for communication (e.g. e-mail) and work-related activities. However in the U.S. there is a greater variety of use of computers for other purposes such as news, sports, entertainment, shopping, etc. The only area where Swedes use computers more than Americans is in seeking community information (local events, traffic and the like).

Differences also exist in the American and Swedish perceptions and attitudes towards household and personal technologies. Swedes are a little more skeptical about new technologies compared to Americans. They seek a more

balanced approach to everyday life and are concerned about excessive dependence on technology. In spite of these cautious attitudes, it has not prevented Sweden from being the most technologically advanced nation in Europe. This is because there is a collective effort between the government and the industry to be at the forefront of the global technological development and not fall behind countries like the U.S., Japan, and Germany. Historically, Sweden has played a leadership role in technology and trade development in the Baltic region. In many respects, Sweden has had strong links to countries like Finland, Russia and Poland although this is not generally understood by casual observers.

In contrast to the U.S., the pervasive form of technology in Sweden is wireless/mobile telephony. There are several reasons for the predominance of these products: 1) Price. The average residential telephone charges are high in Sweden and the differential cost between having a regular telephone and a cellular telephone is much less than in the U.S. In fact, cellular phones may even be less expensive than traditional phones. 2) Sparseness of Population. Because the population in Sweden is not concentrated, land phone lines are not well established throughout the country. The infrastructure standards for mobile telephony allow cellular phones to be used anywhere throughout the country without roaming charges.

As mentioned earlier, Swedish consumers maintain a conservative attitude toward new technologies. Consumers tend only to try something after it has been studied carefully. However, changes in attitudes are occurring quite dramatically among the younger generation. In general, one might say that there is more technological push in the U.S. and technological pull in Sweden.

While in the U.S. technology adoption occurs primarily as a result of the purchase of a private good, in Sweden technology adoption occurs in a greater measure in the public space. Often, the population is exposed to a new technology as a result of using a public service, such as the subway, a new banking system, new educational programs, etc. This sort of mass exposure to new technologies results in a more rapid and pervasive adoption rate of new media and technologies than found in the U.S.

Professor Venkatesh will be presenting the results of his Swedish study in June to the members of the Marketing and Technology Center in Stockholm, including the sponsors Ericsson, Electrolux, and Vattenfall. Meanwhile, he is fulfilling the role of Acting Director of CRITO while Professor Kenneth Kraemer is away on sabbatical in Germany.

TO RECEIVE THIS NEWSLETTER AND OTHER CRITO INFORMATION ELECTRONICALLY, PLEASE PROVIDE YOUR CURRENT E-MAIL ADDRESS TO LESLIE FELL at lfell@uci.edu

FACULTY ASSOCIATES NEWS

Outsourcing on the Internet

Professor Vijay Gurbaxani was recently interviewed for the April 10-14, 2000 edition of the *Irvine Spectrum News* in an article, "Learning the ABCs of ASPs." Explaining that Application Service Providers (ASPs) are another chapter in the outsourcing trend, Professor Gurbaxani stated that an advantage of ASPs is that "You don't have to have the programs on your computer so no matter where you are in the world – as long as you have an Internet connection – you can run the software and access your files." In addition, he noted that another upside for businesses using ASPs is not having to be bothered with upgrading their applications: "Think about it; for a large company with thousands of PCs, every time you have to do a system upgrade there's a lot of labor involved. Not being responsible for upgrades represents a significant savings in labor," he stated. He also pointed out that small companies in particular might find that storing files on an ASP's web server is actually more secure than doing it in-house. On the other hand, Professor Gurbaxani did mention that "The downside [of ASPs] is you do lose some degree of control."

Access to Computers Will Not Bridge the Digital Divide

Professor Henry Jay Becker was interviewed in the *Orange County Register* article, "Computers Put to the Test: UCI Professor Says Access is Not Enough for Students to Benefit," February 15, 2000. Following the release of his third report in a series, "Teacher and Teacher-Directed Student Use of Computers and Software," Professor Becker was interviewed about student computer access at home vs. in schools and stated that "School-level differences in technology are only weakly associated with socioeconomic status. In terms of having computers, there's not much difference. In terms of Internet access, there is more...The digital divide is much, much more a home computer issue than a school computer issue. Mere access to computers plays a relatively small role."

**Visit CRITO's website for
complete information on CRITO
activities, current projects, and
publications.
www.crito.uci.edu**

A Passage to India

Professor Vijay Gurbaxani was quoted in the May 22, 2000 *Orange County Register* article, "Imported Ingenuity," about the use of Indian labor to supplement engineering staffing in the U.S. Gurbaxani explained that India has been preparing a technically skilled workforce since the 1960s when it began producing engineers to develop the country's industrial infrastructure. Since that time, India has become an internationally recognized source of high tech talent with the ability to provide value-added services for companies. Gurbaxani stated, "It used to be back-office work. Now they're building mission-critical applications, front-line applications." While the cost of hiring such talent is relatively low, \$600-\$1000 a month for Indian beginning programmers v. \$4,000-\$5,000 for such U.S. positions, other costs such as the overhead charged per engineer to support the communications technologies in India can run high.

To read this article, please visit the *Orange County Register* at www.ocregister.com.

FACULTY UPDATES

Speaker Series

"Internet Economics, E-Commerce, and Price Dispersion Among Internet Retailers," Dr. Joseph P. Bailey, Robert H. Smith School of Business, University of Maryland, March 2000.

"Critical Mass, Metcalf's 'Law' and the Scaling of Network Externalities," Dr. Chris Westland, Hong Kong University of Science and Technology, May 2000.

Publications

"The Production of Information Services: A Firm-Level Analysis of Information Systems Budgets," **Vijay Gurbaxani, Nigel Melville, and Kenneth L. Kraemer**, forthcoming in the June 2000 issue of *Information Systems Research*.

"Liberalization and the Computer Industry: A Comparison of Four Developing Countries," **Kenneth L. Kraemer and Jason Dedrick**, forthcoming in the *Information Society*, late 2000 issue.

"Impacts of Liberalization and Economic Integration on Mexico's Computer Sector," **Jason Dedrick and Kenneth L. Kraemer**, forthcoming in the *Information Society*, late 2000 issue.

FACULTY ASSOCIATES NEWS

Talks, Conferences, Seminars

Vijay Gurbaxani participated in a panel for Public Radio International's program, "The World," to identify key critical societal issues resulting from technology advancements for future programming, Stanford University, February 2000.

Kenneth L. Kraemer, while on sabbatical in Germany, "IT and Organizational Performance: Untangling the Productivity Paradox" and "IT Payoffs in the Internet Age: Three Case Studies," at the University of Bocconi in Milan, Italy, May 2000.

Alladi Venkatesh, while on sabbatical in Sweden, "Home Technology Adoption and Diffusion," University of Uppsala, Sweden, University of Göteborg, Sweden, University of Linköping, Sweden, August 1999–March 2000.

Mary Wolfinbarger and Mary Gilly, "Motivations for Online Shopping," 2000 Americas Conference on Information Systems (AMCIS 2000), August 10-13, 2000, Long Beach, CA.

Mary Wolfinbarger and Richard Celsi, "The Evolving IT-Marketing-Strategy Relationship: Will Business Schools Meet the Need?" (named best paper, e-commerce curriculum mini-track).and "A Conceptual Taxonomy of Technology Adoption and Diffusion in the Classroom," 2000 Americas Conference on Information Systems (AMCIS 2000), August 10-13, Long Beach, CA

Kevin Zhu, "The Effects of Ecommerce on Firm Performance," MIS Colloquium at the Andersen School of Management, UCLA, May 11, 2000.

Kevin Zhu, "Internet Commerce and Real Options," Stanford University, April 24, 2000.

Guest Editors

Kenneth L. Kraemer is the guest editor of a special issue of *The Information Society* on the: impacts of economic liberalization on information technology production and use, forthcoming in late 2000.



UNIVERSITY OF CALIFORNIA, IRVINE, 3200 BERKELEY PLACE, IRVINE, CA 92697-4650
949-824-6387 (tel), 949-824-8091 (fax), website: www.crito.uci.edu

New! Working Papers Now Available to Public

The following working papers have just been released to the CRITO Consortium visitor page under Consortium Publications:

<http://www.crito.uci.edu/consortium/visitors/>

Mark Ackerman, W.G. Lutters, J. Boster and D.W. McDonald, "Creating a Knowledge Mapping Instrument: Approximation Techniques for Mapping Knowledge Networks in Organizations."

Rebecca Grant, "Advanced Book Exchange, Inc.: Infomediation in Action."

Vijay Gurbaxani and Asish Ramchandran, "Online Discount Brokerages: E*Trade vs. Charles Schwab."

Vijay Gurbaxani and Aarti Shirkhande, "Competing in Book Retailing: The Case of Amazon.com."

Kenneth L. Kraemer and Jason Dedrick, "Using IT to Support the Business Integration Client-Service Model: Andersen Consulting."

Kenneth L. Kraemer and Jason Dedrick, "Leveraging the Global Networked Business Model: Cisco Systems."

Kenneth L. Kraemer, Paul Tallon and Charles Rieger, "When Context Matters: Making Sense of Executives' Perceptions of IT Payoffs Using Strategic Intent for IT."

Kenneth L. Kraemer and Jason Dedrick, "National Policies for the Information Age: IT and Economic Development."

Alladi Venkatesh, "National Outlook for Automation in the Home: Project NOAH II: Preliminary Results."

UPCOMING EVENTS

Japan-America Institute for Management Science (JAIMS) will visit CRITO and several local companies for an educational seminar on Business Models and Strategies for E-Commerce, June 12-15, 2000.

CRITO Consortium Industry Advisory Board Meeting, June 22-23, 2000.