



IACIS Program & Refereed Proceedings

47th Annual IACIS Fall Conference
October 3-6, 2007
Vancouver, British Columbia



Globalization and Information Systems



CONFERENCE PROGRAM



PROGRAM OVERVIEW

Wednesday, October 3, 2007

6:00 - 8:00 p.m. Reception/Registration Ports of the World, 3rd Floor

Thursday, October 4, 2007

7:30 a.m. - 5:10 p.m. Registration Harbourside Foyer, 2nd Floor

7:30 - 8:30 Continental Breakfast Harbourside Foyer, 2nd Floor

8:30 - 8:50 Welcome and Announcements Harbourside Ballroom I, 2nd Floor

8:50 - 9:20 Award 2007 Computer Educator of the Year Harbourside Ballroom I, 2nd Floor

9:20 - 10:10 Keynote President Gregory Dell'Omo
Robert Morris University Harbourside Ballroom I, 2nd Floor

10:10 - 10:40 Networking Break Harbourside Foyer, 2nd Floor

10:40 - 11:30 Session 1A IS Enrollment #1 Port of Hong Kong, 3rd Floor
Session 1B Web Design Port of San Francisco, 3rd Floor
Session 1C Instructional Strategies #1 Port of New York, 3rd Floor
Session 1D Technology and Culture: Panel Presentation Port of Singapore, 3rd Floor

11:40 - 12:30 Session 2A IS Enrollment #2 Port of Hong Kong, 3rd Floor
Session 2B E-Commerce #1 Port of San Francisco, 3rd Floor
Session 2C Instructional Strategies #2 Port of New York, 3rd Floor
Session 2D Corporate Culture and Communication #1 Port of Singapore, 3rd Floor


12:30 - 2:00 Lunch (on your own)

2:00 - 2:50 Session 3A Global Society Port of Hong Kong, 3rd Floor
Session 3B E-Commerce #2 Port of San Francisco, 3rd Floor
Session 3C Instructional Strategies #3 Port of New York, 3rd Floor
Session 3D Corporate Culture and Communication #2 Port of Singapore, 3rd Floor

3:00 - 3:50 Session 4A Round Tables Port of Hong Kong, 3rd Floor
Session 4B M-Commerce Port of San Francisco, 3rd Floor
Session 4C Instructional Strategies #4 Port of New York, 3rd Floor
Session 4D Corporate Culture and Communication #3 Port of Singapore, 3rd Floor

3:50 - 4:20 Networking Break Harbourside Foyer, 2nd Floor

4:20 - 5:10 Session 5A IS Assessment Port of Hong Kong, 3rd Floor
Session 5B E-Government Port of San Francisco, 3rd Floor
Session 5C Instructional Strategies #5 Port of New York, 3rd Floor
Session 5D Corporate Culture and Communication #4 Port of Singapore, 3rd Floor

6:00 - 10:00 p.m. Fun Night  Gabriola Mansion

PROGRAM OVERVIEW

Friday, October 5, 2007

7:30 a.m. - 5:10 p.m.		Registration	Harbourside Foyer, 2nd Floor
7:30 - 8:30		Continental Breakfast	Harbourside Foyer, 2nd Floor
8:30 - 9:00		Welcome and Announcements	Harbourside Ballroom I, 2nd Floor
9:00 - 9:50	Keynote	Richard T. Watson Project Co-Leader, Global Text Project	Harbourside Ballroom I, 2nd Floor
9:50 - 10:20		Networking Break	Harbourside Foyer, 2nd Floor
10:20 - 11:10	Session 6A Session 6B Session 6C Session 6D	Web 2.0 and 3.D Software Development #1 Ethics #1 E-Learning: Panel Presentation	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor Port of Singapore, 3rd Floor
11:20 - 12:10	Session 7A Session 7B Session 7C Session 7D	Social Networking and Virtual Communities Software Development #2 Ethics #2 E-Learning #1	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor Port of Singapore, 3rd Floor
12:15 - 2:00		Business Luncheon	Harbourside Ballroom I, 2nd Floor
2:00 - 2:50	Session 8A Session 8B Session 8C Session 8D	Knowledge Management Software Development #3 Security and Internet Policies E-Learning #2	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor Port of Singapore, 3rd Floor
3:00 - 3:50	Session 9A Session 9B Session 9C Session 9D	Customer Relationship Management Expert Systems Privacy Policies E-Learning #3	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor Port of Singapore, 3rd Floor
3:50 - 4:20		Networking Break	Harbourside Foyer, 2nd Floor
4:20 - 5:10	Session 10A Session 10B Session 10C Session 10D	End-User Computing Network and Distributed Systems IS Programs and Curriculum Development #1 Data Warehousing and Data Mining	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor Port of Singapore, 3rd Floor
5:15 - 5:45		JCIS Editorial Board Meeting	Harbourside Ballroom I, 2nd Floor



PROGRAM OVERVIEW

Saturday, October 6, 2007

8:00 - 11:00 a.m.		Registration	3rd Floor
8:00 - 9:-00		Continental Breakfast	3rd Floor
9:00 - 9:50	Session 11A Session 11B Session 11C Session 11D	Enterprise Resource Planning (ERP) #1 Supply Chain Management #1 IS Programs and Curriculum Development #2 IS Research	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor Port of Singapore, 3rd Floor
10:00 - 10:50	Session 12A Session 12B Session 12C Session 12D	Enterprise Resource Planning (ERP) #2 Supply Chain Management #2 IS Programs and Curriculum Development #3 Technical Support	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor Port of Singapore, 3rd Floor
10:50 - 11:20		Networking Break	3rd Floor
11:20 - 12:10	Session 13A Session 13B Session 13C	IS Careers Outsourcing and Offshoring IS Programs and Curriculum Development #4	Port of Hong Kong, 3rd Floor Port of San Francisco, 3rd Floor Port of New York, 3rd Floor
12:15 - 12:45		Conference Debriefing	Port of Singapore, 3rd Floor



»» KEYNOTE PRESENTATIONS

Thursday, October 4

8:45 – 9:50 a.m.

Harbourside Ballroom I, 2nd Floor

Speaker: President Gregory Dell'Omo, Robert Morris University

Presentation Title:

Presentation Abstract:

Friday, October 5

8:45 – 9:50 a.m.

Harbourside Ballroom I, 2nd Floor

Speaker: Richard T. Watson, Project Co-Leader, Global Text Project

Presentation Title:

Presentation Abstract:



IS ENROLLMENT #1

Thursday, October 4

10:40—11:30 a.m.

Session Chair: Lissa Pollacia

Port of Hong Kong
3rd Floor**EXPLAINING INFORMATION SYSTEMS PROGRAM ENROLLMENTS:
A MARKET STUDY**

Thomas S. E. Hilton, University of Wisconsin—Eau Claire, hiltonts@uwec.edu

Tara L. Pehlke, University of Wisconsin—Eau Claire, MartineA@uwec.edu

Information systems (IS) programs at the university level are crucial to human civilization. It has long since become axiomatic that society runs on information systems and that the professionals who design, develop, and operate those systems are at the very crux of human progress. It is therefore imperative that universities continue to educate information systems professionals who can meet the enormous and growing information needs of the human race.

DEVELOPING A MARKETING STRATEGY TO INCREASE ENROLLMENT

Corrine M. Brown, Ohio University, brownc@ohio.edu

Many factors have contributed to the downward spiral of IS enrollment. Many educators accept the downturn as the result of outside influences over which they have no control. When successful businesses experience a downturn, major intervention strategies are set in place so the business can adapt and succeed in an ever changing marketplace. This paper discusses a marketing strategy put in place to increase enrollment and interest in the MIS major. The background behind the development of each segment of the plan is outlined so that it can be replicated by other IS departments. The results show an increase in enrollment and student satisfaction with the MIS major.

MARKETING IS TO THE ADULT STUDENT

Jeanne M Baugh, Robert Morris University, baugh@rmu.edu

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Frederick G Kohun, Robert Morris University, kohun@rmu.edu

Walter Pilof, Robert Morris University, pilof@rmu.edu

Adult learners are becoming a growing population on campuses around the country. The adult student is looking for a flexible and fast paced program that will allow him to finish a degree quickly without giving up his life. He is balancing home, family, job and school while not wanting any area to suffer. Many institutions are making student satisfaction a priority. Acknowledging that the satisfaction experienced by the adult student will differ from that experienced by the traditional-age student is a key to successful competition for the enrollment and retention numbers. This paper describes the process of the creation of an Information Systems Degree marketed specifically to the adult learner. Among the areas addressed are adult student needs, faculty input and reservations, curriculum design and administrative support.



WEB DESIGN

Thursday, October 4
Session Chair: Seung Lee

10:40—11:30 a.m.

Port of San Francisco
3rd Floor

ANALYSIS OF WEB PAGES AND METRICS RELATED TO GLOBAL ENVIRONMENTAL MANAGEMENT

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Much of the media's attention has recently been focused on problems with the global environment and its management. This paper examines related Internet sites and focuses on how web metrics can provide information on the priorities and interests of Internet users. The conclusions indicate that keyword search statistics provide good information on user priorities that may be used in place of more expensive survey based research. Keyword search data significantly reproduced the results of a survey used to identify investment banking opportunities in the area of global environmental management. Also, contrary to expectations, the rank order of Google search results were positively correlated with traffic: the higher the traffic, the farther down in the search result.

DIVERSITY AND HOMOGENEITY IN THE CYBERSPACE: A STUDY OF WEBSITE CONTENT PREFERENCES OF SELECTED ETHNO-LINGUISTIC GROUPS

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Adriana Martinez Santa Cruz, University of Wisconsin-Eau Claire, martinea@uwec.edu

The Internet has been hailed as the ideal medium to facilitate expressions of cultural diversity and individualism in cyberspace. But the dominance of a few Web giants also exerts a homogenizing influence over users and audience in this space. To assess the relative influence of these two opposing forces, we examine the top ranking websites of several ethno-linguistic groups to determine whether there are any discernable differences in content preferences.

SKILLS FOR WEB DESIGNERS/DEVELOPERS: A SURVEY OF THE ONLINE JOB MARKET

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E-commerce knowledge and skills have become an integral part of Information Systems education. This study analyzed 100 job advertisements for web designers/ developers to get an overview about the skills desired by employers to help with the development of a Web Design course. The languages desired most by employers were HTML and JavaScript, whereas Photoshop and Flash were the most desired web development tools.



INSTRUCTIONAL STRATEGIES #1

Thursday, October 4
Session Chair: Azad Ali

10:40—11:30 a.m.

Port of New York
3rd Floor

OPEN SOURCE SOFTWARE DEVELOPMENT: THE NEW TRAINING GROUND?

Dr. Hala Annabi -University of Washington, The Information School -hpannabi@u.washington.edu
Dr. Sean T. McGann – Ohio University MIS Department -mcgann@ohio.edu

Individuals interested in software development are joining Open Source Software (OSS) projects to learn how to develop software. OSS projects provide an experiential learning opportunity as learning occurs through the actual building of code. Also, OSS project are often globally distributed including members from a variety of countries. This makes OSS an especially suitable setting to prepare students for participating in global software development projects. This paper reports on findings from a study analyzing learning processes in OSS project and how these processes may serve as a training ground for Information Systems students.

BLENDED LEARNING AND STUDY EFFECTIVENESS

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After the initial e-learning enthusiasm, we have finally reached a stage of sobriety (similar to the burst of the dot.com bubble in business). The research results presented in the paper bellow showed that ICT per se does not improve e-learning effectiveness. In the paper, a case of blended learning approach in higher education is presented. The presentation is part of a wider research made by our institution, which showed that only using different teaching strategies (methods of teaching and learning) from those used in traditional education can improve study effectiveness in e-learning.

VIRTUALIZATION IN THE CLASSROOM

Thom Luce, Ohio University, luce@ohio.edu

This paper briefly describes the growth of computer virtualization and some of the reasons for that growth. The paper takes a quick look at Microsoft Virtual PC as one example of virtualization software and then examines how the benefits of virtualization apply to the classroom and computer lab. The paper describes how virtualization can help reduce the cost of classroom computing while offering students and staff a wider range of options than may currently be possible. The paper also describes how virtualization can help with classroom support functions, compatibility issues and safe and secure computing.



TECHNOLOGY AND CULTURE: PANEL PRESENTATION

Thursday, October 4

10:40—11:30 a.m.

Port of Singapore

Session Chair: Elaine Winston

3rd Floor

CONTEMPORARY PERCEPTIONS OF THE RELATIONSHIP BETWEEN TECHNOLOGY AND CULTURE

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Cara Hoehn, Robert Morris University, hoehnca@aol.com

*This paper would be the basis for a panel discussion that explores contemporary perspectives on the relationship between technological innovation and culture. The paper reviews works written over the past one hundred years that explore the relationship between culture, understood as human groups that exhibit “stable and enduring systems of meanings shared” (Skovira), and technology, the mechanical and digital extensions of human beings into the physical world for survival and control. In the paper I identify five typical ways that humans have attempted to articulate the relationship between these two complex realities. I have adapted the five types from H. Richard Niebuhr’s *Christ and Culture* where Niebuhr identifies five typical ways that the relationship between Christianity and culture has been articulated. It seems to me that the word “technology” functions as a god term in the West (Burke, Weaver) and that the substitution of “technology” for “Christ” in each of Niebuhr’s constructs might yield a typology that could elucidate people’s perceptions of the relationship between technology and culture. The five types are briefly discussed below:*

Technology Against Culture—Technology attacks and eventually destroys culture. Examples of this approach include Jaques Ellul, *The Technological Bluff* and Neal Postman, *Technopoly*.

The Technology of Culture—Technology is culture or a natural outgrowth of culture. Examples include James Beniger, *The Control Revolution*.

Technology Above Culture—Technology is neutral and depends on what one does with it. Splitting the atom can either generate electricity for a large city or annihilate it. This approach is illustrated by the ready acceptance of technological innovation by most Americans who reject the two radical positions above and treat technology as a good god with good gifts. Hundreds of popular journals and books that populate the shelves of Barnes and Noble illustrate this approach.

Technology and Culture in Paradox—Technology and culture stand in a paradoxical relation to each other. These folks want the technological innovation but also seek to preserve the culture they value. The relationship between technology and culture is not simple, and one should neither reject technological innovation outright nor accept it unconditionally, rather the two realities must be reconciled in some fashion in every culture in order to fashion a good and just world. Scholars like Thomas B. Hughes, *Human Built World: How to Think about Technology and Culture* (2004) and David Nye, *America as Second Creation* (2003) and *Questioning Technology* (2006) illustrate this approach. Umberto Eco’s humorous essays collected in *How to Travel with a Salmon* also reflect this approach.

Technology the Transformer of Culture—Technology transforms culture in unforeseen and powerful, but generally positive ways. Examples include Lewis Mumford, *Technics and Civilization* and Marshall McLuhan, *Understanding Media*.



IS ENROLLMENT #2

Thursday, October 4

11:40 a.m.—12:30 p.m.

Port of Hong Kong
3rd Floor

Session Chair: Thomas S. E. Hilton

ADDRESSING THE DECLINE IN CIS ENROLLMENT

Lissa Pollacia, Northwestern State University, pollacia@nsula.edu

Jack Russell, Northwestern State University, jrussell@nsula.edu

It is widely known that since the year 2000, the number of U.S. students who choose Computer Information Systems (CIS), Management Information Systems (MIS), or Computer Science (CS) as a major has declined significantly. For many CIS departments, a portion of their budget is tied to the number of student credit hours that are produced. There are ways to increase these numbers, such as offering more service courses to the general student body. A department may also consider offering multi-disciplinary minors that incorporate computer-intensive courses taught by other departments. This paper presents a review of CIS minors offered at institutions in the U.S. The results of the review shows information such as the type of minor, the number of credit hours, and the types of courses that are typically required. It is our hope that this study will provide information to assist anyone considering curriculum changes.

EXPLORING THE MOTIVATION OF STUDENTS IN CHOOSING INFORMATION SYSTEMS AS THEIR MAJOR

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As part of the effort to investigate what motivates (or de-motivates) a student to choose information systems as his/her major of study, this paper looks into the differences in terms of career outcomes as the students perceived in each of the five functional majors in the business schools. It also discusses how the students' perceived career outcomes of choosing an IS major are different from their personal preference. The career outcomes are defined in terms of Schein's [1] and DeLong's [2] Career Anchors. Our discussions are based on the empirical data collected from 106 business students in two universities located in a southeastern state.

USER ASSESSMENT OF AN ADVISORY SERVICE SYSTEM: USE OF THE E-S-QUAL INSTRUMENT

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MIS faculty members at a public university have developed a prototype academic advising support system (AASS). To facilitate user assessment of the system, an instrument that measures service quality for electronic services was modified and administered. Results from the survey of 63 students found that the instrument was suitable for a service-based system such as AASS. The factor of efficiency was considered to be the most significant electronic service attribute related to perceived value of the system. The implications of the study are discussed.



E-COMMERCE #1

Thursday, October 4

11:40 a.m.—12:30 p.m.

Port of San Francisco

Session Chair: G. Kent Webb

3rd Floor

EMPIRICAL STUDY ON E-AUCTION WEBSITE ASSESSMENT IN CHINA

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Consumer-to-consumer e-auction is especially popular among young Chinese netizens. Despite the growing interest in e-auctions, however, little research about e-auctions has been published in scholarly journals. This study develops an electronic auction website assessment model (EAWAM) from a consumer perspective. This model suggests that user intentions of whether or not to continue using an e-auction website is based on their satisfaction with the website which are determined by their perceived website user friendliness, functionality and interactivity. To validate this model, a survey was conducted using users of Taobao.com, a well known e-auction website from 15 Chinese cities in 2006. 191 data entries were actually used in data analysis procedures in SPSS 14.0 and PLS-Graph 3.0. The results provided strong support for the proposed model.

A THEMATIC METHOD FOR WEB-BASED APPLICATIONS DESIGN

Seung C. Lee, University of Minnesota at Duluth, slee@d.umn.edu

Developing business applications on the Web requires execution of business process logic, integration with heterogeneous systems, and powerful processes composed from components. It also requires high performance, scalability, and extendibility. Successful development of a Web application in these environments, therefore, calls for bridging the gap between exercising available Web programming specifications and existing design methodologies. The proposed methodology employs both a multi-tier Web application architecture (presentation layer, business layer, data access layer, and data layer), as well as a unique Web application model, which views a Web application as a collection of themes, meta-themes, and other design primitives. A theme is a set of semantically tight-cohesive and syntactically loose-coupled information clusters. The design primitives include seven unique Web page types for the presentation and business layers, eight link types that are semantically different from each other, and four component types.

DETERMINANTS OF WEB SERVICES AND STRATEGIES DEVELOPMENT BUDGET

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Web Services and Strategies (WSSs) are becoming increasingly popular and companies continue to budget and invest in such ventures. The factors that actually drive such investments, as far as we know, have not been securely established. This study revealed that socio-economic characteristics of firms, except perhaps company's net-worth, and IT Portfolio Management (ITPM) seem to have very little influence on the amount of money expended on web applications.



INSTRUCTIONAL STRATEGIES #2

Thursday, October 4

11:40 a.m.—12:30 p.m.

Port of New York

Session Chair: Natalya Goreva

3rd Floor

TRANSITIONAL DISTANCE THEORY AND COMMUNICATION IN ONLINE COURSES – A CASE STUDY

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The need to enhance online classrooms is imperative to ensure a successful learning experience. This paper outlines the methods and tools needed to open the lines of communication within the different factors described in Moore's transitional distance theory. The paper may also serve as a model for graduate technology classes at Indiana University of Pennsylvania (I.U.P.) that are being designed for delivery in an online format. While these courses span multiple facets of technology such as security, technical trends, and Web design, the core competencies to develop a structurally sound online learning environment remain unchanged. The authors of this paper are incorporating tools and programs outside of traditional text and PowerPoint to encourage communication and student interaction in the online classroom. Incorporating communication tools in an online course differs from that of a traditional course. Thus this paper searches for answers in this regard.

ADVANCED DATABASE PROFICIENCY: THE CASE OF INSERTING LARGE DATA SETS

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Karina Hauser, Utah State University, karina.hauser@usu.edu

Advanced database skills are important for student to be prepared for the job market. This paper illustrates how an up-to-date, advanced database topic, namely BULK INSERT, can be incorporated into a database class. It gives detailed examples on how to import different file types and discusses associated issues.

CASE PROJECTS IN DATA WAREHOUSING AND DATA MINING

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This paper describes briefly the process of development of several case projects through offering a graduate level course on Data Warehousing and Data Mining. It then outlines a particular case project that describes the process of data extracting, data cleansing, data transfer, data warehouse design and development. It also outlines the development of a data cube as well as application of OLAP tools using Microsoft SQL Server Analysis Services to understand business intelligence. The results can be beneficial to an instructor who wants to develop a practical course or a practitioner venturing into the data warehousing and data mining area.



CORPORATE CULTURE AND COMMUNICATION #1

Thursday, October 4
Session Chair: Jensen J. Zhao

11:40 a.m.—12:30 p.m.

Port of Singapore
3rd Floor

PERSPECTIVES FROM CORPORATE MANAGEMENT

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Compliance with government regulations is forcing corporations to make changes in their information systems (IS) that are counter intuitive to the modern business model. Many organizations are reworking company processes to separate the functional tasks of end users. Conversely, previous studies have documented the positive impact of senior management who encourage employees to extend their responsibilities by handling a broad range of business processes. Multiple case studies were conducted with managers who work at one of the world's largest independent providers of information technology (IT). A framework is presented that suggests how IT and organizational strategy may be integrated to support both corporate governance and innovation.

UNINTENDED CONSEQUENCES:

IT'S DISRUPTION OF WORK-LIFE BALANCE

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Advancements in information technology have provided many opportunities for people to stay connected both at work and in their personal lives. Researchers and the popular press have argued that such connectivity would bring increased flexibility to both the firm and the individual. For the firm, this flexibility was to lead to productivity gains, improve information transparency, and make it easier to meet and exceed the needs of customers. As for the individual employee, flexibility would improve work-life balance. The idea was that the individual could choose when and where to work, thus allowing one to mesh personal life and work life in a more harmonious way. What proponents did not fully explore was that such technological advancements would allow employers to create a new work culture that would use technology to make their employees do more, work longer hours and blur the boundaries between a person's work life and personal life.

FIRST AND LAST THINGS:

UNDERSTANDING COMMUNICATION AND ORGANIZATIONAL INFOSCAPE

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Robert Joseph Skovira, Robert Morris University, skovira@rmu.edu

This research study has focused primarily on meetings (on-ground and virtual) as a means of gaining insight into the interaction of corporate culture, communications, and information technology. The methodology is qualitative in nature. The investigative focus of this paper is the problem of the interaction of corporate culture, communications, and information technology, the information landscape, in a large global professional services firm. Power distance and uncertainty avoidance are two dimensions of the corporate infoscape.



GLOBAL SOCIETY

Thursday, October 4

2:00—2:50 p.m.

Port of Hong Kong

Session Chair: Robert Joseph Skovira

3rd Floor

EMPIRICALLY TESTING FACTORS THAT DRIVE ICT ADOPTION IN AFRICA AND OECD SET OF NATIONS

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This study investigates factors that affect the adoption of information and communications technology (ICT) in Africa. The study also compares the ICT adoption factors in African nations with that of developed nations, represented by the Organization of Economic and Cooperative Development (OECD) over a period of over 21 years. Using a large set of data from World Bank and pooled regression analysis, the results show that economic development, education/training, and infrastructures play a significant role in ICT adoption. The effects of these factors could be similar or different on developed and developing nations depending on the specific factor considered.

LEVERAGING INFORMATION TECHNOLOGY TO BUILD A MORE INCLUSIVE E-SOCIETY

Mysore Ramaswamy, Southern University, Baton Rouge, LA, mysore@acm.org

George M. Neely, Sr., Southern University, Baton Rouge, LA, george_neely@subr.edu

The last few decades have seen tremendous innovations in information technology (IT) that have affected all aspects of modern life. Contemporary society has been variously called 'Information Society,' 'Digital Economy,' and 'Knowledge Economy.' The term 'E-Society' is perhaps more appropriate as it truly reflects the degree to which we are dependent on electronic or digital means even to execute our daily routine activities. Unfortunately, this convenience has not reached all segments of our society. Globally speaking, only one billion out of six billion has access to the Internet. In the United States, 27 percent of the population lacks access to the Internet, according to a study completed last year by the Pew Internet and American Life Project. In this paper, we analyze the role of information technology in shaping the various aspects of the current e-society. We study the problem from several perspectives and propose a set of recommendations that aids in building a more inclusive e-society.

USING MEDIA AND INFORMATION SYSTEMS TO EXPLAIN THE EFFECTS OF GLOBALIZATION AND MIGRATION

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Winston Tellis, Fairfield University, winston@mail.fairfield.edu

In this paper, the authors present the plight of a significant segment of immigrants – unaccompanied minors – who are not just alone in frightening circumstances, but often need services. The authors explore the role of Information Technology (IT), particularly the Internet in providing information to organizations who serve this population.



E-COMMERCE #2

Thursday, October 4
Session Chair: June Lu

2:00—2:50 p.m.

Port of San Francisco
3rd Floor

A RESEARCH FRAMEWORK ON B2C E-BUSINESS MODELS FOR CUSTOMER VALUE CREATION

Hwang-Yeh Chen, National Dong Hwa University (Taiwan), hjychen@gmail.com

The purpose of this study is to develop a conceptual framework highlighting the key drivers of customer value creation and its relationships with business models and strategies relevant to B2C electronic business that firms have to think of in order to successfully operate in the Internet era and eventually lead to sustainable competitive advantage. In this study, four key drivers for customer value creation are identified, i.e. efficiency, complementarities, innovation and lock-in, and their relationships with previously classified e-business models and adopted strategies for value creation are explored based on an extensive literature review. By integrating the business model/strategy approach with the customer value creation and by applying them to e-business, an appropriate foundation can be achieved through a conceptual framework that would provide a shared and common understanding of B2C electronic business models and that can be easily communicated between people and various stakeholders.

A LITERATURE REVIEW OF ONLINE TRUST IN BUSINESS TO CONSUMER E-COMMERCE TRANSACTIONS, 2001-2006

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The purpose of this research is to examine previous studies which focus on trust in Business to Consumer (B2C) of e-commerce transactions between 2001 and 2006. All selected papers are analyzed through a conceptual framework to recognize the context and nature of trust. The working process includes three primary phases: selecting and focusing, analyzing, and concluding and outcome-converging, which enhance the fulfillment of analysis and the accumulation of knowledge in the domain of B2C trust research. In the future, the research in this area need clearly indicate how proposed models are tested base on theory, and the nature of B2C trust studies must be identified more detailed, additionally, improving the oversimplification of the trust nature. Moreover, the researchers should associate the focal point with comprehensive in the future.

INTERNET LEGAL RULINGS: MOVEMENT TOWARD A CONSISTENT GLOBAL LEGAL E-COMMERCE ENVIRONMENT

Dr. Karen Lynne-Daniels Ivy, karen.l.ivy@lmco.com

The Internet has rapidly become an influential social, economic, and political force of the modern world. As the Internet and Internet legal issues have grown and developed, so too have the laws surrounding it. Countries have different approaches to Internet regulation. Most countries of the world regulate the Internet within the framework of their political, legal, moral and cultural values. Continued implementation of agreements between countries actively trading in electronic commerce is required to move toward a consistent global legal e-commerce environment. Agreements amongst all e-commerce trading countries would lead the way to a consistent global legal environment.



INSTRUCTIONAL STRATEGIES #3

Thursday, October 4

2:00—2:50 p.m.

Session Chair: Karina Hauser

Port of New York

3rd Floor

APPLYING COOPERATIVE LEARNING TECHNIQUES IN THE CLASSROOM: AN EXAMINATION OF LEADERSHIP STYLES IN CIS MAJORS

Dacia Charlesworth, Robert Morris University

Cooperative learning is becoming more prevalent in the classroom and has been shown to be an effective method for both faculty and students; however, it can often be difficult for faculty without expertise in leadership styles to implement the principles of cooperative learning and, more specifically, create successful teams. This paper (1) examines the leadership styles of Computer and Information Systems graduate and undergraduate students, (2) analyzes the validity of using students' self-reported leadership style, and (3) demonstrates how faculty could use an easily understood measure to help ensure successful cooperative learning experiences.

A COMPARISON OF COMPUTER-SUPPORTED COOPERATIVE WORK PROJECTS IN INFORMATION SYSTEMS COURSES

Dr. Pam A. Dupin-Bryant, Utah State University—Tooele Regional Campus, pamd@ext.usu.edu

Groups are a fundamental part of the business world. Yet, as companies continue to expand internationally, a major challenge lies in facilitating communication amongst team members who are geographically dispersed and located in varying time zones. Globalization has made it essential for companies to employ computer-supported cooperative work (CSCW). Therefore, to prepare students for success in the business world, instructors must help students develop necessary skills to collaborate via computer systems. This paper describes CSCW projects used in several Information Systems (IS) courses. Three areas provide a framework for discussions, including: (a) strategies for integrating computer-mediated collaborative projects into IS course curriculum, (b) a comparison of student groups who primarily used asynchronous groupware and those who employed synchronous groupware to complete course projects, and (c) an overview of student outcomes and skill development evidenced in these collaborative projects.

GLOBALIZING PROFESSIONAL DEVELOPMENT: THE EVALUATION OF A COLLABORATIVE COMPUTER-MEDIATED PROFESSIONAL DEVELOPMENT PROGRAM

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Maria Elena Valdes-Corbeil, The University of Texas at Brownsville, maria.e.valdes@utb.edu

Does long-term professional development in educational technology impact teachers' integration of technology in the classroom? According to a recently published 5-year study, the answer is "Yes!" This paper presents the evaluation results of a three-year, hybrid professional development program established through an innovative partnership between an East Texas school district and a South Texas university that are 500 miles apart. The report revealed that more than 350 teachers who participated in the professional development program, significantly increased their integration of technology and utilized research-based instructional strategies to enhance student learning. Based on its success, the program serves as a conceptual model for collaboratives between school districts and institutions of higher education that maximize resources and transcend distance for the delivery of effective professional development and continuing education for classroom teachers.



CORPORATE CULTURE AND COMMUNICATION #2

Thursday, October 4

2:00—2:50 p.m.

Port of Singapore

Session Chair: Roger L. Hayen

3rd Floor

CORPORATE CYBERSPACE COMMUNICATION VS. PAPER-BASED COMMUNICATION:

THE IMPACT OF MEDIA CHOICE ON COST AND BENEFIT

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This study investigated how corporate media choices such as cyberspace and paper-based communication impacted cost and benefit. Data were collected from the Fortune 500 companies. The findings indicated that, while all the companies provided the Web version of annual reports on their investor relations page, 53% of the companies still printed and distributed paper-based annual reports in 2005. The average cost of designing, printing, and distributing paper-based annual report was more than \$1.7 million per company in one year, which also consumed approximately 647,059 pounds of paper. In contrast, the costs of CD- and Web-based annual reports were only 21% and 3% of the cost of the paper version, respectively. In addition, the cost of distributing e-coupons by email was just 2% of the cost of mailing paper coupons via postal service.

A STUDY OF COMMUNICATION THAT DESCRIBES AND DEFINES CORPORATE COMMUNICATION PATTERNS AND OVERALL EFFECTIVENESS

Dr. Dennis L. Mott, Oklahoma State University, dennis.mott@okstate.edu

This is a study of communication that describes and defines corporate communication patterns and overall effectiveness. A series of scientific studies confirm what established professionals typically know from an intuitive perspective—information systems managers spend the majority of their days in meetings, on the telephone, conducting interviews, giving tours, supervising informal visits to their facilities and engaging in a wide variety of social events. A 2005 survey by American Online and Salary.com concluded that the average U.S. worker wastes more than two hours each day on non-productive technical communication tasks. It was estimated that the overall cumulative costs to employers was \$759 billion each year for time expended on non-mission related communications. This research focuses on the overall strengths and weaknesses of communication efforts --with recommendations for improved communications at the personal and corporate level.

HOW TO MEASURE INFORMATION AND COMMUNICATION TECHNOLOGIES PERFORMANCE:

AN UPDATED LITERATURE REVIEW

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This paper presents a systematic literature review of Information and Communication Technologies impact from a firm performance perspective. We introduce and describe a framework of classification according to several economic performance measures. As in previous studies, we distinguish market value and accounting measures but we also highlight the importance of intermediate measures and other performance measures such as customer satisfaction, effectiveness, quality or turnover ratios to understand previous mixed results. These measures are increasing their importance in recent academic studies. The study presents a wide view of the literature on ICT impact and offers suggestions to improve future research.

ROUND TABLE DISCUSSIONS

Thursday, October 4
Session Chair: S.E. Kruck

3:00—3:50 p.m.

Port of Hong Kong
3rd Floor

BEYOND INTERNSHIPS WITH SERVICE LEARNING: A CASE STUDY IN MERGING CLASSROOM ACTIVITIES WITH COMMUNITY SERVICE

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Academe faces a challenge to increase the student's exposure to real-world situations in the classroom beyond internships. How can students get practical field experience if they do not have a paid internship? How can they get field exposure through the classroom? To meet those challenges, the Computer Information Systems faculty at a university in southwestern Pennsylvania collaborated with the Senator John Heinz History Center in Pittsburgh, PA to provide students with service learning opportunities in the field. Students gained applications development experience as part of the course requirements for assignments and exams found in traditional in-class activities. This round table discussion frames the startup of the collaboration between the two entities, the successes accomplished in the past two years and the plans for the next two to three years.

FINDING LIGHT AT THE END OF THE GRADUATION TUNNEL

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This paper identifies some key attributes Information System (IS) graduates should be aware of in their quest to find a job. In looking at over 330 job postings on Monster.com and Dice.com, we found that there are three things employers want in their new hires: education, certification, and experience. In this paper we develop a rationale for motivating IS students to graduate, take internships, and get certified.

TABLET PCS: AN ADOPTION CASE STUDY

Thomas S. E. Hilton, University of Wisconsin—Eau Claire, hiltonts@uwec.edu

In 2002 the computer industry was abuzz with the "death of the PC" and the advent of alternative computing platforms. Prime among these alternatives was the tablet PC. Forecasts abounded that PCs would decline as tablets became ubiquitous. However, as of 2007 that has not happened. As an early adopter and long-time user of the "slate" (as opposed to "convertible") tablet PC form factor, I have been curious about the reasons the forecast adoption did not occur. I have also been inundated by questions from curious computer users wherever I go. As a result, I have gathered a(n admittedly anecdotal) body of information around which I propose to present (a) a case study (my own) of tablet PC adoption and (b) an analysis of points raised by computer users who have told me they would obtain and use a tablet PC and then did not.

THE USE OF OPEN-SOURCE SOFTWARE IN THE CIS CURRICULUM : A ROUND-TABLE PROPOSAL

Joseph Francom, Kentucky Wesleyan College, jfrancom@kwc.edu

Open source software is a readily available and inexpensive resource that could be used to facilitate instruction and aid student learning in many different areas of CIS. Open source software could be used in nearly any class. Some examples might include the usage of GIMP instead of Photoshop, MySQL instead of SQLServer, SharpDevelop instead of Visual Studio .NET. Many other potential implementations and usages of OSS within the CIS program are feasible. The round-table discussion has the following objectives: (1) Discuss where OSS is currently being used within the CIS curriculum and where else it could be used, including particular examples of OSS software, (2) Discuss advantages and disadvantages of using OSS within the classroom, (3) Discuss successes and failures of the utilization of OSS within the classroom as well as how students have responded to OSS implementation.

M-COMMERCE

Thursday, October 4

3:00—3:50 p.m.

Port of San Francisco

Session Chair: Fuchung Wang

3rd Floor

DECISION MAKING TOOLS IN CELLULAR TELECOMMUNICATION NETWORK DESIGN: GIS AND NLP

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Using the correct tools to make a decision is very important to the decision makers. In this paper two supporting tools, Geographic Information Systems and Nonlinear Programming, are introduced to select the optimal location of a Mobile Telephone Switching Office in the cellular telecommunication network design. The cellular telecommunication network system often encounters capacity inadequacy issues due to an increase in the number of subscribers and the related data traffic. Installing a Mobile Telephone Switching Office (MTSO) is a common method used to increase the network capacity. Selecting the installation location of MTSO is critical due to its direct relationship to the installation cost and call routings. Candidate areas are selected using a Geographic Information Systems technique. A non-linear programming model is developed to solve the MTSO's optimal location problem of selecting a spot among the candidate sites, and two test cases are implemented and analyzed. Based on the analytical results of the test cases, this paper suggests a method of selecting MTSO locations along with the effectiveness of the method.

WIRELESS FINANCIAL TRANSACTION REPORTING SYSTEM FOR M-COMMERCE

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As mobile devices have been popular, many wireless applications for mobile devices have been developed. The paper presents the financial transaction system for online game and its architecture in J2EE. The system provides transactional report by filtering the millions of transactions on selected periods. The paper first describes the system's financial transaction formula, then, provides m-Commerce architecture, and finally illustrates how the system is expanded to wireless application on WAP by integrating J2EE and WML. The financial analyzer can gather information by the mobile device and analyze the transaction of the game with the reports displayed on the device that is portable and scalable.

LONG-TERM SECURITY VULNERABILITIES OF ENCRYPTED DATA

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Large amounts of digital data continuously move across the Internet, much of it traveling under a wide variety of encryption and security protections. Such schemes are intended to secure this data against information theft as it traverses the various nodes along the path to its intended destination. While such methods, when properly utilized, may be considered secure in the short-term, many widely employed encryption schemes may not meet consumer expectations over longer periods of time. Therefore, we highlight a little-noted vulnerability that exists for certain classes of information that require longer-term security. Encrypted information, captured and stored today, may be decrypted at some point in the future as more powerful computers and more sophisticated methods become available. This paper provides a first description and analysis of this gap in data security practices. A practical method for auditing and addressing data security vulnerabilities of this type is presented, along with a brief demonstration of its use.



INSTRUCTIONAL STRATEGIES #4

Thursday, October 4

3:00—3:50 p.m.

Port of New York

Session Chair: Leila Halawi

3rd Floor

SPREADSHEET-BASED DECISION SUPPORT COURSE USING VBA

Dr. Harry Benham, Montana State University, hbenham@montana.edu

This paper argues in favor of using a spreadsheet-based approach in the undergraduate Decision Support course. Such an approach is widely used within Information System and is consistent with common Management Science pedagogy. Spreadsheet software is sufficiently powerful to implement most Decision Support techniques and it is widely available in the workplace so that skills acquired in school can have direct application in the workplace. And finally, employers recognize and reward skills.

A PICTURE IS WORTH A THOUSAND WORDS:

USING DIGITAL STORYTELLING IN THE CLASSROOM

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Digital storytelling is the use of multimedia presentations to convey information in a way that is logical, yet often deeply emotional. Through the use of global media like images and music, stories can be told that span language, culture, and disciplinary boundaries. In this paper, we describe the ways that digital storytelling can be used in the classroom, both as a learning assessment method and as a teaching tool. We show how the use of digital storytelling in classes can make computing skills relevant in a non-computing class, as well as attract non-technical students to the computing field.

IS THE PROBLEMATIC IN CS1 A STUDENT'S PROBLEM SOLVING ABILITY?

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A student's problem solving ability (PSA) is often considered a factor in determining their success in a first course in computer programming (CS1). Can a student's PSA be measured before taking a CS1 course? How? Would such an assessment effectively predict final exam scores? This paper presents the results of a pilot study guiding the development of a PSA assessment method. The approach attempts to use a student's words in response to an analysis task to extract quantifiers of PSA. This research is viewed as a compass to point out a direction (with much more road to travel). The tentative answer is "PSA may be detectable in student's expressions."



CORPORATE CULTURE AND COMMUNICATION #3

Thursday, October 4

3:00—3:50 p.m.

Port of Singapore

Session Chair: Dennis L. Mott

3rd Floor

USE OF GROUP SUPPORT SYSTEMS IN TODAY'S SOCIETY

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Group support systems are increasingly being used in organizations and within schools. Group support systems are collaborative software tools that can be used to focus and structure a team's deliberation, while minimizing costs and distractions among teams working collaboratively. Several advantages are present such as anonymity, parallel communication, automated record keeping, more structure and an increase in productivity. Companies such as IBM, Procter and Gamble, Boeing and Marriott have used these systems to reduce meetings times and project times by 90 percent.

A COMMUNICATION MODEL FOR VIRTUAL COLLABORATION

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Globalization and the changing structures of organizations have created work groups that are distributed across space (different sites) and time. Collaboration among and between organizations is needed to support outsourcing strategies. As organizations focus on long term outsourcing and off-shoring relationships, effective communication is often seen as an important factor contributing to the success of individuals, project teams, and organizational growth. The adoption of global business models are enabled by the deployment of advanced technology to extend the usefulness of IT in support of distributed work environments. This research focuses on communication medium, decision quality, and group cohesiveness as important factors in determining the effectiveness of virtual teams.

IF E-MAIL IS FOR OLD PEOPLE, ARE UNDERGRADUATES OLD PEOPLE?

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This study investigated the use of e-mail and other means of electronic communication by undergraduates at a northeastern university and whether gender and student year of study impact the use of various electronic communication means. It was found that 94% of the students check their university e-mail account at least once a day with the major use of university e-mail to communicate with instructors and keep up with the notices from the school. 79% of the students have other e-mail accounts, but they do not use the other e-mail accounts as frequently as the university e-mail. In addition to e-mail, many students use other electronic communication means on a daily basis. E-mail is considered by 17% of the students as their favorite means of electronic communication, while 29% favor the cell phone and 25% favor instant messaging. It was also found that gender impacts the use of text messaging and student year of study impacts the use of instant messaging and facebook.com. In general, this study did not find that undergraduates have abandoned e-mail as reported in some periodicals.



IS ASSESSMENT

Thursday, October 4
Session Chair: Harry Benham

4:20—5:10 p.m.

Port of Hong Kong
3rd Floor

RUBRIC FOR ASSESSING OUTCOMES

IN BUSINESS INFORMATION SYSTEMS VIA CAPSTONE PROJECTS

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In recent years, assessment has become increasingly important in education. Additional focus has been placed on assessment by accreditation agencies with the result that all disciplines must participate in assessment. A central component of the assessment plan that we developed for assessing outcomes of our Business Information Systems concentration within the Computer Science major at St. Norbert College takes advantage of our capstone course and the projects that our seniors complete as part of the course. The rubric we use to assess outcomes, its development and evolution, and its effectiveness are presented in this paper.

DEVELOPMENT OF A MODEL FOR THE ASSESSMENT

OF LEARNING OUTCOMES AND COMPETENCIES ACROSS A PROGRAM

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How can we evaluate the knowledge and skills acquired by students during their academic lives? Can we identify best assessment practices and develop a quantitative method to assess student learning outcomes (in the framework of the International University of Monaco)? Furthermore, how can we extend this method to assess and then improve the quality of education provided by our institution? More over can we adopt One Line survey, to allow faster collection of data and open the assessment to the world, including Alumni, alumni employers, Executive students always far away from the university

A COMPARISON OF TWO COMPUTER LITERACY TESTING APPROACHES

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Although computer literacy is hard to define and means different things to different people, the advancement of information and communication technologies and the ubiquitous computing environment have made it a necessity for everyone to be computer literate. Computer literacy is a fundamental part of undergraduate education. The assessment of computer literacy remains to be a challenging issue faced by educators. This study focuses on a comparison of two computer literacy testing approaches. Two testing tools, the Computer Skills Placement (CSP) test and the Prentice Hall Train & Assess IT (TAIT) testing tool, were selected and investigated. A qualitative comparison of two testing tools was made. The differences in basic computer skills or sets of knowledgebase covered were discussed and the advantages and disadvantages of each testing tools were examined.



E-GOVERNMENT

Thursday, October 4
Session Chair: Joon-Yeoul Oh

4:20—5:10 p.m.

Port of San Francisco
3rd Floor

E-GOVERNEMENT-TO-BUSINESS SERVICE QUALITY AND USER SATISFACTION:

AN ASSESSMENT OF THE U.S. STATE G2B WEB PORTALS

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This study assessed the e-government-to-business (G2B) service quality and user satisfaction of the 50 U.S. states and Washington, D.C. The findings indicate that only the following five e-services were offered by most G2B portals with effective information, navigation, interactive, transactional, and intelligent capacities: (a) Business Licenses, Permits, and Regulations, (b) Business Taxes and Reporting, (c) Doing Business with the State, (d) Employment and Workforce Information, and (e) How to Start a New Business. The majority of the online users were satisfied with the state G2B services. The findings also identified areas that need improvement.

ON THE DIMENSIONS OF E-GOVERNMENT INTERACTIONS

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The way in which governments interact with their constituents has radically changed due to the recent innovations in information and communication technology (ICT). In spite of the considerable literature on digital or e-government, a clear understanding of the dimensions along which the success of automating government-constituent interactions can be measured is still lacking. This is a critical issue as it has a direct bearing on the very effectiveness of e-governance. Without some method of categorization and assessment, the formation of good policy and planning capable of leveraging the existing capacity of institutions to deliver public service is simply not feasible. In this paper, the dimensions of interactions that occur between a government and its various constituents are analyzed through a variety of modeling techniques. The exercise of restructuring government processes to make them more amenable to automation is also explored through an integrated approach that combines the key elements of three modeling techniques.

E-GOVERNMENT SYSTEM IN WIKINOMICS: STAKEHOLDERS AND CONFLICT

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Despite the importance to researchers, managers, and policy makers of how information and communication technology (ICT) contributes to public organizational performance, there is uncertainty and debate about how e-government (e-Gov) differs from traditional public management information systems. The new world of wkinomics, which is based on four powerful new ideas—openness, peering, sharing, and acting globally—is replacing some of the old tenets of business. Our research focuses on several different theories include transaction cost, bargaining power, coordination to develop a new perspective to explain the e-Gov system development in the wkinomic. We synthesize what is known about government value and clarify the supposed uncertainty about the relationship between the e-Gov and the traditional public management information systems.

INSTRUCTIONAL STRATEGIES #5

Thursday, October 4

4:20—5:10 p.m.

Port of New York

Session Chair: Michele Kleckner

3rd Floor

A PROPOSED CIS CURRICULUM REDESIGN FOR EVALUATING THE EDUCATION VALUE AND VALIDITY OF TABLET PC

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It is a scientific fact that people will retain significantly more if they can see, hear, and do simultaneously in learning. Therefore, an effective instructor should employ multiple methods of delivery especially when the material at hand is particularly complex. The Tablet PC has been widely known for its ability to conveniently and intuitively accept input through a digital pen, store the handwritten input, and allow annotations. Hence, it is believed that the computer courses that involve a high degree of complicity in content could be taught more efficiently and effectively through course redesign and the application of Tablet PC technology. This paper describes a proposed project that evaluates the education value and validity, with respect to the interactive features of the Tablet PC under an environment where the "Student-Centered Learning" concept and practice is emphasized.

EXAMINING STUDENTS' ACCEPTANCE OF TABLET PC USING TAM

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With the proliferation Tablet Personal Computer (TPC) based mobile computing initiatives across campuses; evaluation of such initiatives becomes the logical next step. Yet for such initiatives to improve students' learning and teaching effectiveness, such technology-based initiatives must be accepted by students and faculty alike. This research evaluates students' acceptance of TPC as a means to forecast, explain, and improve usage pattern. The research utilizes the technology acceptance model as an underlying theoretical model and the Partial Least Square (PLS) to estimate the parameters of the causal model. Overall, the findings indicate that TAM is able to provide a reasonable of students' acceptance of TPC with perceived usefulness a significant determinant of attitude and intention, perceived ease of use a significant determinant of usefulness and attitude.

MEASURING FACULTY PERCEPTIONS OF BLACKBOARD USING THE TECHNOLOGY ACCEPTANCE MODEL

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Web-based education offers the combination of self-paced learning and interactivity. We are just now beginning to empirically assess the differences between online education and traditional classroom based instruction. The Technology Acceptance Model (TAM) has been widely used in Information Systems research to analyze user perceptions of technology. This paper describes the results of an empirical study of faculty perception of Blackboard usage, utilizing TAM as its theoretical basis.



CORPORATE CULTURE AND COMMUNICATION #4

Thursday, October 4
Session Chair: Gary Baker

4:20—5:10 p.m.

Port of Singapore
3rd Floor

AN EMPIRICAL STUDY OF STRATEGIC IMPLEMENTATION OF ORGANIZATIONAL LEARNING

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This paper is a case study of creating learning-based competitive advantage through organizational learning. It examines how two business firms create competitiveness through transforming themselves into learning organizations. Data was collected and analyzed at corporate level of the subject organizations. A conceptual model of creating learning-based competitive advantage through organizational learning has been developed based on the findings.

CULTURAL AND DEMOGRAPHICAL DIFFERENCES IN E-BANK PRIVACY: A CROSS-NATIONAL STUDY BETWEEN PORTUGAL AND FINLAND

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In globalising markets, banks face an increasing need to recognize the differences in customer perceptions between cultures and to restrict the factors causing uncertainty. The study is aimed at providing academics and bank managers with a better understanding of how real e-Bank users perceive privacy in Internet banking environment, exploring differences between two countries, quite asymmetric at the cultural and communication technology adoption levels. Internet surveys were conducted on online banking customers in Portugal and Finland. Sample sizes were 754 and 2.675, respectively. In what respects perceived privacy, one has studied the differences not only between countries but also between all of them, both at the demographic and usage level. Results indicate significant differences in customer-perceived privacy: Portuguese users have a significantly higher level of perceived privacy, mostly due to gender and experience (using e-bank) effects, demonstrated by GLM and ANOVA techniques. Perceived Privacy level increases significantly with usage time experience and varies across genders. Portuguese female heavy-users revealed the highest level of perceived privacy, whereas Finnish female with low experience with e-Banking showed the lowest level. Furthermore, suggestions for the enhancement of customer perceived privacy in Internet banking are made.

ICT USE: THE INFLUENCE OF CULTURAL DIMENSIONS ON THE NEED FOR MEDIA RICHNESS AND TECHNOLOGICAL RICHNESS

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Globalization is one of the major forces behind the growing need to know the extent to which culture and context-related variables influence information technology (IT) use. In this study, data collected from Chinese and Canadian managers was used to assess the impact of cultural dimensions on the extent to which people are interested in both media richness and technological features associated with Information and Communication Technologies (ICT). The results showed that there is a significant difference between Canadian and Chinese managers in terms of their interest in media richness. The results also showed that there is no relationship between cultural dimensions and peoples' interest in technological features like storage capacity, data accessibility, and ability to access messages anytime, anywhere.

WEB 2.0 AND 3.D

Friday, October 5

10:20—11:10 a.m.

Port of Hong Kong
3rd Floor

Session Chair: Bryan Marshall

WEB 2.0: IS THE ENTERPRISE READY FOR THE ADVENTURE?

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The current popularity of social networking is starting to infiltrate the corporate space. Web 2.0 applications, such as blogs and wikis, are increasingly being utilized as ways for businesses to collaborate and share information with employees, customers, partners, and suppliers. Organizations have adopted enterprise architecture approaches to enable them to more quickly react to new technologies. Are organizations ready for Web 2.0? We explain the fundamental concepts in Web 2.0, examine ways it is being utilized in the enterprise, and then analyze if the E2AF enterprise architecture framework is equipped to meet the challenge of Web 2.0

APPLICATION OF WEB 2.0 TECHNOLOGY TO THE ENTREPRENEURIAL PROCESS

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Information systems have become an integral part of social, professional, educational, and business environments. Technology has shown its mark through companies such as MySpace, YouTube, E-bay, Blackboard, Amazon, and Facebook. The Internet has enabled people to pursue unique business opportunities and create social phenomena and trends online. Technology that is at the root of new business trends and opportunities is Web 2.0 software, which is the next generation of web technologies that utilize the Internet as a platform to emphasize networking, collaboration, and sharing amongst users. This paper outlines a system to bring innovation to the process of supporting entrepreneurs and their communities by resource providers through the application of Web 2.0 software. The model characterizes how technology can be leveraged to streamline the business development process in order to route entrepreneurs through the various business development and growth life cycle stages with a self-sustaining network. The individualized network allows entrepreneurs to obtain timely and pertinent information and training that directly applies to their individual needs.

PRICING GAP OF CONSUMER PRODUCTS IN VIRTUAL WORLDS

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Christoph Lattemann, Rollins College & University of Potsdam, christoph.lattemann@uni-potsdam.de

The emergence of social Internet-mediated networking such as Skype, Myspace, and Youtube enable people new ways and channels to communicate, collaborate, and cooperate. This is often referred to Web 2.0. However, technology development does not stop there and it seems a new, far more significant and profound trend to emerge, with the Web 3.D. It is the synonym for Internet based virtual worlds, where people can create their own 3D 'virtual' personalities, called avatar, meet people, test products, travel, participate in virtual workshops and events, and specifically buy and sell virtual goods and services. One of the most famous of these virtual worlds is Second Life (SL). By using a heuristic approach, this paper analyzes the pricing of the various product classes in the virtual world.



SOFTWARE DEVELOPMENT #1

Friday, October 5
Session Chair: Xing Liu

10:20—11:10 a.m.

Port of San Francisco
3rd Floor

SECURE PROGRAMMING CONCEPTS IN SELECTED C++ AND JAVA™ TEXTBOOKS

Robert Joseph Skovira, Robert Morris University, skovira@rmu.edu
David Wood, Robert Morris University, wood@rmu.edu

Creating secure software applications and writing secure programs are difficult affairs. Secure programs are well designed software applications which meet specified requirements. Well designed software is reliable in its availability and accessibility. The paper's problem is whether the textbooks used in instruction of beginning programming students directly and actively discuss secure programming issues. A possible flaws model (buffer overrun, format string, integer overflow, SQL injection, command line injection, and exception handling) is constructed. Selected introductory textbooks on Java and C++ were reviewed.

A PRACTICAL APPROACH TO INCLUDE SECURITY IN SOFTWARE DEVELOPMENT

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Meledath Damodaran, University of Houston-Victoria, damodaranm@uhv.edu

This paper explores the question of, and suggests some specific methods for, building security into an application software system, starting from the requirements gathering phase and continuing on with each of the subsequent phases of the software development life cycle: requirement analysis and specification, design, development, testing, and implementation.

EXPLORING THE ROLE OF SELF-EFFICACY, PLAYFULNESS, AND CREATIVE SELF-EFFICACY IN INFORMATION SYSTEMS DEVELOPMENT

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In this paper we argue that successful information systems development requires creative problem solving skills, and present two cognitive factors, self-efficacy, and creative self-efficacy, and one affective factor, playfulness, as three key personal factors that aid creative problem solving during information systems development (ISD). A research model to support our argument is constructed synthesizing relevant literature from social cognitive theory, IS success, and software quality research streams. A proposed methodology to test the research model and the research implications are also presented.



ETHICS #1

Friday, October 5

10:20—11:10 a.m.

Port of New York

Session Chair: Robert J. Boncella

3rd Floor

INFORMATION TECHNOLOGY INTELLECTUAL PROPERTY ETHICS: ISSUES AND ANALYSIS

Alan R. Peslak, Ph.D., Penn State University , arp14@psu.edu

Unethical information technology behavior is estimated to cost billions of dollars of losses for businesses and corporations. This includes issues associated with information technology property. As an example, software piracy is resulting in extremely large costs for IT (information technology) firms. This paper examines current views of information technology property as measured by a series of six current information technology related property ethical issues. The study surveys a cross-section of students, faculty, and professionals and analyzes recognition of an ethical issue for each individual topic. First, the study confirms that all the studied information technology property issues are generally recognized as important ethical topics. Age and gender are studied to determine demographic influences. Significant differences were found by age and gender for some but not all property issues. A discussion and implications of this research are also presented.

EMPLOYEE INTERNET ABUSE: POLICY VERSUS REALITY

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Zsolt Ugray, Utah State University, Zsolt.Ugray@usu.edu

This study addresses the question of whether Management and Technical measures effectively prevent or reduce employee Internet Abuse. Recent literature suggests that there is concern among practitioners and academics regarding the potential for diminished productivity, wasting of time and other resources, and even legal liability due to personal Internet use on company time. Recommendations to counter these problems usually include technical measures (firewall policy) and management measures (Acceptable Internet Use Policy or AIUP). Most studies to date have relied on subject self-reporting to assess these potential problems. In our study we examine the actual Internet log file of an international company. We compare the declarations in the company's AIUP with the actual Internet use patterns in the log file. We also assess the effectiveness of the company's firewall policy by noting the types of web sites that are blocked, compared to the types that are not blocked. This study sheds light on the gap between currently recommended measures and the reality of personal Internet use in the workplace. Our findings have implications regarding effective policy formulation and enforcement of interest to both managers and educators.

GROWTH AND TRAINING IMPACT IN IT: A MEASURE OF ETHICAL REASONING

Belle Woodward, Assistant Professor, Southern Illinois University, bellew@siu.edu

As technological advances reshape society and the workplace, the need for ethically-grounded information technology professionals has become paramount. Recognizing the importance of pursuing the ethical life as well as the unique ethical challenges posed by rapidly evolving technologies, scholars have recently debated how best to incorporate ethical instruction in the information technology (IT) curriculum. The controversy lies not so much in whether ethics should be taught, but rather in how to evaluate the effectiveness of particular pedagogical practices vis-à-vis their impact on the ethical development of IT students. One ethicist, Muriel Bebeau, suggests that a system of "intermediate concepts" should be adopted in particular disciplines. This review of the literature traces the developing demand for and concern about ethical training in the IT field and suggests an application of Bebeau's intermediate stages theory in the IT field.

E-LEARNING: PANEL PRESENTATION

Friday, October 5
Session Chair: Gary A. Davis

10:20—11:10 a.m.

Port of Singapore
3rd Floor

COLLABORATIVE LEARNING/ACTIVITIES IN ONLINE IS/IT COURSES

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Collaborative learning assumes active construction of knowledge through social presence and cognitive presence. The aspiration for collaborative learning is "...to create a community of inquiry where students are fully engaged in collaboratively constructing meaningful and worthwhile knowledge."

The purpose of this panel is to create a dialog on collaborative learning/activities in online Information Systems/Information Technology (IS/IT) courses. First, the collaborative learning principles will be delineated and discussed. Second, each panelist will discuss his/her experience with online IS/IT courses. The discussion will then shift into the following themes:

Advantages of collaborative learning/activities in online IS/IT courses

Limitations of collaborative learning/activities in online IS/IT courses

Challenges of collaborative learning/activities in online IS/IT courses (class size, faculty support, assessment)

Future of collaborative learning/collaborative activities in online IS/IT courses

Panelists will present one theme at a time. Audience will be invited to participate in the discussion.

SOCIAL NETWORKING AND VIRTUAL COMMUNITIES

Friday, October 5
Session Chair: Richard V. McCarthy

11:20 a.m.—12:10 p.m.

Port of Hong Kong
3rd Floor

CAN HEATHER GILLETTE SAVE YOUTUBE?

INTERNET SERVICE PROVIDERS AND COPYRIGHT LIABILITY

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Bryan McKinney, Ouachita Baptist University, mckinneyb@obu.edu

The phenomenal growth of Internet service provider YouTube has already raised the company to legendary status. When Google acquired the company in 2006, YouTube's founders became billionaires. But YouTube's future success is contingent upon its ability to avoid copyright liability lawsuits that destroyed an earlier generation of online firms like Napster and Grokster. This paper describes YouTube's products and technology, summarizes the potential legal case against YouTube, discusses the relevant legal precedents, and concludes with an assessment of YouTube's future legal challenges.

SOCIAL NETWORKING AND VIRTUAL COMMUNITIES (cont.)

Friday, October 5

11:20 a.m.—12:10 p.m.

Port of Hong Kong

Session Chair: Richard V. McCarthy

3rd Floor

**CROSS-CULTURAL COMPARISONS OF TECHNOLOGY ADOPTION
AND TECHNOLOGY PREFERENCES FOR SOCIAL NETWORKING SITES**Daniel Norris, Ph.D., University of South Carolina, dnorris@sc.eduPeter W. Cardon, Ph.D., University of South Carolina, pcardon@sc.eduBryan Marshall, Ph.D., Georgia College and State University, bryan.marshall@gcsu.edu

Social networking sites are significantly impacting the youth and young adults of the world. The adoption and preferences of social network sites were examined in 10 countries: one country from each of ten cultural clusters. Technology adoption was analyzed in terms of number of users and in terms of the TAM Model. Dimensions for site preferences included orientation of content, types of services (i.e. video or mobile enabled), privacy tools, and membership requirements. Cultural dimensions used to analyze these results included individualism, power distance, masculinity, and uncertainty avoidance. The paper concludes with implications for the future use of social networking sites in the workplace.

**WHY PEOPLE BLOG:
AN EXPECTANCY THEORY ANALYSIS**Su-Houn Liu, Chung Yuan Christian University, vandy@mis.cycu.edu.twHsiu-Li Liao, Chung Yuan Christian University, wenlly.liao@msa.hinet.netYuan-Tai Zeng, Chung Yuan Christian University, idr1980@yahoo.com.tw

The evolution of the Internet offers new tools allowing ordinary people to become content creators. One of the latest popular tools is the Internet-based blog. In this study, expectancy theory is applied to construct a conceptual framework as well as a measurable model on bloggers' motivation to blogging. Interviews with 177 bloggers were performed. From the 10 motivations examined in this study, bloggers ranked pouring out feelings and connecting with people respectively, as their two most valued rewards. They also assigned the highest probabilities to these rewards. The collected data shows that bloggers with high (both intrinsic and extrinsic) motivation for rewards have higher level of blogging intention. A blogger with higher blogging intention is willing to take more time to maintain their blog and post more articles on the blog.

**WEBLOGS: AN EXPLORATORY STUDY
OF UNDERGRADUATE BEHAVIOR BY ACTIVITY AND GENDER**Carl J. Case, St. Bonaventure University, ccase@sbu.eduDarwin L. King, St. Bonaventure University, dking@sbu.edu

Weblogs (also known as blogs) are being increasingly used in the business world to communicate information from both the corporate and consumer perspectives. Little research, however, has been conducted to examine weblogging at the undergraduate level. This study, therefore, was conducted to empirically investigate student behavior and perceptions. Results suggest that blogging is not common among students, varies by type of blog and by gender, and is not similar to that of the general population. In addition, bloggers perceive information on blogs to be much more accurate than non-bloggers.



SOFTWARE DEVELOPMENT #2

Friday, October 5

11:20 a.m.—12:10 p.m.

Port of San Francisco

Session Chair: David F. Wood

3rd Floor

CREATING PLUGGABLE DOMAIN-PLATFORMS FOR GOVERNMENTAL SYSTEMS

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Governmental entities, by their nature, repeat geographically across the nation and around the world. As such, they have duplications of needs and of course this leads to “reinventing of the wheel”. Given the available technologies available today, much of this duplication can be eliminated using the “open source” software paradigm for the construction of information systems. The goals of this paradigm shift are to (1) make the creation of governmental computer systems more efficient by reducing duplications, (2) spread the expense, (3) create better systems and (4) make the systems available to other government agencies.

DESIGN AND DEVELOPMENT OF A WIRELESS TOXIC GAS SENSING INFORMATION SYSTEM

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Zhen Sheng Gao, Original Organic Farm Inc., jamesg@origino.ca

This presentation reports some on-going applied research in developing a wireless toxic gas sensing information system. The system has the potential to be used in greenhouse vegetable producing facilities, residential homes, in-building parking facilities, commercial buildings and underground mines. The objective of the project is to build the hardware of a wireless gas sensor together with an information system that works with the sensor. The hardware of the sensor is based on off-the-shelf components plus the electronic circuitry to be developed by the authors. The information system software to be developed has database capability, a presentation layer which consists of standard Internet interface and mobile device interface, and an expert module. The database module stores the data collected. The presentation layer enables data retrieval from the Internet or from mobile devices, and the expert module provides educational, medical and production advice regarding toxic gases.

USE OF FUZZY LOGIC IN SOFTWARE DEVELOPMENT

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Fuzzy logic has the ability to deal with uncertainty and multi valued logic in software development processes and products. Fuzzy logic uses membership functions to incorporate linguistic variables and quantifiers. Fuzzy Logic could also be used in project estimation purposes efficiently by gathering size data on previously developed programs. Fuzzy logic based estimation provides reasonably good estimates where new work is like prior experience. Fuzzy logic concepts could also be used at the testing phase of software development. If some decision making or human communication is involved during development process, we can use the concept of fuzzy logic to improve software development processes and products.



ETHICS #2

Friday, October 5
Session Chair: Alan Peslak

11:20 a.m.—12:10 p.m.

Port of New York
3rd Floor

**AN ONLINE LEARNING ENGINE FOR ETHICS EDUCATION:
A PROOF OF CONCEPT USING BUSINESS ETHICS**

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Learning to apply business ethics or ethics in general is difficult. Add to this the desire to have students learn ethics online and the task becomes more difficult. A major reason for the difficulty when using this approach, online education for ethics, is that seldom do the required subject matter expertise (SME) and technological and related pedagogical expertise (TPE) reside in one person. The following is an attempt to create an online education engine based on Cognitive Flexibility Theory and the technology of Wikis. This online education engine is designed for the subject matter of ethics in general. We then give a proof of concept by instantiating it with the content of Business Ethics. When deployed, this learning engine will provide a standardized approach to learning to apply Business Ethics in context without the need for a stand alone Business Ethics course.

E-CHEATING: ARE STUDENTS MISUSING IT?

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Carl J. Case, St. Bonaventure University, ccase@sbu.edu

Undergraduates have numerous technological avenues to utilize if they choose to cheat in a class. Students, for example, can use a cell phone to store answers or use the Internet to download a research paper. Even though the problem of “e-cheating” is important to teaching faculty, little research has been conducted to examine e-cheating at the undergraduate level. This study, therefore, was conducted to empirically investigate student behavior and perceptions. Results suggest that although cheating is common among students, e-cheating is not prevalent.

**ETHICAL AND LEGAL ISSUES RELATED TO INFORMATION TECHNOLOGY
IN A HIGHER EDUCATION ENVIRONMENT**

Sharon Paranto, Northern State University, parantos@northern.edu
Scott Peterson, Northern State University, scott.peterson@northern.edu

Historically, higher education has maintained a strict set of rules in terms of plagiarism and cheating, and has not condoned unethical or illegal activity in any shape or form. But are there exceptions? This paper deals with a very specialized ethical/legal issue relating to information technology and the higher education environment: Student labor access to password-protected confidential files. What follows is a case study based on a “theft of files” incident that occurred at a university several years ago. Could this same thing be happening at your university?



E-LEARNING #1

Friday, October 5
Session Chair: Corrine Brown

11:20 a.m.—12:10 p.m.

Port of Singapore
3rd Floor

WEB-BASED LEARNING AND INTERACTIVE HYPERMEDIA IN BUSINESS APPLICATION PROGRAMMING EDUCATION

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Bryan A. Marshall, Georgia College & State University, bryan.marshall@gcsu.edu

Using examples of programming code is an effective method for teaching code. However, it has serious complications: first, the code is not “flexible,” i.e., each student has to view all comments at once, even if he or she does not need all of them. This is especially true for large and complicated programming projects. Second, the size of comments, though technically not limited, can be an issue because long comments on multiple lines of code prevent students from having a clear picture of the code. The projects in intermediary/advanced business programming classes have both limitations: they include thousands of lines of complicated code, multiple sections and dozens of web pages. The objective of this research project is to apply web-based learning to overcome the limitations of comment-based code learning. The interactive web system WebEx, introduced in one of the business application programming classes, is an example of interactive web-based learning systems that provides example-based code learning and can be personalized by each student based on her or his individual learning pace.

CASE STUDY: PERCEIVED EFFECTIVENESS OF ONLINE LEARNING IN CIS CURRICULA

Gary A. Davis, Robert Morris University, davis@rmu.edu
Paul J. Kovacs, Robert Morris University, kovacs@rmu.edu

The emergence and rapid growth of the Internet and the media-rich extensions of the World Wide Web have made possible new developments in the way instructors transfer course content to their students. This has resulted in the growth of a new paradigm in pedagogy: technology-enabled learning. Many studies have examined the effectiveness of technology-enabled learning (also called online learning) but very few of the results can be generalized to CIS curricula. The current study examined the perceived effectiveness of online learning courses. Specifically, the study compared the perceived effectiveness of courses offered completely online versus those courses that are offered in a partially-online format. The results of the study suggest that CIS students rate partially online courses as being significantly more effective than courses offered completely online. In addition, the present study also suggests that CIS students prefer classroom instruction over online delivery methods for conveying CIS course content.

EFFECTIVENESS OF ONLINE LEARNING PROGRAM: A CASE STUDY OF A HIGHER EDUCATION INSTITUTION

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Hongjiang Xu, Central Michigan University, xu1h@cmich.edu

Online learning has become a popular tool in addition to traditional learning methods. This study emphasizes on how assessment and delivery methods employed can influence the effectiveness of online program, as well as the benefits and constraints experienced in e-learning. The research project was conducted at a Higher Educational Institution for a period of three months. A case study methodology was employed to investigate the opinions and experiences of faculty and students involved in online programs. Various factors that affect the effectiveness of online programs were studied in order to provide insights on the major challenges, benefits and limitations faced. Among the findings, major problem areas were identified and suggestions were proposed on how identified problems can be minimized. The study also raised future direction for e-learning.

KNOWLEDGE MANAGEMENT

Friday, October 5

2:00—2:50 p.m.

Session Chair: Reggie Davidrajuh

Port of Hong Kong
3rd Floor

A DESCRIPTION OF BA AND KNOWLEDGE USE MODEL IN AN ORGANIZATION

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Robert Joseph Skovira, Robert Morris University, skovira@rmu.edu

Knowledge management is an important function in any large organization. In this paper, a conceptual model of knowledge management in the large organization will be developed. The organic-like mechanics of knowledge management and a mathematical means of quantifying the model will be discussed. Personal experience from a large organization will be used to provide context for the model.

ONTOLOGICAL GROUNDING OF A KNOWLEDGE MAPPING METHODOLOGY: DEFINING DATA, INFORMATION, AND KNOWLEDGE

Robert Joseph Skovira, Robert Morris University, skovira@rmu.edu

The paper presents an articulated conceptualization of four major categories of knowledge management. The categories are ontology, data, information, and knowledge. These categories make up a meta ontology as a ground for a knowledge mapping methodology. The paper discusses each category and gives a brief taxonomy of each.

SELECTING CLASSIFICATION AND CLUSTERING TOOLS FOR ACADEMIC SUPPORT

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Classification and clustering are powerful and popular data mining techniques. Organizations use them to capture information, retain customers, and improve business performance. This paper presents a method for selecting data mining software for an academic environment based on its classification and clustering tools. This research applies the data mining software evaluation framework to evaluate three major commercial data mining tools: SAS Enterprise Miner, Clementine from SPSS, and IBM DB2 Intelligent Miner. We added to the framework a criterion that became important in the Internet age. After ranking software on relevant criteria in the framework then purchase the best one that is affordable.



SOFTWARE DEVELOPMENT #3

Friday, October 5

2:00—2:50 p.m.

Port of San Francisco

Session Chair: Mike Mitri

3rd Floor

METACOGNITION AND SOFTWARE DEVELOPER COMPETENCY: CONSTRUCT DEVELOPMENT AND EMPIRICAL VALIDATION

Paul J. Ambrose, University of Wisconsin - Whitewater, ambrosep@uww.edu

Software developer competence is essential for developing quality systems. Typically past experience, education and training, academic and professional references, tests, and interviews are used to assess developer competence. In this paper we propose that to obtain a holistic assessment of competence, it is essential to evaluate developer perceptions and beliefs on what they can achieve since these beliefs can impact their performance, independent of the skills possessed. Using social cognitive theory, we propose and develop a measure of developer self-efficacy, a metacognitive factor, to assess a critical facet of developer competence. We also empirically validate our self-efficacy measure through an experiment, and discuss the results of the findings.

THE EFFECT OF SEMANTIC KNOWLEDGE ON SOFTWARE MAINTENANCE: AN EMPIRICAL STUDY

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Someswar Kesh, University of Central Missouri, kesh@cmsu1.cmsu.edu

A model for software maintenance based on the Human Information Processing (HIP) model has been developed and tested. The model considers the characteristics of the maintenance task, programmer characteristics, program characteristics, and organizational characteristics. Hypotheses were tested using a variation of the multi-group post test design with multiple treatments. The subjects were students in a university enrolled in procedural and object-oriented programming courses. The research shows that software maintenance requires programmers with high level of semantic knowledge, including conditions where significant complexity is involved. Moreover, time pressure works better for programmers with low level of software maintenance. Further field studies are recommended for enhancing the external validity of this research.

GLOBALIZATION AND GLOBAL SOFTWARE DEVELOPMENT

Juyun Cho, Utah State University, jcho@cc.usu.edu

At the beginning of twenty-first century, globalization is recognized as one of noticeable characteristics in information technology. Several aspects of globalization affect the world in different ways including emergence of worldwide production/consumer markets, emergence of worldwide financial markets, spread of political sphere of interests, increase in information flows, and emergence of new way of developing information systems. In this paper, the author discusses key elements that expedite the globalization, and how the globalization impacts the information systems development. In addition, this paper presents the motivations of global software development and issues associated global software development. Finally, some possible solutions for issues are provided.



SECURITY AND INTERNET POLICIES

Friday, October 5

2:00—2:50 p.m.

Port of New York

Session Chair: Marzie Astani

3rd Floor

LAPTOP THEFT:

A GROWING CONCERN FOR ORGANIZATIONS

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This paper examines the growing problem of laptop theft and security. A review of the professional literature was done to determine the magnitude of the problem and what organizations are doing to address it. A survey was constructed and administered to a sample of employees of organizations in southern New England to determine the rate of adoption of security measures by their organizations taken to address this problem. The results of the survey indicated that these organizations primarily used only the most fundamental security measures, use of more sophisticated measures was limited, and one-third of the organizations did no formal training of laptop users.

IDENTITY THEFT:

THE NEWEST DIGITAL ATTACK

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This paper discusses the definition of identify theft and the ramifications to the banking industry. In today's environment of on-line banking and ecommerce, ID theft has become a serious problem. Not only can banks lose the confidence and goodwill of their customers, but legal sanctions/actions can result from the bank's not protecting the consumer. While banks focus on protecting the consumer's information, it is imperative that customers follow the correct procedures and take precautionary measures to protect their information and transactions.

WEB SITE SECURITY DISCLOSURE POLICIES OF ONLINE SECURITIES FIRMS:

ARE THEY SATISFACTORY?

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Eric D. Moscato, Iona College, emoscato@iona.edu

This paper is the latest component of a research project conducted by the authors over a four-year period. The first phase emphasized the privacy policies of global banks and other businesses engaged in E-commerce [7, 8, 9, 10, 11, 12]. Over 800 individualized web-sites were visited and evaluated. This, the third phase of the research project, focuses on the security policies in place for retail online securities institutions. The purpose of this research study is to review, compare and summarize the security policies of online securities firms as they are expressed on their web sites. As part of this study, we ask the important question "Are the existing web site policies inadequate, acceptable or laudable"? The study was conducted during the month of June, 2006. One of the authors conducted the review of each of the sites evaluated. This paper reports on the results of 59 major, high profile online securities organizations.



E-LEARNING #2

Friday, October 5

2:00—2:50 p.m.

Port of Singapore

Session Chair: Roman M. Wong

3rd Floor

A COMPARISON OF STUDENT OUTCOMES IN ONLINE AND TRADITIONAL COURSES

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Lauren Kenyo, Ohio University, krewatch@ohio.edu

This study compares student outcome measures for two identical courses. Both courses were taught by the same instructor, used the same book and completed the same assignments. One delivery mode is online and the other is a traditional face-to-face course. Outcome measures for each course include scores on individual assignments, final grades expressed as a percentage, and student satisfaction as measured by faculty evaluations. These outcome measures are used to determine if there is a difference in the performance of students in an online course compared to students in a face-to-face course and whether students in the two modes evaluate the instructor differently. The preliminary findings show the face-to-face course and the online course had very similar outcomes when the assignment scores, final grade and faculty evaluation were calculated. The preliminary findings for this class indicate the delivery methods for the face-to-face and online classes were equally effective in terms of student performance. Items on the faculty evaluation addressing the delivery method showed differences between the two student groups.

STUDENT'S PERCEPTION OF THE BENEFITS AND USE OF ONLINE TEACHING & LEARNING

Dr. Amine Nehari Talet, King Fahd University of Petroleum & Minerals, nehari@kfupm.edu.sa

The new millennium heralds exciting opportunities to diversify the ways in which we offer education. We can now offer greater flexibility through online access to learning -- when, where and how we do it. Breaking the shackles of tradition empowers all learners, as their diverse needs are increasingly accommodated in educational programs that are supported by information technology. This paper examines the students' perceptions of the benefits and the efficient use of Online Teaching and Learning (OTL) in one of the AACSB Accredited Schools. Specifically, this study investigates if there are statistically significant differences in the benefits and the use of OTL among students with different GPAs. The analyses were based on a sample of one hundred and ninety-two students, drawn randomly from the student population at the College of Industrial Management (CIM) of King Fahd University of Petroleum & Minerals (KFUPM). The analyses showed that there were no significant differences in the OTL benefits among students with different GPAs. It also showed that there were partially significant differences in the use of OTL.

A PROPOSED MODEL FOR EVALUATING ON-LINE COURSES FOR TRANSFER OF CREDIT

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This paper will examine the degree of agreement between online course transfer credit benchmarks and the standards of Association to Advance Collegiate Schools of Business (AACSB International). A model for applying transfer credit for online course work is proposed. Traditional accreditation standards and research studies on quality indicators for online programs are used to support the model development.



CUSTOMER RELATIONSHIP MANAGEMENT

Friday, October 5

3:00—3:50 p.m.

Session Chair: Harold Records

Port of Hong Kong

3rd Floor

TOWARDS MODELING THE ECONOMICS OF PERSONAL RELATIONSHIPS IN DYADIC BUSINESS EXCHANGES

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Øystein Jensen, University of Stavanger, oystein.jensen@uis.no

This paper proposes modeling the economies of personal relationship so that its impact on the collective economic outcome in dyadic business exchanges can be measured. Firstly, this paper introduces personal relationship in business environment. Secondly, some of the parameters that are related to the issue of personal relationship are presented. Thirdly, a hybrid approach is proposed for developing a mathematical model; with the mathematical model, a better understanding of the impact of personal relationship on switching business exchange relationship and the costs involved (switching costs) can be understood and experimented with.

PRIORITIZING FACTORS IMPACT ON CUSTOMERS' EXPECTATIONS FOR IT PRODUCTS: A CASE STUDY OF I-POD

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This study investigates different factors impact upon the customer's expectations for IT products. A research framework was developed to illustrate how various factors influence the customers' satisfactions. i-pod, as an example of the IT products, was chosen in this study because its popularity and high market share. Various categories of customers were interviewed regarding their knowledge and expectations of the product and service. Analysis of the interviews indicated that customers have very complex requirements which cannot be fully understood by companies unless proactive steps are taken to approach customers and further analyze their requirements. Actions that annoy customers provoke them to sometimes break a relationship with a particular brand or company. The factors affecting customer satisfaction were studied and prioritized using Quality Function Deployment. Increased customer satisfaction resulted from fulfillment of spoken as well as unspoken needs of the customers.

USING IT TO IMPROVE CONSUMER/PARTNER RELATIONSHIP MANAGEMENT

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The customer relationship management (CRM), as an interconnected whole of strategies, systems, processes and information technologies (IT), represents the innovative marketing opportunity for companies. CRM is an effect of the latest management techniques and computer science; it is closely integrated with Internet and e-trade. This work illustrates basic concepts of the CRM strategy and system in networked companies from a relationship marketing perspective. It presents the application of CRM system modules in companies. The objective of this work is to examine whether Polish companies use CRM system and which modules of it they have implemented. Summary results of questionnaire research on this subject are described in this work.



EXPERT SYSTEMS

Friday, October 5
 Session Chair: Juyun Cho

3:00—3:50 p.m.

Port of San Francisco
 3rd Floor

**THE DEVELOPMENT OF AN EXPERT SYSTEM
 FOR MEASUREMENT SYSTEMS EVALUATION**

Jiin Wang, Alabama State University, jwang@alasu.edu

This article examines and demonstrates the use of expert systems (ES) technology to augment and to enhance measurement systems evaluation procedures. It presents the results of a research project in which an expert system that utilizes a knowledge-based methodology to facilitate or to automate the process in conducting a gauging R&R analysis is developed. The paper begins with a discussion of the steps involved in a variable gauge study, pointing out that inefficiencies and inaccuracies often arise due to the lengthy time requirement and heavy statistical burden placed on the study team. The paper then describes the features and the functionality of the PC-based expert system developed in the research. Numerous screens are provided to illustrate these features. Finally, a synopsis of the primary benefits of the system is given, as well as its limitations that call for further research efforts.

**DATA MINING AND EXPERT SYSTEMS IN
 LAW ENFORCEMENT AGENCIES**

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 Roger L. Hayen, Central Michigan University, roger.hayen@cmich.edu

Criminal databases and artificial intelligence have proven to be effective in solving crime on a local basis. However, what is needed is an expert system that links law enforcement agencies nationwide. Evidence and clues relating to crime are located across numerous data bases and have no connection to each other. This research examines five different Law Enforcement Information Systems (LEIS) to determine current features and characteristics of these systems. Some systems have a narrow or local scope of use, whereas others are more widely used. Some utilized expert systems that implement artificial intelligence techniques while others have a data mining orientation. Traffic violations are identified as an important component for any LEIS, because routine traffic stops often lead to apprehension for more violent crimes. However, traffic violations appear in only the local LEIS reviewed in this study. Clearly, tools, techniques, and data can be shared in the development future LEIS.

**TOWARD A SEMANTIC WEB FRAMEWORK
 FOR ASSESSMENT AND EVALUATION**

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I present a proposed methodology for applying the two AI/DSS models for assessment in a semantic web environment. These two models, Candidate Evaluation and SemNet-MAU were developed in the 1990s, and merge knowledge representations (rule-based reasoning, semantic networks) with decision-theoretic constructs (primarily multi-attribute utility). Both models have been presented at IACIS conferences in the past, and articles related to both models are published in JCIS.



PRIVACY POLICIES

Friday, October 5

3:00—3:50 p.m.

Port of New York

Session Chair: Wallace A. Wood

3rd Floor

RFID: A SURVEY OF ETHICAL AND PRIVACY CONCERNS

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Radio Frequency Identification (RFID) has garnered much attention in recent years as a method of supplanting the barcode. The uniqueness that RFID has engendered, allowing an instance of a product to be tracked, has raised some important privacy concerns. RFID technology has also promised to increase the amount of aggregate data that is collected. When dealing with data, especially the tremendous amount that RFID will produce, ethical concerns about how the data is to be used are prevalent. This paper reviews the RFID technology, presents challenges that the technology creates for privacy and ethics, and suggests possible solutions to these challenges.

RADIO FREQUENCY IDENTIFICATION TECHNOLOGY AND CONSUMER PRIVACY

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Radio frequency identification (RFID) technology has helped many organizations to reduce cost. Nevertheless, there are challenges and issues associated with RFID adoption. The most common internal challenge for many organizations is justifying the investment and modification of processes. However, there are external issues such as privacy and security that companies need to deal with. The focus of this study is to show the business value of RFID technology and the related issues, especially consumer privacy issue that organizations need to be concerned about.

ARE PRIVACY POLICIES MORE CLEAR AND CONSPICUOUS IN 2006 THAN 2001?

A LONGITUDINAL STUDY OF THE FORTUNE 100

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Concern over the effectiveness of privacy policy statements has been the focus of numerous studies. Most studies have concluded that plenty of room exists for improving policy statements, both in terms of their readability as well as their adherence to fair information principles. However, few studies have examined the effectiveness of policy notices beyond a single point in time to determine whether or not organizations have made improvements. The current study compares the effectiveness of Fortune 100 policy notices in terms of clearness and conspicuousness for 2001 and 2006.



E-LEARNING #3

Friday, October 5
Session Chair: Hongjiang Xu

3:00—3:50 p.m.

Port of Singapore
3rd Floor

THE POTENTIAL OF SYNCHRONOUS TEXT-BASED COMPUTER-MEDIATED COMMUNICATION FOR SECOND LANGUAGE ACQUISITION

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This study aims to examine the potential of synchronous text-based computer-mediated communication (SCMC) for second language acquisition and see if it can serve as another channel to offer learners opportunities for communicative practice. Fifty students from a commercial high school participated in the study, interacting with the teacher via the channels of SCMC and face-to-face communication (F2F) separately. Comparing the quantity and quality of the students' language output via SCMC and via F2F, the study revealed that students who interacted with their teacher via SCMC significantly produced more than via F2F. In addition, these students were aware of the sequence of conversation (e.g. initiating, maintaining, and closing a dialogue). Unfortunately, compared with F2F, the average number of the accurate utterances was lower. The study concludes that SCMC provides a less tense environment which motivates learners to take risks in participating in communication. Next, the SCMC task offers an authentic setting for learners to be aware of reciprocal communication which can refine their conversational strategies. At last, the SCMC task may result in improved linguistic ability, but it needs more investment in time.

THE ADOPTION OF SYNCHRONOUS AND ASYNCHRONOUS MEDIA IN THE TEACHING OF A SECOND LANGUAGE

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This paper discusses the use of synchronous and asynchronous media methods in the field of second language learning, its advantages, and challenges. We, based on Krashen's second language acquisition theories, formulated an evaluation framework for identifying asynchronous and synchronous media methods to be used in different language instruction scenarios.

ENHANCING INTERACTION IN ASYNCHRONOUS ONLINE INFORMATION SYSTEMS EDUCATION

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Will increasing the level of interaction help students or is it just another time consuming task for already busy students? According to Karen Swan, one may increase learning effectiveness through interaction in four general ways: interaction with content; interaction with instructors; interaction with classmates; and interaction with course interface. The aim of this paper is to consider how one may enhance interaction with instructors and classmates through the use of virtual collaboration, voice, and video. Our research indicates virtual collaboration, voice, and video provides an unprecedented level of interaction in asynchronous online IS education.



END-USER COMPUTING

Friday, October 5

4:20—5:10 p.m.

Session Chair: Belle Woodward

Port of Hong Kong
3rd Floor

STUDENT PERCEPTIONS OF LONG TERM CONSEQUENCES OF COMPUTER USE

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Student perceptions of the long-term consequence of computer use are shown in this study to be significantly and positively related to reported computer usage levels. Results support the inclusion of long-term consequences in evaluations of student perceptions of systems, system usage, and assessments of user behavior.

USER-CENTERED DESIGN FOR GLOBAL INFORMATION SYSTEMS

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User-centered design is rapidly becoming a necessary component of business systems. As users become more sophisticated, they expect usability to be a key component of information systems. Global information systems have more challenges to create systems with user-centered design principles as they must account for different languages and cultures. This study identifies key user-centered design principles and then measures the websites of twenty Fortune 500 companies with an international presence against these principles.

THE POTENTIAL IMPACT OF SPEECH RECOGNITION TECHNOLOGY ON WORKPLACE PRODUCTIVITY

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The effect of desktop applications programs on knowledge worker productivity has been significant and well documented. However, for the most part technology driven productivity gains have been at a standstill for last few years. Recent modifications to office suites and operating systems have been more superficial than substantive, and with the exception of improved search and data security capabilities, software introductions have not substantially advanced worker productivity. That may be about to change. Automatic speech recognition (ASR) software embedded in popular word processing programs shows great promise, offering the potential for a faster and more effective human computer interface.

A study was conducted to investigate 1) Is voice recognition ready for prime time; and 2) What is the learning curve for desktop voice recognition technologies. It was found that the user-friendliness of ASR was perceived as being very good, that the likelihood of future use of ASR was very high, and that user comfort levels with dictation, editing and accuracy were tepid. This suggests that lack of familiarity may contribute to user hesitation in adoption of ASR technology, but there is a recognition and willingness among users to pursue it.



NETWORK AND DISTRIBUTED SYSTEMS

Friday, October 5
Session Chair: Roy A. Boggs

4:20—5:10 p.m.

Port of San Francisco
3rd Floor

THE EFFECTS OF CLUSTER SIZE ON PACKET INTER-ARRIVAL PATTERNS AND INTENSITY IN A DISTRIBUTED SYSTEM

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Packet inter-arrival data was collected and analyzed for a message passing interface (MPI) and a HTTP problem that simulated packet movement in an enterprise level LAN test-bed. The parallelization method used broke the problem into N subparts based in the number of processors used. Inter-processor communication was required when ever a processor needed to communicate with another processor to help solve the application. That communication was relayed via the MPI protocol using TCP packets with intensities in .0005 second range. Experimental trials were run on from 2 to 12 two processor units for MPI and 8 and 16 unit for HTTP. In the MPI experiment, although the CPU time continued to drop as additional units were added the elapsed time only dropped to the 4 unit level and then increased thereafter. In the HTTP experiments the two switch/server model provided slightly better performance than the one switch/server model.

NEURAL NETWORK MODEL VS. SARIMA MODEL IN FORECASTING KOREAN STOCK PRICE INDEX (KOSPI)

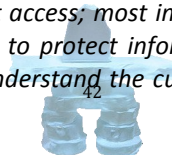
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The purpose of this study is to compare the forecasting performance of a neural network (NN) model and a time-series (SARIMA) model in Korean Stock Exchange. In particular, we investigate whether the back-propagation neural network (BPNN) model outperforms the seasonal autoregressive integrated moving average (SARIMA) model in forecasting the Korea Composite Stock Price Index (KOSPI) and its return. Forecasting performance is evaluated by the forecasting accuracy of each model. KOSPI data and its return data over the 390 week (89 month) period extending from January 1999 to May 2006 are analyzed. We find the followings: first, the SARIMA model generally provides more accurate forecasts for the KOSPI than the BPNN model does. This relative superiority of the SARIMA model over the BPNN model is pronounced for the mid-range forecasting horizons. Second, the BPNN model is generally better than the SARIMA model in forecasting the KOSPI returns.

A SURVEY ON CURRENT PRACTICES IN ENTERPRISE WIRELESS NETWORKING AND SECURITY MANAGEMENT

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Wireless networks, based on IEEE802.11x family of standards, have been deployed as an extension to the wired networks in many enterprises. It has been seen the widespread use of wireless networks in hospitals, universities, airport, hotels, restaurants, libraries, warehouses, factory floors, and convention centers. However, it is unclear what applications are run over wireless networks, and whether these wireless networks are being used for mission critical applications or just for casual convenient Internet access; most importantly, how the wireless networks are secured, what security protocols or technologies are used to protect information transmitted across wireless networks. The purpose of this study is to conduct a survey to understand the current industry practices in using wireless networks and wireless security management.



IS PROGRAMS AND CURRICULUM DEVELOPMENT #1

Friday, October 5

4:20—5:10 p.m.

Port of New York

Session Chair: Sean McGann

3rd Floor

INTEGRATING ERP ACROSS THE CURRICULUM: A PHASED, THREE-TIERED APPROACH

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The authors propose a phased, three-tiered approach for incorporating enterprise system software into the curriculum. The courses in each tier have different objectives and requirements. By phasing in the tiers over time, maximum student exposure and minimal course disruption is achieved. The authors illustrate this approach by discussing the on-going implementation of SAP R/3 into the curriculum at one university.

USING ERP IN CURRICULUM INTEGRATION: A CASE STUDY

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The business college at the authors' university embarked on a revised bachelor of science in business administration (BSBA) degree. The revisions to the degree focus on the common body of knowledge (CBK) courses that are required of all BSBA degree students. Primary dimension of the revisions are enhanced teamwork activities, improved Enterprise Resource Planning (ERP) software knowledge, and increased integration of concepts among functional area courses. Four surveys at different times and semesters are used to examine these goals for teamwork and integration. The results show progress in achieving these goals for the this new arrangement of integrated core required CBK courses. However, scheduling, in particular is an issue that requires additional attention in the overall satisfaction of students in the BSBA degree.

CREATING A COURSE IN BUSINESS SYSTEM INTEGRATION: PROCESS, CHALLENGES AND LESSONS

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Integration of courses across the Management Information System (MIS) curriculum and their relevance to industry have been significant topics of discussion in IS departments for the past few years. To address this and to respond to declining enrollments, many departments have made major curricular changes. Some of these involve redesign of individual courses, while others require creation or deletion of complete courses. This paper presents a case study of the creation of a new senior level course in Business Systems Integration at a medium sized Midwestern university. Course evaluations and focus groups reveal that the first iteration of this course lacks cohesion and organization. This leads to a well informed and researched process of redesigning the course to mend the problems in the course. Driven by MSIS2006 curriculum and classic project-based learning and pedagogical directives, a second iteration is created that results in a more streamlined and organized course. The paper outlines the entire process from creation of the course to the final metamorphosis that took place for its adoption as a successful course. It summarizes the problems faced in development and progression of the course, and presents pedagogical lessons learned.



DATA WAREHOUSING AND DATA MINING

Friday, October 5
Session Chair: Karen Forcht

4:20—5:10 p.m.

Port of Singapore
3rd Floor

ORGANIZATIONAL DATA MINING IN KOREA

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The factors influencing international organizations could not well explain the Korean organization behavior and factors. Most of the existing data mining implementation studies were undertaken in Western countries, and only a few have examined data mining practice in Asian countries. Also, most DM research focuses on factors that involve resources (finance, human resources, skills, and others) and information (business strategy, visions and objectives, and others) perspectives. These studies ignore the effects of cooperative competence, organizational context and structure, as the data mining implication process becomes more complex and more difficult to handle as technology continues to change. Researchers have shown that IT management style may differ between Eastern and Western countries, due to cultural and political context. Cultural differences exist between Korea and other countries. The subjects of this study are the ODM factors in Korea.

AN INVESTIGATION OF THE FACTORS AFFECTING DATA WAREHOUSING SUCCESS

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In this study, a case study investigated a model of data warehousing success. An IT staff at Financial Service Company (FSC) was also interviewed on the implementation factors and the success of the warehouse. The results from the case study and an interview identified significant relationship among the system quality, data quality, perceived net benefits. It was found that management support and resources help to address organizational issues that arise during warehouse implementations; resources, user participation, and highly-skilled project team member increase the likelihood that warehousing projects will finish on-time, on-budget, and with the right functionality. The implementation's success with organizational and project issues, in turn, influence the system quality of the data warehouse.

E-CATALOG IMAGE METADATA MINING SYSTEM USING USER USAGE PATTERNS FOR E-BUSINESS INTELLIGENCE

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E-business and shopping mall sites contain many images. Image retrieval uses web search engines or image database engines which rely on keyword-only retrievals or color-based retrievals with limited search capabilities. This paper presents an intelligent web e-catalog image retrieval system using metadata and user log. We propose the system architecture, the texture and color based image classification and indexing techniques, and representation schemes of user usage patterns. We will demonstrate the usefulness of the proposed system and explain some of the experimental results showing recall and precision.

ENTERPRISE RESOURCE PLANNING (ERP) #1

Saturday, October 6

9:00—9:50 a.m.

Port of Hong Kong

Session Chair: Jack D. Shorter

3rd Floor

A STEP CLOSER TO PURE GLOBAL COMPETITION: MASTERING MASTER DATA AS THE KEY TO THE ERP IMPLEMENTATION LABYRINTH FOR THE NEW GENERATION OF COMPANIES GOING GLOBAL WITH ERP

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This paper explores, via literature review and focus group discussions, the relative importance that Master Data Management (MDM) plays in the implementation and maintenance of ERP systems. The focus group included key players of large-scale ERP implementations and/or upgrades, from both an internal intra-company and consulting standpoint. The findings of the discussions resulted in practical advice on developing an efficient and effective MDM process within the ERP system, reducing the risk of a failed implementation or the need for expensive additional data management software. The potential impact on the global marketplace and competition is also explored, as small and medium sized globally- positioned businesses embrace ERP. Given that the challenges of master data are not as great if carefully planned and managed, there is potential for small and medium-sized businesses to gain a competitive advantage over larger competitors.

ERP IN HIGHER EDUCATION: A CASE STUDY OF SAP AND CAMPUS MANAGEMENT

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Enterprise Resource Planning (ERP) software has been applied to industries to support financial accounting, procurement, human resources, customer service management and supply change management. Recently, it is being promoted to new areas, for example, higher education. This case study examines the application of ERP software to the student information management in higher education at a Midwestern university that has replaced its legacy software with an ERP system. This paper also explores critical success factors for a successful ERP implementation discussed in the literature. In addition, this paper investigates user acceptance of this new system specifically examining the staff attitudes, concerns expressed and comfort level for the average user.

INVESTIGATING THE RELATIONSHIPS AMONG ERP SYSTEMS SUCCESS DIMENSIONS: A STRUCTURAL EQUATION MODEL

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The objective of this paper is to empirically test the relationships among the dimensions in an extended Enterprise Resource Planning (ERP) systems success measurement framework. To test the relationships, a conceptualized model highlighting the paths among the constructs or dimensions is formulated. A 41-item questionnaire was developed from the relevant literature and distributed to 470 firms in two Northern European countries. Sixty two (62) participants from 44 diverse, industrial organizations returned their questionnaires. Using the structural equation modeling technique to examine the hypothesized paths or relationships, the analysis confirmed four of the five hypotheses developed. Insights from this research will be beneficial for information systems (IS) success evaluations researchers and may serve as a base for future investigations.



SUPPLY CHAIN MANAGEMENT #1

Saturday, October 6
Session Chair: Vic Matta

9:00—9:50 a.m.

Port of San Francisco
3rd Floor

DSS FOR DENTAL HOSPITAL EMERGENCY SECTION SIMULATION

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This paper presents results obtained from simulating a service system with process oriented simulation methodology. To make the service system responsive and efficient, the SCOR modeling idea is incorporated to build the simulation model. Awesim is a process-oriented simulation modeling methodology and so is the method suggested in Supply Chain Operations Reference (SCOR) manual, developed by supply chain council. A dental hospital patient care case is taken in this study to exhibit how the dental care service system is simulated and the service system design parameters are derived using response surface technique to develop efficient service and besides a responsive supply chain. The Awesim simulation modeling analysis is an alternative mode to benchmark performance of business function, since it provides information about resources utilization. The paper also provides detail sketch of the dental care management practices.

SUPPLY CHAIN SOFTWARE: CUSTOMER DECISION FRAMEWORK AND GLOBAL CUSTOMER PERSPECTIVE ON SOFTWARE UPGRADES AND INTEGRATION

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Asghar Sabbaghi, Indiana University South Bend, sabbaghi@iusb.edu

This study focuses on identifying the key elements that managers consider when making the decision to upgrade and integrate supply chain management system that are already in use. A survey of information systems managers is used to evaluate the proposed framework and the results of the survey suggests that managers use certain key elements when deciding on upgrading and integrating supply chain management systems. The majority of respondents, approximately 80%, perceive Software Quality and Customer Services as very important factors when making the integration and upgrading decision while the remaining respondents believe that these two factors are somewhat important during the decision making process

A SYSTEMS VIEW OF THE IST VALUE CHAIN: THE PROCESS-VALUE MODEL

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In this paper, the authors propose a new framework, the Process-Value Model (P-VM), to investigate the mechanism through which IST contributes to the organization's business value generation. The P-VM is based on General System Theory and describes the IST value chain, which directly relates the IST process to the production of measurable business outcomes. The model resolves one essential limitation of existing theoretic models, namely the lack of an effective core framework for identifying the underlying IST system and its relationship to the business organization performance objectives. PV-M provides a solid platform for further research into the mechanisms by which IST contributes to enhancing business performance.



IS PROGRAMS AND CURRICULUM DEVELOPMENT #2

Saturday, October 6

9:00—9:50 a.m.

Port of New York

Session Chair: Steven C. Ross

3rd Floor

EXPLORING THE EVOLUTION OF IS EDUCATION: A COMPREHENSIVE CURRICULUM REVIEW

Dr. Sean T. McGann, Ohio University, mcgann@ohio.edu

The study of the evolution of IS curricula over the past four decades provides an interesting perspective on the progression of the IS discipline as it comes of age. Through a comparison of IS curriculum “ideals” put forth by the IS academic community (ACM/AIS Curriculum Committee recommendations) and a sample of general IS texts, which represent “actual” curriculum designs, the nature of the development of IS education over time is shown. In this process, I identified 3 primary areas of emphasis in the scheme of IS curriculum design: Technical/Specialized, Organizational/Society, Strategic/Management. In tracing the evolution of the curriculum design in these areas, I saw the emphasis shift from general technical skills in the 1970s to the addition of organizational skills in the 1980s and finally to a more integrated model emphasizing all three areas more equally by the late 1990s to the present. There was also an apparent relationship between the “ideal” designs of the ACM Committee and the “actual” curriculum suggested by the texts. Further research is needed to specify the nature of these correlations.

COMPARING TWO PROGRAM CONTENTS WITH COMPUTING CURRICULA 2005 KNOWLEDGE AREAS

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The purpose of this paper is to compare the content of two computer programs with the different knowledge areas listed in the standard curricula that was published in 2006 and named Computer Curricula 2005 (CC2005). The paper begins by giving some description of CC2005, a brief history of the standard curriculums in the computer area and then explains the content of both programs intended to be discussed here. The two programs being discussed are the Technology Support and Training department (TST) at Eberly College of Business – Indiana University of Pennsylvania (IUP) and the Computer Information Systems (CIS) program at Robert Morris University (RMU). Both of these programs are technology programs but neither name is listed in the five computing areas described in CC2005. Thus a discussion is needed regarding the placement of these two programs within the traditional programs listed in CC2005.

THE GEOGRAPHIC INFORMATION SYSTEMS INITIATIVE AT THE NORTHERN ILLINOIS UNIVERSITY COLLEGE OF BUSINESS

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Brian Mackie, Northern Illinois University, bmackie@niu.edu

It is estimated that 80% of all corporate data has content that is geographic, meaning that place or location can be associated with the data. This fact is leading innovative businesses worldwide to treat geographic data as an organizational asset and to realize that location information about customers, suppliers, and competitors can be a key business driver. It is within this context that the College of Business at Northern Illinois University (NIU) has, for the past eight years, offered both undergraduate and graduate students the opportunity to learn business applications of geographic information systems. This paper describes this initiative, emphasizing the kinds of location-based business problems solved by students.



IS RESEARCH

Saturday, October 6

9:00—9:50 a.m.

Port of Singapore

Session Chair: Wayne M. Machuca

3rd Floor

RESEARCH PRODUCTIVITY IN THE IS EDUCATION LITERATURE

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Richard G. Mathieu, James Madison University, mathierg@jmu.edu

There is awareness today that research related to educational issues is important in both higher education and industry. A recent report from the United States Secretary of Education's Commission on the Future of Higher Education stated a concern with the "national capacity to measure and publicly account for general knowledge and skill levels," and called for the academic community to create a culture of accountability and transparency in a way that allows "comparisons between universities based upon regarding learning outcomes and other performance measures" (2006). In addition, accreditation organizations such as the Association to Advance Collegiate Business Schools (AACSB) and ABET (formerly the Accreditation Board for Engineering and Technology) have made the assessment of student learning a top priority in school accreditation.

FORMAL INQUIRY SYSTEMS FOR INFORMATION RESOURCES ANALYSIS

Roy Boggs, Florida Gulf Coast University, rboggs@fgcu.edu

In her article on systems rethinking, Alice Kienholz demonstrated the importance of recent scholarship based upon the formal inquiry systems identified by C. West Churchman for an understanding of organizational learning. A parallel research path has not been established for Information Resources Analysis. It is proposed here that this is not only possible but also desirable. To this end, a beginning popularized matrix is presented along with an initial introduction. The result is a path for future scholarship that will add the lessons of current research in a related area to that of Information Resources Analysis.

DIFFERENCES IN QUANTITATIVE AND QUALITATIVE PROFESSORS' CRITERIA FOR TEXTBOOK ADOPTIONS: A PILOT STUDY

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Textbooks are an integral component of the higher education process. This pilot study examined the differences in quantitative faculty and qualitative faculty's ratings on factors influencing the textbook selection process and various marketing techniques used by publishers to encourage adoption. A total of 1398 faculty responded to the Internet survey-681 were quantitative faculty and 717 were qualitative faculty. Overall results indicate that content, ancillary materials, edition of text, and textbook costs are the primary drivers of adoption. Examination copies and contact by book reps were the best methods of encouraging faculty to examine a new textbook. However, there were significant differences between quantitative faculty and qualitative faculty on selection criteria.



ENTERPRISE RESOURCE PLANNING (ERP) #2

Saturday, October 6

10:00a.m.—10:50 a.m.

Session Chair: Princely Ifinedo

Port of Hong Kong

3rd Floor

IMPLEMENTING ENTERPRISE RESOURCE PLANNING (ERP) FOR STRATEGIC COMPETITIVE ADVANTAGE

Karen A. Forcht, North Carolina A & T State University, kaforcht@ncat.edu
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This paper discusses the definition of an ERP system using packaged software that enables a company to make efficient use of corporate resources. These resources include materials, human resources, finance, sales, marketing, finance, etc. ERP provides a total, integrated solution for all of the organization's information processing needs. This paper also discusses why ERP projects often fail and how organizations can insure success of the ERP implementation. Critical Success Factors (CSF) of ERP implementation are discussed, which include appropriate business and IT legacy systems, business plan and vision, business process reengineering (BPR), change management culture and programs, effective communication, teamwork and composition of teams, monitoring and evaluation of performance, project champions, project management, software development, testing and troubleshooting, top management support, etc.

ACHIEVING SARBANES-OXLEY COMPLIANCE WITH XBRL-BASED ERP AND CONTINUOUS AUDITING

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The Sarbanes-Oxley Act (SOX) of 2002 places significant and costly new burdens on public companies. Meeting the recurring requirements for financial reporting under SOX effectively will demand innovative application of information technology. The Continuous Auditing Web Services model (CAWS) provides a framework for considering how to efficiently manage and automate financial reporting. We propose extending the basic ideas behind CAWS, to leverage the flexibility and power of Extensible Business Resource Language (XBRL) in Enterprise Resource Planning (ERP) systems. The resulting comprehensive IT support for financial reporting, auditing, internal control, and monitoring functions will enable corporations to achieve SOX compliance in a timely, sustainable and cost-effective manner. Our analysis demonstrates the appropriateness of the XBRL-based solution by showing how the capabilities of such a system can address the specific requirements imposed by SOX.

MEASURING THE IMPACT OF ENTERPRISE ARCHITECTURE

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Enterprise architecture frameworks provide a basis to systematically document and manage the information technology assets of an organization. Numerous frameworks have emerged to support large scale organizations and government entities but to date there has been no empirical support to determine if they meet the needs of their users. We present a research model to enable empirical testing of the extent to which enterprise architecture frameworks support the task needs of their users. This model extends the existing task-technology fit research by combining the benefits of organizational technology fit with individual task needs. Further, it extends enterprise architecture research by providing a theoretical model to assess the fit of enterprise architecture frameworks.

SUPPLY CHAIN MANAGEMENT #2

Saturday, October 6
Session Chair: Mark P. Sena

10:00—10:50 a.m.

Port of San Francisco
3rd Floor

EFFICIENCY OF RFID IN SUPPLY CHAIN MANAGEMENT: STRATEGIC BENEFITS AND CHALLENGES

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We examine the appropriate business processes to apply RFID, required planning and testing for successful implementation as well as the many potential impacts on effectiveness and efficiency of supply chain management. We highlight potential strategic business benefits that can be gained by implementing RFID by first addressing RFID as part of a comprehensive supply chain strategy. We used an existing supply chain framework, surveyed managers on RFID use in their firms, and present the current stage of RFID development in firms. The survey shows that RFID can be used in various functions in firms and that all firms that were surveyed are looking at RFID in their SCM efforts.

DEFINING THE ANTECEDENTS FOR ADOPTION OF RFID IN THE SUPPLY CHAIN

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While the benefits of Radio Frequency Identification (RFID) Technology adoption by organizations within supply chains have regularly been cited in the academic and trade presses, actual adoption has lagged behind early predictions and expectations. Four specific variables (top management support, organizational size, expected return on investment, and external pressure from outside forces) are identified as most likely to affect RFID adoption based on their impact on previous technology adoptions and their projected impact on RFID adoption. Empirical research on RFID adoption beginning with these variables may provide support to increase the adoption of RFID within supply chains.

AGENT-BASED DIAGNOSTICS IN SUPPLY NETWORKS

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No matter how thoroughly supply chain operations are considered in the planning phase, disruptions and other unforeseen irregularities may occur in the execution phase. In many cases, fast reaction to such events is crucial, because they require immediate detection of the events as they occur. In this paper an approach for automatically detecting problems in supply networks with the help of software agents is discussed. Simulation runs were performed to evaluate system behavior. The architecture of the underlying multi-agent system and the results of the simulation are presented. Benefits and drawbacks of the approach are discussed.

SCM DESIGN FOR WATER DISTRIBUTION WITH QFD APPROACH

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A distribution plan for a bottled drinking water company in the Central Asian Region is developed using Quality Function Deployment (QFD). The QFD explores the essential customer expectations as important information to construct an efficient distribution plan to augment responsive water distribution Supply Chain (SC). The significant SC characteristics those are necessary in meeting the customer expectations are identified, Using QFD. Algorithms to develop spatial distribution plans, with overlay map, using SC network design software are discussed. The delivery plan shows how the routing is developed using city map. The analysis also demonstrates how to benchmark SC performance.



IS PROGRAMS AND CURRICULUM DEVELOPMENT #3

Saturday, October 6

10:00—10:50 p.m.

Port of New York

Session Chair: Adel Fergany

3rd Floor

MAKING OOA REAL : ITERATIVE AND INCREMENTAL PROJECTS

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Project-based learning is often used to teach analysis and design in one course, followed by physical design and implementation in the second course. Factors considered in redesigning the systems analysis course for this setting are described in this paper. Approaches to teaching the revised course resulted in higher quality system specifications and a redistribution of the student's workload across the two courses.

TEACHING AN APPLIED BUSINESS INTELLIGENCE COURSE

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This paper reports on the development of an applied Business Intelligence (BI) course for a graduate program. The course provides students with working knowledge of the concepts, techniques, and tools to provide effective business intelligence. Students learn how to leverage data warehousing and data mining to establish a competitive advantage and solve business problems faster by using SAP's online analytical processing, data warehousing and data mining tools. In addition, this course provides a detailed overview and strategic analysis of the available data mining and warehousing technologies. Students also learn how to compare different data mining technologies, and understand how they fit into the overall business processes.

TRANSNATIONAL HIGHER EDUCATION: ISSUES EFFECTING JOINT DEGREE PROGRAMS AMONG US AND CHINESE SCHOOLS

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Globalization leads to the need for transnational education. Transnational joint degree programs are a realization of transnational higher education. Joint degree programs between US and Chinese universities are rare. Our university is exploring opportunities with Chinese universities to develop joint degree programs. This paper argues that joint programs are appealing but implementation is not without difficulties. To illustrate these difficulties we map a US Computer Science and Technology curriculum to three Chinese curricula to identify major gaps between curricula in the two countries. We then propose solutions to address the curricula gaps.



TECHNICAL SUPPORT

Saturday, October 6

10:00—10:50 a.m.

Port of Singapore

Session Chair: Andrew A. Tiger

3rd Floor

HELP DESK RENAISSANCE: A NEW UNDERSTANDING OF THE IMPORTANCE OF TECHNICAL SUPPORT SERVICES

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The technical help desk has traditionally been a place where minimal effort or expense is placed. To save money, many companies have sent their call centers overseas. However, new issues are developing which are causing companies to rethink their technical support strategy. These issues include (1) an increase in technological frustration by American consumers, (2) a back lash of American consumers against companies using foreign call centers, (3) a reduction of experienced workers as the “baby boomers” retire, and (4) an insufficient number of new IT college graduates able to fill the void. The implication is that the combination of these forces is creating a “perfect storm” which will ultimately affect information systems in two ways. First, it will force companies to rethink their IT support programs and require an increased investment in technical services as well as payroll. Second, it will force academia to give credence to and create curriculum for general technical programs as the demand for such graduates increases. This paper is an examination of the impact of these forces and details how to deal with the need to provide effective technical support.

BE BRIEF THE KEY IN USING TECHNICAL INTERNET GROUPS

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This paper examines using threaded discussion technical groups as an aid in solving technical problems. The study focuses on factors that may effect whether or not a question receives a response. The terms used and the length of subject lines was examined for 66,650 threads from 13 different technical groups. Statistics from threads that received replies were compared to threads that did not receive replies. Some support was found among the use of specific terms in subject lines. The average number of terms used in the thread in the subject line that messages received replies was less then messages that did not receive replies across all 13 groups. T-Test by groups showed that 11 of the 13 groups were statistically significant.

INTERNET EXPLORER AND FIREFOX: WEB BROWSER FEATURES COMPARISION AND THEIR FUTURE

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Internet technology is one of the utmost inventions of our era and has contributed significantly in distributing and collecting data and information. Effectiveness and efficiency of the process depends on the performance of the web browser. Internet Explorer is the leader of the competitive browser market with Mozilla Fox as its strongest rival, which has been and is gaining a substantial level of popularity among Internet users. Choosing the superlative web browser is a difficult task due to the considerably large selection of browser programs and lack of tangible comparison data. This paper describes and compares vital features of Internet Explorer and Mozilla Firefox, which represent over 90% of the browser market. The performance of each browser is evaluated based on the general features, operating system support, browser features, protocol support and language support. The paper is concluded with concrete remarks based on the comparison.



IS CAREERS

Saturday, October 6

11:20 a.m.—12:10 p.m.

Port of Hong Kong

Session Chair: Asghar Saggaghi

3rd Floor

UNDERSTANDING IS CAREERS IN THE 21ST CENTURY: NEW DIRECTIONS FOR A NEW MILLENNIUM

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This research investigates career movement and factors that could serve as motivators to attract and retain bright technical specialists. It also investigates the effect of demographic variables on the career decision motivators as well as on the movement itself. In the current research, we examine career transition points of information systems professionals. A career transition point is a change in position, organization, location, or any combination of these. The research examines these career transition points in terms of the direction of movement (upward, lateral or downward) and type of movement (new organization, transfer to a different location within the same organization, or new position with the same organization in the same location). Specifically, the research objectives are to determine (1) the motivators (organizational, personal, career, and internal) for movement in the careers of information systems professionals; and (2) if demographics (gender and ethnic background) influence the reasons for movement or movement itself.

IS A JOB A JOB? A GLOBAL CONCEPT OR A FUNCTION OF PERSONAL TRAITS?

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The prominent paradigm in the field of voluntary turnover research is that job satisfaction is related to the decision to leave an organization. The purpose of this study is to evaluate whether or not job satisfaction is a broad enough measure of a person's overall feelings about their job or whether a new construct that measures the congruence of fit between the job and the person's goals for quality of life would be a better predictor of turnover intention.

VISUALIZING GENDER-BASED DIGITAL DIVIDE ISSUES IN THE UNITED STATES THROUGH DATA MINING AND GIS

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Since the invention of the digital computer, careers in computers have been dominated primarily by Caucasian men. This paper examines the current state of efforts to close the so-called Digital Divide, specifically addressing the gap drawn along gender lines in the United States. Using data from the 2000 U.S. Census and tools including the Jenks classification method and Geographic Information Systems (GIS) for visualization, we find that although women in the United States appear to be occupying an increasing share of Information Systems-related careers, substantial gaps still remain. Specifically, this study examines Computer Specialist jobs as a percentage of all jobs in each county in the U.S., and then examines the percentage of those jobs which are held by women. The results of this investigation show that both statistically and geo-spatially speaking, there are no correlations between the greatest concentration of computer jobs and the greatest concentration of women in those jobs. These findings form a foundation for conversation about the current state of the gender Digital Divide in the U.S., as well as a platform for a comparison study to be performed when the 2010 U.S. census data are released.



OUTSOURCING AND OFFSHORING

Saturday, October 6

11:20 a.m.—12:10 p.m.

Port of San Francisco

Session Chair: Ganesh Vaidyanathan

3rd Floor

IT OUTSOURCING: A KNOWLEDGE-MANAGEMENT PERSPECTIVE

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The transfer of all or part of information technology (IT) functions from the user organization (client) to external (vendor) organization(s), known as IT outsourcing, has recently been the subject of numerous articles. Many research studies in this area conclude that IT outsourcing provides the client organizations with several benefits. Some studies also discuss, in general terms, various risks associated with this practice. However, there is a general lack of substantial and clear indication in the literature regarding the extent of knowledge gain/loss as a result of outsourcing. On the other hand, to be an effective strategy, IT outsourcing decisions must address various issues including the risks of compromising corporate knowledge base and human capital. The purpose of this paper is to present an analysis of the nature of knowledge transfer as a result of IT outsourcing. The paper draws from existing literature on IT outsourcing as well as knowledge management, and explores strategies to mitigate potential risks of corporate knowledge loss in IT outsourcing deals.

THOSE WHO OFFSHORE AND THOSE WHO DON'T: A COMPARATIVE EXAMINATION OF EXECUTIVE PERSPECTIVES ON IT STRATEGY

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This paper reveals insights from 245 interviews to compare the perspectives of executives in organizations who practice IT offshoring with those of executives whose organizations do not offshore. The principle findings of the study reveal three conclusions: 1) organizations that offshore are not statistically different than those who do not regarding the extent to which they feel that IT is an area that is used to differentiate themselves from competitors; 2) organizations that offshore are more likely to agree that they have effective methods to measure and assess IT investments than organizations that do not offshore; and 3) organizations that offshore are less likely than organizations that do not offshore to agree that the ROI of past projects has generally been positive.

PLUGGING INTO OFFSHORE OUTSOURCING OF SOFTWARE DEVELOPMENT: A MULTIPLE CASE STUDY

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This paper explores the practice and trends of offshore outsourcing of systems development in two countries; namely, Finland and India. In particular, it deliberates upon the driving forces and obstacles of the offshore outsourcing. The viewpoints of the participating companies were researched using a multiple case study method. The findings indicate that the imperative for engaging in offshore outsourcing systems development and the obstacles encountered do not depart from similar findings in information systems (IS) literature. However, a novel finding of this present study is the use of a software house (broker) on the Finnish side that acts a buffer for other local firms with little or no experience in offshore outsourcing. On the other hand, the Indian software house in this study engages in offshore systems development with their Finnish counterparts for reasons espoused in IS literature. Furthermore, the role of trust, the nature of the project outsourced and the importance of selecting the right partners are considered vital to the success of the arrangement.

IS PROGRAMS AND CURRICULUM DEVELOPMENT #4

Saturday, October 6

11:20 a.m.—12:10 p.m.

Port of New York

Session Chair: Stevan Mrdalj

3rd Floor

ADVISORY BOARD: EXPERIENCE AND STATUS REPORT

Adel Fergany, Slippery Rock University, adel.fergany@sru.edu
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Academia and Industry are locked into a producer/consumer relationship: academia seeks to educate and prepare students to become active players in the labor force. Industry, on the other hand, wants to ensure that such students are getting the “right” kind of education and training in preparation for the job at hand.

The Computer Science Department, Slippery Rock University, has a very active advisory board since Fall 2000. This paper presents the department’s experience with its advisory board, its history and guidelines for establishing similar boards. This paper also discusses the mutual benefits and typical activities of a successful advisory board.

CHANGE MANAGEMENT IN IT AND MIS EDUCATION FOR GLOBAL COMPETITION: TEN SOUGHT-AFTER RECOMMENDATIONS FROM THE INDUSTRY ADVISORY BOARDS

L. Roger Yin, Univ. of Wisconsin-Whitewater, USA, yinl@uww.edu

This paper outlines a change management mindset for IT and MIS program faculty members to embrace recommendations from industry advisory board as if they were coming from difference perspective within the same system rather than considering them merely from the outside looking in. A change of view at our role from a discreet entity reacting to others to an embedded system approach that any IT or MIS program is an integral part of larger systems and expanded global context is introduced. The top recommendations from the industry advisory boards, though not comprehensive, service as reference points for IT and MIS programs who are searching for tools to proceed with accreditation requirements including self study, audit review, and assurance of learning assessment and other activities.

QUANTITATIVE REQUIREMENTS OF INFORMATION SYSTEMS MAJORS

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For information systems students, communications, logical thinking, and quantitative skills are mission critical for attaining long term career success. Unfortunately, compared to students from other nations, United States high schools graduates are continuously reported to lack quantitative skills. To adapt to these students with lower analytical abilities, universities are removing quantitative courses or substituting them with more contemporary requirements. This study examines the quantitative requirements of the information systems major at United States educational institutions. A random sample of 120 institutions was selected for this study. Based on the curriculum disclosed on the Websites of these institutions, this study found a number of very interesting observations. First, the total number of credits, be they in the general core requirements or the major degree core, can be quite large. Second, while it is true that the type of quantitative courses required by institutions that are accredited by the same agency is fairly similar, their levels (by year) can be quite different. Third, the quantitative requirements are highly influenced by the department and college or school conferring the degree. Finally, this study found that the number of quantitative courses required is also related to institutional classification.