Refereed Proceedings - Abstracts

Sponsors

University of Economics in Katowice, Poland
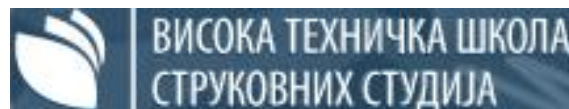
International Association for Computer Information Systems
Publisher of the Journal of Computer Information Systems (JCIS)
USA

MGA
Middle Georgia State, USA

Higher Education Technical School of Professional Studies, Novi Sad, Serbia

Workshop: Cybersecurity and Current State of e-Learning System Security

Professor Yair Levy, Professor of Information Systems and Cybersecurity, Nova Southeastern University, levyy@nova.edu

Abstract

Cybersecurity incidents and data breaches have been on the rise. It is estimated that cyber crime incidents cost about $450 billion, yearly, to the global economy. Moreover, while technologies that reduce or block cyber attacks have drastically improved over the past three decades, human error and employees' mistakes have been identified as the single most significant cause of cyber breaches. Knowledge, skills, and awareness of cybersecurity have demonstrated to help individuals mitigate the risks of cyber attacks to their personal as well as work computing. This workshop will include presentations, interactive discussions, and games to help attendees increase their awareness and skills of cybersecurity prevention. Specifically, this workshop will include six modules on the topics of: (1) malwares; (2) phishing; (3) identity theft; (4) social engineering; (5) system access; and (6) e-learning system security. All attendees will be provided with a certificate of completion.

Keyword: Cybersecurity, e-learning security system

Panel Discussion: Research possibilities into aspects of the field of knowledge management

Panelists:
Robert Joseph Skovira, Robert Morris University, skovira@rmu.edu
Bob Travica, University of Manitoba, btravica@ms.umanitoba.ca
Frederick G. Kohun, Robert Morris University, kohun@rmu.edu

This panel is a discussion and inquiry of the various possibilities, opportunities, and challenges of doing research in the field of KM. The discussion will focus on theoretical (conceptual) aspects as well as empirical aspects. The panel will focus its discussion on personal (cognitive) aspects, social aspects, and semantical aspects; these aspects are possible perspectives of KM as cognitive schemes, social (organizational) practices, and systems of meanings (semantical), as they frame different possible understandings of KM. the panel will discuss what may constitute worthwhile, or valued, research agenda about the multiple aspects of KM. The panel will discuss possible types of research questions used in the study of aspects of the field. Thus, the panel will discuss the boundaries and horizons of the field.

Keywords: knowledge management, Nonaka, Polanyi, Davenport

Panel/Workshop: Essential Elements of a Sound Research Paper: Publishing in Refereed Journals

Alex Koohang, Middle Georgia State, USA, alex.koohang@mga.edu
Daryl Nord, Oklahoma State University, USA, daryl.nord@okstate.edu
Jeretta Horn Nord, Oklahoma State University, USA, jeretta.nord@okstate.edu

This panel/workshop is made of two parts. Part one will include insights from the editors on how to increase chances of getting a manuscript published in a journal. Part two covers the essential elements of a sound research article worthy of publication in a refereed journal.

Keywords: Preparing manuscripts, submitting manuscripts, refereed journal publication, sound research elements

Examining Users' Personal Information Sharing Awareness, Habits, and Practices in Social Networking Sites and E-Learning Systems

Albert L. Ball, Hodges University, Fisher School of Technology, aball@hodges.edu
Michelle M. Ramim, Hodges University, Fisher School of Technology, mramim@hodges.edu
Yair Levy, Nova Southeastern University, Graduate School of Computer and Information Sciences, levyy@nova.edu

Abstract

Reports of identity theft continue to be widely reported, while users continue to share an increasing amount of personal information online, especially within social networking sites (SNS) and e-learning systems (ELS). Research has suggested that many users lack awareness of the threats that risky online personal information sharing poses. However, even among users who claim to be aware of security threats, actual awareness is still lacking. Research indicates that users' habits influence their practices. However, the relationship between habit and practices is not always clear. Habit theory has been validated across many disciplines, with very limited attention in Information Systems. Thus, the main goal of this study was to assess the influence of users' personal information sharing awareness (PISA) on their habits (PISH) and practices (PISP), while comparing the three constructs between SNS and ELS. Empirical survey instrument was developed based on prior literature. A total of 390 responses were received, and path analysis was conducted to test the hypotheses. All three constructs demonstrated high reliability. Users' habits were determined to have the strongest influence on their practices. Information gained from this study may help organizations in the development of better approaches to the securing users' personal information.

Keywords: Information sharing awareness, E-learning systems, habits, practices, Social Networking Sites.

The application of the balanced scorecard (BSC) in the higher education setting of a Polish university

Michał Pietrzak, Warsaw University of Life Sciences, michal_pietrzak@sggw.pl
Joanna Paliszkiewicz, Warsaw University of Life Sciences, joanna_paliszkiewicz@sggw.pl
Bogdan Klepacki, Warsaw University of Life Sciences, bogdan_klepacki@sggw.pl

Abstract
The increased competition both in the public and private sector has caused growing interest in quality improvement, designing, and implementing organizational performance measurement systems. Academic organizations also recognized the need for implementing such systems, for example, some recent works in organizational performance in higher education make use of Kaplan and Norton's Balanced Scorecard (BSC) to translate the characteristic strategic goals (e.g. research and teaching excellence) into performance measures. Currently, continuous quality improvement of organizational performance is required. In this paper BSC as performance measurement and strategic management system was described. Our research emphasized using BSC in higher education. The BSC model applied to a public university and the information system (IS) dedicated to supporting monitoring strategy. The proposition of future research is written in conclusion.

Keywords: BSC, performance measurement, higher education, measures, strategy

Knowledge Dam: Making Video Lectures Searchable by Using Automatic Speech and Text Recognition Technologies in Under-Resourced Languages

Vered Silber-Varod, The Open University of Israel, vereds@openu.ac.il
Amir Winer, The Open University of Israel, amirwi@openu.ac.il
Nitza Geri, The Open University of Israel, nitzage@openu.ac.il

Abstract
Automatic Speech Recognition (ASR), the technology which automatically transforms speech into text, has the potential to increase the access to spoken information that is captured in videos. This technology is needed especially for online academic video lectures that are gradually becoming a replacement to class lectures and traditional textbooks. In this conceptual study, we examine how the technological barrier to automatic speech recognition in under-resourced languages impairs accessibility to academic video lectures and demonstrate it with empirical findings of Hebrew ASRs evaluations. We compare ASR with Optical Character Recognition (OCR) as two different technologies that facilitate access to textual and speech content and show their current ability to work with under- resourced languages. We target ASR technologies of under-resourced languages as the main barrier to searching academic video lectures. We further show that information retrieval technologies, such as smart video players that combine both ASR and OCR capacities, must come to the fore once ASR technologies have matured. Therefore, we suggest that the current state of information retrieval from video lectures in under-resourced languages is equivalent to a knowledge dam.

Keywords: Automatic Speech Recognition (ASR), Under-resourced languages, Hebrew, Academic video lectures, Search, Optical Character Recognition (OCR), Knowledge dam.

How to evaluate knowledge within the organization: Research in progress report

Boštjan Delak, ITAD, Technology Park, Ljubljana, Slovenia, bostjan.delak@itad.si

Abstract
Knowledge is people (O'Dell and Hubert, 2011) and knowledge is recognized as the most important strategic asset every organization has. It is very important to identify, capture/acquire, share, reuse and unlearn knowledge. These activities are managed through knowledge management. It is a rather challenging task to assess and evaluate the level of knowledge management in an organization. The Framework for Information System Due Diligence (FISDD) can be used as an approach for different information system (IS) due diligence activities. Similar to information security also knowledge and knowledge management are recently assimilating with IS. We have upgraded the FISDD with a special part of knowledge and knowledge management assessment and evaluation. The aim of the paper is to validate the upgraded FISDD with the objective to be able to effectively identify the knowledge within the organization. Few years ago there have already been some activities in this framework, but there were some limitations of generality and also some limitations in research methodology. The main novelty of the upgraded framework is a new part of the FISDD Status questionnaire collecting the data for knowledge purposes. As the paper is research in progress, it represents our motivation and hypothesis, as well as current status of the research and further steps to disseminate these assessments. The paper presents a literature review of knowledge and knowledge management, especially those dealing with knowledge assessment. Overview of upgrading FISSDD is presented with the steps to choose the most appropriate methodology for the analysis, plans for case studies and draft plans for the following activities. Discussion and areas for further research section summarizes issues regarding existing research and concludes with suggestions of additional activities to enhance the illustrated approach.

Keywords: knowledge identification, knowledge evaluation, knowledge risks

Internet of Things (IoT) and Internet of Everything (IoE) in Management

Zieliński Jerzy Stanisław, Dept. of Informatics, Faculty of Management, University of Łódź
jzielinski@wzmail.uni.lodz.pl

Abstract
The aim of this paper is a short review of the Internet of Things (IoT) and Internet of Everything (IoE) application in management. Special attention is paid to general considerations on Business Models for IoT/IoE. Several examples of IoT/IoE applications in power, remarks on predicted financial results of the IoE application there are presented.

Keywords: Internet of Things, Internet of Everything, Management

Facilitating Real-Time Engagement: #AskAg Twitter Chats

Maciej Chmielewski, United States Agency for International Development (USAID) LEARN Contract, mchmie@dexisonline.com

Abstract
The purpose of this paper is to illustrate a case study of one U.S. Government agency's experience using Twitter as a platform for knowledge generation and exchange. It is intended as a precursor to a more intense study. In 2012, the United States Agency for International Development's (USAID) Bureau for Food Security worked with the USAID Knowledge-Driven Microenterprise Development (KDMD) project to pilot a series of Twitter Chat activities, organized under the #AskAg hashtag. The initial objective was to give a voice to development practitioners in the field by providing a monthly platform for them to exchange knowledge on various subjects, with the understanding that the conversation would happen in a transparent and accepted environment—Twitter. Since then, the Bureau has conducted more than 20 #AskAg Twitter Chats with over 100 experts and organizations. These Twitter Chats have covered a multitude of topics that relate to the Bureau's knowledge cycle. #AskAg Twitter Chats have evolved from a simple question and answer format to a more robust, structured conversation due to the addition of a full-time facilitator and participants' greater familiarity with the Twitter platform.

Keywords: Social Media, Knowledge Transfer, Web 2.0, Communications, Collaboration, Adaptation, Knowledge Exchange

The evaluation method of Web 2.0/3.0 usability in e-health knowledge management system

Anna Soltysik-Piorunkiewicz, University of Economics in Katowice, anna.soltysik-piorunkiewicz@ue.katowice.pl

Abstract
The article aims to provide a method for evaluating the usability of Web 2.0/3.0 application to support knowledge management in knowledge-based organizations of the various stages of the cycle knowledge management, taking into account: generating knowledge, evaluating knowledge, sharing knowledge, etc., based on the example of e-health knowledge management system. The method focuses on five areas of evaluation: GUI, functional structure, the way of content publication, organizational aspect, and technological aspect. The method is based on the proposed scoring in five areas of knowledge management system.

Keywords: information and communication technology (ICT), knowledge management system (KMS), Web 2.0/3.0 usability.

E-commerce adoption in the Polish commercial insurance sector

Maciej Czaplewski, Faculty of Management and Economics of Services, University of Szczecin,
ul. Cukrowa 8, 71-004 Szczecin, Poland, maciej.czaplewski@poczta.wzieu.pl

Abstract
The following article has two main objectives. On one hand it aims at describing the basic ways of Polish insurance companies engagement in e-commerce in the recent years and evaluating the existing situation regarding this matter. On the other hand it raises questions regarding the subject matter of e-commerce and related technologies based on the use of the Internet and their influence on the development level of insurance companies in Poland. These issues might be quite important especially because nowadays it seems that in Poland most companies from the insurance sector are still functioning in a traditional way. In consequence this means that their customers are served typically by their own offices and eventual, other external structures (e.g. insurance agents, brokers and other dealers).

Keyword: E-commerce, E-business, Polish insurance market, Internet.

Proposal of procedure of creating ontology of business knowledge

Helena Dudycz, Wrocław University of Economics, helena.dudycz@ue.wroc.pl

Abstract
Economic indicators provide much information concerning functioning of an enterprise. Their usefulness depends also on comprehension by decision-makers existing between indicators structural and semantic connections. More and more attention is paid to the use of semantic technologies as a solution which can be used to search and acquire unique information. In literature development of Business Intelligence systems towards using semantic search is describe. One of the main artifacts to create a semantic network is the ontology. There are many methods describing the procedure of creating ontology for information solutions. So far there is no single standard of design and creating ontology recommended by everyone. The article presents the approach to creating ontology of business knowledge, which can be implemented in the Business Intelligence system.

Keywords: ontology, ontology of business knowledge, procedure of creating an ontology, Business Intelligence system.

Institutionalization of information and knowledge management in U.S. joint and Army doctrines

Andrzej Lis, The Faculty of Economic Sciences and Management, Nicolaus Copernicus University, andrzejlis@econ.umk.pl

Abstract
The aim of the paper is to analyze the institutionalization of information and knowledge management in U.S. joint and Army doctrines and publications. U.S. military capstone and keystone joint publications as well as key U.S. Army doctrines are scanned to identify the elements of information and knowledge management concepts and discuss their assumptions. The quantitative and qualitative analyses of the content of U.S. joint and Army publications are main data elicitation methods. The analysis encompasses only unclassified publications, officially approved for public release and unlimited distribution online. The study shows that information management is more frequently mentioned in U.S. military doctrines than knowledge management. Detailed issues concerning information management are covered by the special series of Army regulations. Moreover, the U.S. Army institutionalizes the concept of knowledge management in the field manual on knowledge management operations. Similarly, the solutions for effective Lessons Learned systems are established in related U.S. military publications.

Keywords: information management, knowledge management, data, information, knowledge, Lessons Learned, military doctrine.

Defining knowledge management: Toward an applied compendium

John Girard, Middle Georgia State College, john.girard@mga.edu
JoAnn Girard, Sagology, joann@sagology.com

Abstract
The purpose of the paper is to chronicle the depth and breadth of applied knowledge management definitions penned by researchers and practitioners alike. Once these definitions are part of the body of knowledge they become accessible to academics conducting research, to organizations considering knowledge management, and to other interested parties who wish to learn more about the subject. All of the definitions are freely available from open access sources. Collectively the definitions represent the thoughts of authors in at least 13 countries and from 23 domains. The collection of definitions highlight the truly multidisciplinary nature of knowledge management. The initial analysis revealed the four most common verbs were use, create, share, and manage. The most common nouns were knowledge, process, organization, and information.

Keywords: knowledge management, definitions, applied, KM

Evaluation of selected mobile applications stores from the user's perspective

Witold Chmielarz, University of Warsaw, witek@wz.uw.edu.pl

Abstract
The growing popularity of the mobile solutions leads to the research different aspects of the sphere. The aim of this article is to analyze select mobile applications stores from the point of view of a user. The analysis was carried out for three the most popular stores: Google Play, App Store and Windows Phone Store. They were selected on the basis of operating systems included in mobile devices used by the customers of these stores. Efforts were made to discover the differences in the assessment of the shops by users with smartphones and tablets with working on three basic platforms currently operating systems: Android, iOS and Windows. The paper presents the results of a survey conducted on students and teaching staff, users of the services of mentioned stores. The paper covers the presentation of the assumptions of the study and research questions, the description of methodology, the analysis of the obtained findings and discussion. In the study, which is of qualitative character, the author analyzed the opinions of a sample of university students to evaluate the selected characteristics of mobile application websites by means of a standardized scoring method.

Keywords: mobile applications stores, comparison analysis

Key Factors in a Successful Knowledge Management Model

Scott C. Spangler, D.Sc., Robert Morris University, scsst295@mail.rmu.edu
Robert Joseph Skovira, Ph.D., Robert Morris University, skovira@rmu.edu
Frederick G. Kohun, Ph.D., Robert Morris University, kohun@rmu.edu

Abstract
This paper first seeks to understand success factors in established knowledge management models. The paper then prescribes a simplistic a three-stage model to understand or evaluate success factors in KM models: transfer, relationship and community. The model proposes a key factor in KM models is its transfer mechanics, which is directly related to the ability of community to form values and behaviors consistent to the natural rules or laws of the community of practice. The acceptance of the natural rules or laws form the mechanism or trust levels in an individual that grants them to access to internal knowledge sharing nodes. These nodes then seek externalization with communities of practice that are in alignment with their own core or noble values.

Keywords: Knowledge management, data, knowledge, information, transfer

Training Business Intelligence Applications: From Pedagogical Reasoning to Business Practices

Dimitar Christozov, American University in Bulgaria, dgc@aubg.edu
Alexandr Bronasco, American University in Bulgaria, avb110@aubg.edu

Abstract
In this paper, we share the experience obtained in offering a pair of courses related to Application of Business Intelligence (BI) Techniques. The first course addresses mostly technological aspects of building BI applications as Data Cube modeling, ETL process and Data Visualization, while the objectives of the second one were in developing understanding regarding complexity in implementing BI solutions in a particular institution. Possessing domain knowledge is essential for both courses and selection of the registration processes of the university as a training case is the natural one. Exploration of this case in class resulted in a well-defined and justified approach of how to make some of the decisions through this process rational and data driven by using well-known analytical techniques.

Keywords: Business Intelligence, Business Analytics, Enterprise Information Management Maturity Model (EIMMM), Course Registration, Customer Relationship Management (CRM)

Worldwide Video Use Patterns in e-Learning: Exploring time, completion rate, and devices

Ruti Gafni, The Academic College of Tel Aviv Yaffo, Israel and The Open University of Israel, Israel, rutigafn@mta.ac.il
Danielle Filin, The Academic College of Tel Aviv Yaffo, Israel, danielle.filin@gmail.com

Abstract
Academic institutes harness technology in order to provide new options for students to learn. One of these technologies is offering video classes that can be seen through the Internet, using different kinds of devices, like personal computers, tablets or smartphones. This research inspects the differences in usage patterns of watching video lectures, by students in fifteen academic institutes, in three different countries: The USA, the UK and Australia. The usage patterns inspected were the type of device used, period during the semester when the videos were played and drop-off percentage. The possibility to watch anywhere and anytime, not needing to attend personally the classroom, opens a new trigger to procrastination. This research used objective data extracted from Kaltura's database, the supplier of the video infrastructure for those academic institutes, during one year (two semesters). Our findings showed that students worldwide prefer to watch online video classes using PCs, while the mobile devices are scarcely used; they prefer short videos, especially at the end of the semester, or they drop-off after a minimal number of minutes watching. Moreover, a U-shape curve of e-learning during the semester was observed, where the video watching was concentrated at the beginning and end of the semester.

Keywords: online video lectures, m-learning, effectiveness of instructional technologies, distance learning, blended learning, procrastination, attention economy.

Trust in software agent societies

Mariusz Zytniewski, University of Economics in Katowice,
mariusz.zytniewski@ue.katowice.pl
Mateusz Klement, University of Economics in Katowice, mateusz.klement@ue.katowice.pl

Abstract
Modern IT solutions, such as multi-agent systems, require the use of mechanisms that will introduce certain social elements to improve the process of communication. Such mechanisms may be trust and reputation models, which allow a very important aspect of human relations, i.e. trust, to be introduced between autonomous software agents. Models that are currently proposed usually fail to take into account openness of present systems or mobility of agents, which allows them to move across systems. According to the authors of this paper, agents from the same system should be evaluated in a different way than agents from a different multi-agent system. The concept of a trust model proposed in this paper takes into account the above mentioned factors and enables a simple evaluation of other agents depending on the system from which they come and the action they are designed to perform.

Keywords: Agent societies, agent reputation, knowledge management system, trust

The role of semantics in searching for information on the Web

Ilona Paweloszek, Czestochowa University of Technology, ipaweloszek@zim.pcz.pl
Jędrzej Wieczorkowski, Warsaw School of Economics endras@sgh.waw.pl

Abstract
As the amount of data in the World Wide Web grows, the Internet becomes the biggest and often the primary information resource for many individuals and organizations. To make good use of the data, it is essential to provide effective and intelligent search capabilities. The users more and more often require direct and unambiguous answers, which are often not explicitly present in any document. The Web users also are not willing to learn complex query languages and need interfaces that will be easy to use and as close as possible to natural language. The aim of this paper is to illustrate the advantages that semantics brings to the users of contemporary Web search engines. The concepts of semantic Web and semantic search engines have been described along with some issues related to their development and usage, such as linked data, semantic query interfaces and the ways of publishing semantic data. The authors also explore the semantic features of contemporary search engines and indicate their future directions of development.

Keywords: Semantic Web, search engine, linked data, semantic query interfaces, semantic data publishing

Leadership, trust, and knowledge management in relation to organizational performance: Developing an instrument

Joanna Paliszkiewicz, Warsaw University of Life Sciences, joanna_paliszkiewicz@sggw.pl
Jerzy Gołuchowski, University of Economics in Katowice, jerzy.goluchowski@ue.katowice.pl
Alex Koohang, Middle Georgia State, USA, alex.koohang@mga.edu

Abstract
This paper develops an instrument that can be used to a) measure the influence of organizational leadership on trust management and knowledge management separately; b) measure the effect of trust management on knowledge management; and c) measure the effect of knowledge management on organizational performance. The instrument is based on a proposed model that illustrates a sequential and interrelated process in achieving successful organizational performance with the essential elements of organizational leadership, trust management, and knowledge management. The instrument includes four constructs - organizational leadership, trust management, knowledge management, and organizational performance. Each construct in the instrument is defined and operationalized. Recommendations for future research are made.

Keywords: Organizational performance, organizational leadership, trust management, knowledge management, trust-based knowledge management model

Modeling organizational intelligence: Nothing googles like Google

Bob Travica, University of Manitoba, btravica@ms.umanitoba.ca

Abstract

The purpose of this article is to contribute to theorizing organizational intelligence. The idea of organizational intelligence (OI) has been addressed from various perspectives and levels of analysis. Still, comprehensive modeling of OI, which would bring together relevant assumptions and concepts, is rather lacking. This article introduces such a model that draws on traditional assumptions about the organization and environment as well as on newer frameworks of knowledge management, organizational mindfulness, dynamic capabilities, and the informing view of organization. In pilot-testing the model, a case of Google Inc. is elaborated subsequently in the article. Findings reveal how OI is embedded in particular aspects of Google's organization, individual and group cognition, technology and management, while being indicated in a sustainable product innovation and organizational performance.

Keywords: Organizational intelligence, organizational mindfulness, dynamic capabilities, informing view of organization, innovation, organizational sustainability

The impact of digital literacy on e-government development

Agnieszka Agata Tomaszewicz, University of Szczecin, agnieszka.tomaszewicz@wzieu.pl

Abstract
The article discusses the meaning of digital literacy and its' influence on the level of e-administration achieved in various countries. A comparison has been made between the levels of e-administration development in particular European Union countries and their citizens' digital competence. Furthermore, the term 'digital literacy' was briefly characterized. Finally, it was indicated that the level of digital competences possessed by both citizens and administration workers is one, however, not the key determinant of e-administration development.

Keywords: e-government, digital literacy, information society, e-Government Development Index (eGDI)

Prosumers' participation in business processes

Ewa Ziemba, University of Economics in Katowice, ewa.ziemba@ue.katowice.pl
Monika Eisenbardt, University of Economics in Katowice, meisen@ue.katowice.pl

Abstract
Enterprises of the twenty-first century are facing the challenge of new business models adoptions. One of them is prosumption referring to situations in which consumers collaborate with enterprises to produce things of value. The goal of this research was to identify business processes in which prosumers can participate and support enterprises. The paper consists of three parts. The first part discusses the prosumption theory, an enterprise process model and a framework of processes classification. The second part presents business processes in which prosumers can participate and identifies practical examples of prosumers participation. The third part proposes a conceptual framework of prosumers' participation in business processes. The study concludes with a discussion of the findings, limitations, implications, and avenues for further research.

Keywords: enterprise, prosumer, prosumption, business processes, prosumers' participation, ICTs.

Women's empowerment: Social technologies in Slovenia, Romania, and Georgia

Jeretta Horn Nord, Oklahoma State University, Stillwater, OK 74074 USA, jeretta.nord@okstate.edu
Joanna Paliszkiewicz, Warsaw University of Life Sciences, Warsaw, joanna.paliszkiewicz@sggw.pl
Tanja Grublješič, University of Ljubljana, Slovenia, EU, tanja.grubljesic@ef.uni-lj.si
Cezar Scarlat, University "Politechnica" of Bucharest, Romania, EU, cezarscarlat@yahoo.com
Salome Svanadze, Ilia State University, Tbilisi, 0162, Georgia, salome.svanadze.1@iliauni.edu.ge

Abstract
Educational, economic, and technological challenges are faced by women throughout the world. These challenges must be addressed. Are opportunities presented through the use of mobile and social technologies an answer to this gender specific issue? Slovenia, Romania, and Georgia are among several countries being studied globally in an effort to determine the status of the use of social technologies by women with the goal of women's empowerment. Social Technologies investigated included facebook, Twitter, LinkedIn, YouTube, and Google+.   Survey results come from respondents from remote regions to large cities. Those using social technologies listed facebook more than any of the other media and included numerous positive benefits: ability to access desired information; fast and effective communication; increased awareness; more informed; and an increased number of opportunities. Complete results of the study including qualitative data which strongly supports the benefits of the use of social technologies for women's empowerment are presented.

Keywords: Social Technologies; Social Networking; Social Media; Slovenia; Romania; Georgia; Women's Empowerment; Information Technology

Pharmaceutical companies' documented and online privacy practices: Development of an index measure and initial test

Shonda D. Brown, Nova Southeastern University, bshonda@nova.edu
Yair Levy, Nova Southeastern University, levyy@nova.edu
Michelle M. Ramim, Hodges University, mramim@hodges.edu
James L. Parrish, Nova Southeastern University, jlparrish@nova.edu

Abstract
Consumers have begun to take a more proactive approach to their healthcare by accessing pharmaceutical companies Websites to obtain health and drug information. In exchange for these benefits, companies require consumers to voluntarily disclose information. However, research has shown that consumers continue to be concerned about how their information is managed, used, and distributed by companies, especially if accessed via the Web. To date, there has been limited empirical research to examine the actual online practices of companies when it comes to privacy, especially those of pharmaceutical companies. Using the Delphi expert panel process, we identified the components of a hierarchical benchmarking index to examine the documented and actual online practices of 100 Website registrations with pharmaceutical companies. In this paper, we outline the development of an index to measure the personal information privacy violations of pharmaceutical companies using hierarchical linear technique. Second, we provided empirical evidence regarding the magnitude of voluntary adherence to the Fair Information Practices (FIPs) by pharmaceutical companies based upon the personal information privacy violations. Our results revealed that companies with headquarters in Europe had fewer personal information privacy violations than those in the US. Moreover, our results indicate that fewer personal information privacy violations occur for chronic conditions than for non-chronic conditions, as well as fewer violations occur with Website registrations for updates than for discounts. Finally, both Europe and UK demonstrated more overall adherence to the FIPs than the US and Asia. This suggests that self-regulation may not be sufficient, while more enforcement may be necessary to decrease personal information privacy violations.

Keywords: Personal information privacy violations; Consumer control; Fair information practices; Information privacy; Information sharing; Pharmaceutical companies' online practices; Hierarchical privacy index development

Knowledge management and self-identity as a sub-culturally bound determinant: Subsoil of the hofstede hypothesis

Gary DeLorenzo, California University of Pennsylvania, delorenzo@calu.edu
Frederick G. Kohun, Robert Morris University, kohun@rmu.edu
Robert J. Skovira, Robert Morris University, skovira@rmu.edu
Vladimír Burčik, Comenius University, burcik@rmu.edu
David Gonda, Comenius University
Jacek Jakubczak, Maria Curie-Skłodowska University, jakubczak.jacek@gmail.com

Abstract
While organizations have initiated knowledge management initiatives to systematically and methodically capture both explicit and tacit (or silent) knowledge, these initiatives have experienced mixed results. Inherent organizational idiosyncrasies have bounded the transferability and reusability of the knowledge base. Characteristics such as relevance, timeliness, but most important, cultural context, bind both the generalizable and transferable value of knowledge. For the knowledge to have value and utility, the cultural context must be taken into consideration. The problematic generalization and applicability of the Hofstede Hypothesis is redefined as a matter of statistical aggregation averages. The collectivity that establishes the essence of culture has many faces that situationally define the culture context (i.e, profession, organization, religion, and ethnicity). Application of the model to demographic, professional, organizational, and other identities may be more useful, telling and generalizable than contemporary national profiles. The framework is readily adaptable to identifiable more homogeneous sub-cultures, and hence a potential source of data that can validate the universality of the Hofstede Hypothesis to document multi-dimensional cultural profiles within the context of a national cultural environment. This research concentrated on the analysis of the results of two additional questions added by the researchers to the Hofstede VSM2013eng survey designed to capture the participants' self-defined notion of identity to a participant pool of Polish, American, and Slovak individuals including undergraduate and graduate students. Understanding cultural nuance and its pervasiveness is critical to context and its role in understanding human behavior. Cultural profiles and individual identity can have relevance in the study of the knowledge management, especially in the practical application of an individual's own knowledge.

Keywords: Hofstede, knowledge management, identity, culture

A discussion focusing on Polanyi's "Tacit Knowing"

Justin Fruehauf, Robert Morris University, jdfst18@mail.rmu.edu
Frederick G. Kohun, Robert Morris University, kohun@rmu.edu
Robert Joseph Skovira, Robert Morris University, skovira@rmu.edu

Abstract
The essay is a contradiction, of sorts. Its problem is prompted by use of Michael Polanyi's term tacit knowing in the knowledge management literature. So the problematic for the essay is what does Polanyi mean by tacit knowing? We will attempt to dwell in Polanyi's description of tacit knowing as he has written extensively about the tacit coefficient of human existence. He has described this phenomenon in Personal Knowledge (1962), The Tacit Dimension (1966), Knowing and Being (1969), and Meaning (1975). The essay is an exploration of the ideas of tacit knowing, tacit knowledge, and the tacit dimension.

Keywords: tacit knowing, subsidiary … focal, from … to, Gestalt, personal commitment, tacit coefficient, conviviality.

29

Risk assessment of knowledge management system

Ljiljana Ruzic-Dimitrijevic, The Higher Education Technical School of Professional Studies, Novi Sad, Serbia, ljdimitrijevic@gmail.com

Abstract

This paper considers the risk assessment in the field of knowledge management. Since knowledge management systems can be observed at the stage of implementation and use, the risks also differ. An overview of the factors critical to the success of a knowledge management system is presented, as well as one method of risk assessment including its possible application to a knowledge management system. It is pointed out that the identification of risk factors is highly significant, together with the evaluation of their impact on knowledge management system. The presented method provides for the quantifying of risk and allows corrections and comparison of the results.

Keywords: risk assessment, knowledge management system.

Using hemispheric preference as a predictor of success in a limited-residency information systems doctoral program

Steven R. Terrell, Nova Southeastern University, terrell@nova.edu

Abstract
Due to the specific functionality of each of the brain's hemispheres, historically many educators and researchers have been quick to identify students or employees as having a right or left brain hemispheric preference. This is important, they believed, in order to create learning and work environments that utilize the strengths of each preference. More recently, researchers have argued that this dichotomy does not exist; the actions of humans rely on the coordinated functionality of both hemispheres. In an effort to support their contention, this study investigated the attrition rate of 152 students in a limited-residency information systems doctoral program. Students were administered a measure of brain hemishperic preference within the first two years of the program; they were then tracked for up to eight additional years until they left the program via attrition or graduation. The results of a logistic regression support the theory that a given hemispheric preference does not predict a student's choice of graduate degree program or success therein.

Keywords: information systems, graduate studies, hemispheric preference, attrition

Knowledge management in the function of risk assessment

Bozo Nikolic, International Institute of Applied Knowledge Management, Serbia, drbozonikolic@gmail.com
Jelena Dakic, The Higher Education Technical School of Professional Studies, Novi Sad, Serbia, jnikolic78@hotmail.com

Abstract

This paper deals with knowledge management in the field of risk. It presents a diagram of the knowledge management process with its application to the area of risk assessment in occupational health and safety. There are examples of risk assessment in which knowledge management has been used as a tool for taking measures that define decisions at the stage of process designing. This has also affected the prevention of risks or provided for preventive activities in order to forestall occupational injuries.

Keywords: risk assessment, knowledge management

Women and Technology in Poland: An Investigation of the use of Social Technologies

Jeretta Horn Nord, Oklahoma State University, USA, jeretta.nord@okstate.edu
Joanna Paliszkiewicz, Warsaw University of Life Sciences, Poland, joanna_paliszkiewicz@sggw.pl

Abstract
The purpose of this study was to investigate the use of social technologies and benefits realized by working women in Poland and whether these technologies provide an avenue for the empowerment of women. Social technologies investigated included facebook, Twitter, LinkedIn, YouTube, and Google+. Women in countries worldwide have faced gender inequality including education, economic stability, and lack of access to technology. This issue has gained international attention with organizations such as Google, Intel, facebook, and Microsoft making significant commitments towards women's empowerment through global technology and education. An abundance of global knowledge is available to everyone with access to the internet. It is important for those in academia, government, and industry alike to understand the power of social technologies as a platform for women's empowerment. The basis of this study was to investigate which social technologies working women in Poland use and the benefits realized as a foundation for women's empowerment. Implications of the study are applicable world-wide as developing countries gain access to the internet and the technology to use social technologies. This presentation will focus on the results of a survey conducted in Poland--one of several countries being studied globally. Following are a few of the comments made by survey respondents indicating the benefits of using Social Technologies: access to a large amount of information instantly; ease of communication; information exchange; access to a large number of individuals; and making new connections. Detailed results of the study will be presented in graphic format accompanied by a discussion of how these results attribute to the purpose of the study. Results of the survey clearly illustrate that social technologies provide the ultimate platform for education and economic empowerment for women.

Keywords: Social Technologies; Social Networking; Social Media; Poland; Women's Empowerment; Information Technology

A Review of Literature on Knowledge Sharing in the Global Virtual Teams – Cultural Aspects and Cross-cultural Challenges

Aleksandra Czarnecka, University of Economics in Katowice, aleksandra.serniak@gmail.com

Abstract
In globalized business environment the organizational knowledge sharing has become more significant than ever before. Due to the technological developments the new way of working emerged known as 'global virtual teams'. The methodology for this study is a review of the relevant literature on knowledge sharing, global virtual teams and cultural diversity. The aim of the article is to identify and describe the cross-cultural challenges of knowledge sharing in global virtual teams. The critical analysis of literature enabled to identify the cultural aspects and cross-cultural challenges that can affect the knowledge sharing in global virtual teams such as way of communication and the knowledge conceptualization and transfer, shared common language, creating efficient team leadership, developing trust and relationships, understanding cross-cultural differences and building intra-team respect. Based on the review of the literature, more research is needed on how cultural diversity impacts efficient knowledge-sharing, how important is trust and what hinders the development of trust among members of global virtual teams.

Keywords: knowledge sharing, global virtual teams, cultural diversity

Privacy and Cryptographic Security Issues within Mobile Recommender Systems as Society Embraces Cloud Based Technology

Jacob E. Mack, Keiser University, j.mack7@student.keiseruniversity.edu
Theophilus D. Owusu, Keiser University towusu@keiseruniversity.edu
John J. Scarpino, Robert Morris University, Scarpino@rmu.edu

Abstract
Recommender systems have a rich and diverse history culminating into modern day manual and more sophisticated automated integrated computer cloud based suggestion and analysis systems. As recommender systems become more contextual and deeper in learning analysis there arises more privacy and security issues regarding end user's data and key identifying information from said data. Shares of movie preferences on Netflix for example via social media sites like Facebook can lead to both demographic data sharing to acquaintances and strangers as well as increase the risk for data hacking. Furthermore, social media sites are in part based upon recommender systems, but true recommender systems filter even greater information than social media sites alone. This research papers will examine key privacy and security issues within the context of recommender systems with several key examples. The researchers use Netflix as the key model for this aforementioned examination and analysis but other relevant examples are also investigated. A recent encryption method, homomorphic encryption is proposed and discussed.

Keywords: Privacy, Cryptographic Security Issues, Mobile Recommender Systems, Mobile Information Systems, Mobile Searches, Mobile GPS, Mobile Location Searches.

Empowering Women through Technology: An Investigation of the Use of Social Technologies in Israel

Jeretta Horn Nord, Oklahoma State University, USA, jeretta.nord@okstate.edu
Dafni Biran Achitu, The Academic College of Tel Aviv Yaffo, Israel, dafniba@gmail.com

Abstract
This study included an investigation of Women's Empowerment through the use of social technologies by working women in Israel—one of several countries being studied globally. Social technologies investigated included facebook, Twitter, LinkedIn, YouTube, and Google+.   Women worldwide face challenges including education, economic stability, and lack of access to technology. Empowering women is a critical issue that can no longer be ignored. Giants such as Google, Intel, facebook, and Microsoft have made significant commitments toward these issues through global technology and education. Knowledge is power and is available to those with access to the internet. In their quest to distribute knowledge, it is important for participants of the KM Conference to understand the benefits of social technologies as a means of educating and empowering women. The basis of this study was to determine whether technological advances in mobile and social technologies provide an answer to women's empowerment. Results of this study provide world-wide implications with access to the internet and social technologies spreading across the globe. This presentation will include the results of a survey conducted in Israel. Israel ranks in the top 50 countries on the Global Gender Gap 2014 Report in the categories of educational attainment and political empowerment which is an indication of the global implications of this Israeli study (The Global Gender Gap Report, 2014). Respondents using social technologies listed numerous benefits including: improved customer service, increasing the number of connections, sharing information, increasing exposure while decreasing expenses, enhancing relationships, and having the ability to distribute information to a large number of people.   Results of the study which will be presented in detail provide a strong case for women's empowerment through social technologies.

Keywords: Social Technologies; Social Networking; Social Media; Israel; Women's Empowerment; Information Technology

Reference

The Global Gender Gap Report 2014. Retrieved March 26, 2015 from http://reports.weforum.org/global-gender-gap-report-2014/

Prominent Features of e-Governance in Russia

Antonova Galina M., Trapeznikov Institute of Control Sciences Russian Academy of Sciences, National Research Nuclear University MEPhI, gmant@ipu.ru

Abstract
"e-Russia 2002-2010" is a large-scale government program. In the real time a set of subsystems is created. Necessity of increasing quantity of subsystems and quantity of interested tasks demand evaluating dataflow and network capacity as well as throughput for different channels of network and communications centers. This could be large problem and may be solved by the imitation statistical model of e-Governments communication network. The poster presentation discusses the model.

Keywords: **Keywords**: e-Governance; Simulation; Data Communication Network; Algorithm.

Problems related to the KM processes at the level of local government

Anna Krakowiak-Bal, University of Agriculture in Krakow, Poland, anna.krakowiak-bal@ur.krakow.pl
Urszula Ziemiańczyk, University of Agriculture in Krakow, Poland, urszula.ziemianczyk@ur.krakow.pl
Maciej Sporysz, University of Agriculture in Krakow, Poland, maciej.sporysz@ur.krakow.pl

Abstract

In paper, the knowledge management processes in public institutions will be evaluated. Main problems of these processes will be indicated and analyzed. In a knowledge-based economy is the most important the possession of intangible assets: knowledge and human capital, supported by modern technology, especially in the third sector. Knowledge in an organization is the collection of expertise, experience and information that individuals and workgroups use during the execution of their tasks. It is produced and stored by individual minds, or implicitly encoded and documented in organizational processes, services and systems. Knowledge Management is playing a key role in every aspect of our lives (Li, 2011; Oliva, 2014; Wiig, 2002). Especially it is recognized as a significant factor in gaining a competitive advantage (Wen, 2009) in business sector as well in public administration (Wiig, 2002) and universities also (Ramachandran, 2013). One of the challenges in knowledge management is to study the facts that have impacts on knowledge processing and how they can improve the efficiency of knowledge application. Important is to indicate problems of these processes and solutions to minimize them. Within the framework of the research there were such elements as: 1) identification of main institutions, 2) the pilot study of specifically selected organizations (stationary research, 3) Selection of proper institutions and modification of the questionnaire, and 4) extensive surveys in all the institutions. The research implemented the CAWI technique (Computer-Assisted Web Interviewing). It is an increasingly popular method of quantitative research, in which the questions used in the questionnaire are copied from the website belonging to the administrator of the research.

Keywords: knowledge management, rural areas, public institution

References

Li B.M., Xie S.Q, Xu X.(2011), "Recent development of knowledge-based systems, methods and tools for one-of-a-kind production" Knowledge-Based Systems, Vol.24 (7) pp. 1108–1119

Oliva F.L. (2014) "Knowledge management barriers, practices and maturity model", Journal of Knowledge Management, Vol. 18 Iss: 6, pp. –

Ramachandran S.D., Chong S.Ch., Wong K.Y, (2013) "Knowledge management practices and enablers in public universities: a gap analysis", Campus-Wide Information Systems, Vol. 30 Iss: 2, pp.76 – 94

Wen Y.F. (2009) "An effectiveness measurement model for knowledge management" Knowledge-Based Systems, Vol. 22, Iss: 5, pp 363-367

doi:10.1016/j.knosys.2009.02.007

Wiig K.M. (2002) "Knowledge management in public administration", Journal of Knowledge Management, Vol. 6 Iss: 3, pp.224 – 239

Modeling flexible configurable processes applied to the enrollment process in higher education institutions

Nataša Subić, The Higher Education Technical School of Professional Studies, Novi Sad, Serbia, subic@vtsns.edu.rs
Maja Dimitrijević, The Higher Education Technical School of Professional Studies, Novi Sad, Serbia, subic@vtsns.edu.rs

Abstract
Modern information systems need to be able to deal with uncertainty and variability, as well as to support the evolution of business processes. In this work, we apply two flexible and configurable modeling approaches to model the process of the student enrollment at a higher education institution. A model based on the configuration of the reference model requires a comprehensive reference model, while the model based on the model structure adaptation contains a minimal reference model. Both modeling approaches proved to be applicable to modeling the process of the student enrollment at a higher education institution.

Keywords: reference process model, business process, flexible business process, adaptive business process

Knowledge Management - Processes and Platforms for Smart Grid Customers

Anna Pamula, University of Lodz, Poland, apamula@wzmail.uni.lodz.pl

Abstract
The paper presents two areas of Knowledge Management in Smart Grids. One is customer education and the knowledge that can arise from different sources (not necessarily connected with energy provision) like dynamic experience and opinion sharing. The second issue deliberated is the problem of Knowledge Management in energy utilities, so far interested mainly in technical solutions with not too much attention paid to their consumers.

Keywords: customer engagement, Knowledge Management, Smart Grids, smart energy customers

The dynamics of information flow and telecommunications sector development

Piotr Waląg, Uniwersytet Rolniczy im. H. Kołłątaja w Krakowie, Poland, piotrwalag@gmail.com
Sylwester Tabor, Uniwersytet Rolniczy im. H. Kołłątaja w Krakowie, Poland
Renata Śliwa, Malopolska Wyższa Szkoła Ekonomiczna w Tarnowie, Poland

Abstract

The significance of telecommunications sector development will be highlighted in respect of facility-based competition. The central role of the paper will be the information as a resource driving great deal of recent economic processes. The demand for variety of types of information and knowledge impose on the sector such as telecommunications the need to generate more and more diversified range of services. This kind of need may only by satisfied by facility-based competition.

Keywords: information, facility-based competition

Knowledge sharing practices in the Global Alliance of Management Education

Celina Sołek-Borowska, Warsaw School of Economics, Corporate Management Department, email: csolek@sgh.waw.pl

Abstract
This paper investigates the extent and type of knowledge sharing practices within the partner universities of the Global Alliance of Management Education (CEMS). An overview of knowledge sharing is followed by a discussion highlighting the changing role of the contemporary university, which goes beyond the traditional roles of teaching and conducting primary research to incorporate the high demand for science, technology, and innovation as the foundations of a knowledge-based economy. Universities are increasingly becoming business oriented, which is a change reflected in the development of the CEMS postgraduate degree program. This prestigious program provides an opportunity to study university knowledge sharing using the results of a questionnaire sent to CEMS partner universities. The research findings indicate that knowledge sharing within CEMS takes diverse forms, and is not solely confined to channels such as staff committees and faculty meetings. Student participation is very important, especially in the form of Annual Events which foster close links with the business world. Interdisciplinary links supported by teamwork are also important.

Keywords: knowledge sharing, knowledge dissemination, modern universities, corporate sector.

Establishing best practices in innovation on the basis of elements of cooperation between the government, educational institutions, and a private sector.

Rafal Jan Daniels, Assistant Professor in Faculty of Informatics and Communication at University of Economics in Katowice, rafal.doniec@ue.katowice.pl
Sergiusz Scheller, Poznan, Poland, sergiusz.scheller@gmail.com

Abstract
The aim of this study is to demonstrate the practical application of three necessary elements necessary to build, then conduct and finalize the project successfully within the framework of cooperation between an academic institution, administration, and a private sector company. The first element is the involvement of external funding. External funding, which does not burden the budgets of companies, schools, and local governments does not guarantee, but can significantly contribute to the potential success of a business or intellectual superiority, namely the development of patent, design mark, etc. The next element illustrated in the examples is the involvement of tight control of consortia participants during the project, which can vastly affect the final outcome of the project. The last element, also highlighted in the examples, is the need for full engagement of the participants consortium project, their experience and clearly defined aim, reducing the risk of failure. The research material consists of publications and open source materials, describes various forms of cooperation within the ranges of the triangle formed by the university, government administrative unit and private business company. In equal measures, both positive and negative examples of cooperation are described in the following paper. The results confirm that well-prepared project, carried out with full commitment and complete factual assessment, supported by an accurate control throughout the process as well as clearly defined cooperation between companies and universities, should be a significant constituent of the scientific research. In this paper's conclusion, an analysis was conducted according to which the inclusion of 30% of best practices from previous projects in a new project will significantly increase its chances of market success.

Keywords: cooperation, innovation, education, technology, external funding, EU funding.

The measurement of intellectual capital by VAIC method – example of WIG20

Salome Svanadze, Ilia State University, salome.svanadze.1@iliauni.edu.ge
Magdalena Kowalewska, Warsaw University of Life Sciences, magdalena_kowalewska@sggw.pl

Abstract
Intellectual capital has become a key resource for enterprises, but its measurement and reporting represents a major challenge for managers and researchers. The aim of this article was to establish the possibilities for using the Value-Added Intellectual Coefficient (VAIC TM) method to report intellectual capital of companies included in the WIG 20 index of the Warsaw Stock Exchange. This study also identified opportunities and threats arising from its use. The data necessary to perform the calculations in accordance with the VAIC method came from balance sheets and profit and loss accounts for the period 2010-2013. The VAIC method provides the means to measure intellectual capital and the efficiency of its individual components, allowing management intervention in those business areas open to objective statistical analysis.

Keywords: intellectual capital, VAIC method, WIG20 companies

Standardizing the presentation layer in B2B system

Monika Łobaziewicz, *John Paul II Catholic University of Lublin, mmlobaza@kul.lublin.pl*

Abstract
The aim of this article is to present the results of the analysis on the possibilities of standardizing the presentation layer in a business-to-business (B2B) system based on Internet technologies as part of a scientific project within a Research and Development department. In this article, all issues that are essential in the design of the user interface of the B2B system, in both theoretical and practical contexts, are discussed. Moreover, the methodology of the research is being presented. This article also includes a sample project of a user layer that has been developed by the researchers, engineers, scientists, and members of IT department.

Keywords: B2Bsystem, standardization, user interface.

The use of intelligent ICT solutions at a local governmental level

Katarzyna Marciniak, Wrocław University of Economics, katarzyna.marciniak@ue.wroc.pl
Małgorzata Nycz, Wrocław University of Economics, malgorzata.nycz@ue.wroc.pl
Zdzisław Pólkowski, (DWSPiT), z.polkowski@dwspit.pl

Abstract
The main goal of this paper is to present how Business Intelligence solutions can be used to support Polkowice in municipality management. Authors, in that case, consider a BI solution as an integration tool for administrative units in municipality responsible for making present ordering and future growth of Polkowice Municipality. The authors' intention is to show how all administrative units of the municipality can cooperate with local authorities using the BI solution.

Keywords: local public units, sustainable development, Business Intelligence