Industry-Academic Partnerships that are leading to Increased Enrollments in IT Professional Programs

Panel

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Abstract

In response to the declining enrollments in the IT/IS programs around the world, many institutions of higher education and concerned private and public organizations have joined together to reverse this trend. Significantly the Society of Information Management, a leading professional organization of IT executives has taken a significant lead in these efforts. Several hundred thousand dollars are currently being directed at academic initiatives that will increase the flow of IT/IS majors in the education pipeline. Many of these efforts are not widely publicized. This panel will discuss a number of these successful efforts, including: Challenge grants to academic departments, sponsorship of STEM-related technology competitions (e.g., programming, robotic, and IT engineering competitions) partnerships with industry leaders, such as Microsoft, and participation in academic advisory boards from Kindergarten through College.

Objective

To provide a dialogue/debate between academic professionals and IT industry leaders on questions relevant to increasing the number of IT/IS majors, beginning as early as Middle Schools.

Questions to be addressed:

1. What innovative programs are MIS and IT Programs trying to recruit talented students into MIS and Information Technology fields of study?
2. Which innovative programs are working? How can academic professionals and IT industry leaders partner to develop IT workforce?
3. What can be done to increase the interest in STEM fields in general and IT/IS areas in particular?
4. Which STEM programs have the most immediate and consequential impact on IT/IS program enrollments?
5. Are academic programs in MIS and Information Technology (IT) generating talented graduates with the appropriate type of skills and knowledge for which IT industry leaders are searching?
6. What innovative programs are IT leaders sponsoring to help colleges and universities develop courses and programs that meet their needs for IT talent?
7. How can academic professionals in MIS and IT work more effectively together with IT industry leaders: (1) to recruit talented students into MIS and IT majors; (2) to improve the quality and effectiveness of the curriculum in MIS and IT; (3) to provide students with internships and projects that will enhance their background for IT job opportunities; and (4) to bridge the gap between the classroom and practice in information technology.
Desired Outcome Measures

1. Increase in IT/IS major program enrollments in the short-term and long-term
2. Understand and quantify the relationship between STEM initiatives and IT/IS program outcomes
3. To facilitate a continuing alignment between IT/IS academic programming and industry expectations.
4. To establish ongoing collaborations between academic professionals and industry leaders to jointly achieve the goals of encouraging talented students to major in MIS and IT programs and to fill the IT workforce pipeline.
5. To share best practices and resources for bridging the communications gap between academic professionals and industry leaders.

Panelists:

Jack D. Becker

Dr. Jack D. Becker is Associate Professor of Business Computer Information Systems at the University of North Texas. He is past Director of the Information Systems Research Center and past Chair of the Department of BCIS (now ITDS) at the University of North Texas. He is Chairperson for PR and Communications for the Dallas Fort Worth Chapter of Society for Information Management (SIM), a past Vice Chairperson, and has been an officer and board member of that organization since 1995.

He served as a member of the ICIS Executive Committee from 1991 to 1994. Becker was co-program chairperson and co-editor of the proceedings for the 1992 ICIS meeting in Dallas, TX. He served as co-general chairperson of the Americas Conference on Information Systems (AMCIS) in Dallas in 2002, and served as the Chairperson of the AMCIS Executive Committee from 2002 to 2003. He was elected the first Vice President for Development of the Association of Information Systems (AIS).

Dr. Becker's recent research and teaching interest areas include analysis of IT Workforce requirements, demand and supply for IT/IS employees, and the role of STEM education in the K-12 educational system. He still dabbles in research on virtual teaming, logistics and eCommerce, data warehouse design and construction, data mining and business intelligence, and group decision support systems. He has published in numerous journals, including Management Information Systems Quarterly, Journal of Management Information Systems, and the Journal of Financial and Quantitative Analysis.

Dr. Becker received his Ph.D. in business administration and quantitative business analysis, an MBA degree and an AB in mathematics from Washington University in St. Louis, MO.

Jana Markowitz

Jana is an experienced technology consultant and organization development professional with a special focus on helping IT organizations with change management, professional development and vendor relationship management.

She founded The Collective Mind, an OD consulting and training company in 1994 after a 15 year career at IBM. Her early work at IBM included technical support and systems implementations. Ultimately she moved into project management, IT strategic planning, and computer-assisted meeting facilitation. She has spent the last 15 years as an OD consultant, providing change management for complex IT projects, teaching the “people” skills she uses in her consulting engagements and coaching IT executives. Clients include NASA, Sears, Hilton Hotels Worldwide, Maybelline and the US Army Corps of Engineers.

Jana holds a bachelor’s degree in Computer Science and Mathematics from Vanderbilt University and a masters in Organizational Psychology from the University of Memphis.

In 2013 Jana became the Director of Outreach/STEM Initiatives for the Society for Information Management International, a professional organization of information technology executives, thought leaders and academics with 4000 members nationwide and 34 chapters.
Mary Sumner

Mary Sumner is Professor of Computer Management and Information Systems, Southern Illinois University Edwardsville. Prior to that, she was on the faculty of New York University. She has been responsible for building the undergraduate and graduate programs in CMIS and has taught for 28 years in the areas of management of information technology, information systems design, project management, software systems design, and enterprise systems design. Dr. Sumner served as chief information officer for academic affairs and was responsible for organizing and managing information services to support the quality and effectiveness of academic programs at the university. She organizes business/university partnerships and executive programs in leadership, project management, and health informatics. She has taught ERP systems design at the Norwegian School of Logistics over the past five years, and teaches executive MBA courses in Hong Kong and Singapore.

She has written seven textbooks, including college texts in Management Information Systems and Enterprise Resource Planning, and has published over forty research papers on enterprise resource planning, IT workforce issues, project management, and health informatics. Her research has appeared in Database, the Journal of Systems Management, Information and Management, the Journal of Computer Information Systems, Information Resource Management Journal, the Journal of Strategic Information Systems, and the Journal of Information Technology. Her education includes a B.A. Syracuse, M.A., University of Chicago, M.A., Columbia University, and Doctorate, Rutgers University. Her certifications include Oracle Master’s and AMIA Health Informatics.