

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Quick Snapshot

Friday, November 9, 2018

| | |
|----------|---|
| 8:30 am | Opening & Welcoming Remarks |
| 9:00 am | Session 1: Plenary Session I—Gary Marchionini, iSchools as Crucible: Melding public good, technical efficiency, and knowledge |
| 10:00 am | Coffee Break |

| | |
|----------|--|
| 10:30 am | Session 2: Methods for Research and Evaluation in KM Moderator: |
| 10:30 am | Session 3: Knowledge Organization I Moderator: |
| 10:30 am | Session 4: Workshop I— The Faculty IT Liaison Program: Using Participatory Design to Build Possibilities with Technology Moderator: |
| 12:00 am | Lunch |

| | |
|---------|--|
| 1:30 pm | Session 5: Innovation I Moderator: |
| 1:30 pm | Session 6: Knowledge Sharing Moderator: |
| 1:30 pm | Session 7: Workshop II—How Does Your Knowledge Flow? Exercises in Spatial Syntax Moderator: |
| 3:00 pm | Coffee Break & Session 8: Poster Sessions |

| | |
|---------|---|
| 4:00 pm | Session 9: Organizational Change Management Moderator: |
| 4:00 pm | Session 10: Data, Information, and People Moderator: |
| 4:00 pm | Session 11: Workshop III— Open Science and Open Data for Sustainable Development: A Global View |

| | |
|---------|---------------------------|
| 6:30 pm | Dinner per sign-up sheet. |
|---------|---------------------------|

Saturday, November 10, 2018

| | |
|----------|---|
| 8:30 am | Session 12: Plenary Session II: Chris Corrigan, The Art of Participatory Leadership |
| 10:00 am | Coffee Break |

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

| | |
|----------|---|
| 10:30 am | Session 13: Collaboration Moderator: |
| 10:30 am | Session 14: Innovation II Moderator: |
| 10:30 am | Session 15: Workshop IV— Managers or Librarians: Roles and Competencies in RDM Moderator: Jayne Sappington |
| 12:00 am | Lunch |

| | |
|---------|---|
| 1:30 pm | Session 16: Intellectual Capital Moderator: |
| 1:30 pm | Session 17: Knowledge Organization II Moderator: |
| 1:30 pm | Session 18: Young Researcher Presentations Moderator: Darin Freeburg |
| 3:00 pm | Coffee Break |

| | |
|---------|---|
| 3:30 pm | Session 19: Plenary III: The Nexus of Knowledge Management and Information Science: What Past and Present Trends Tell us About the Future |
| 5:00 | Closing |

Session 1: Plenary Session 1

iSchools as Crucible: Melding Public Good, Technical Efficiency, and Knowledge

Gary Marchionini, School of Information and Library Science, University of North Carolina at Chapel Hill

iSchools bring together people, information, and technology. We do so by considering all aspects of socio-technical systems ranging from the genesis, flow, and management of knowledge to the creation and use of information technologies to theories of human behavior and social practices. In today's globally informed world, our fundamental human capabilities, tendencies, and beliefs are being challenged on physical, cognitive, and affective levels. For example, it is one thing to create and manage knowledge repositories—libraries, archives, Google, and Amazon Web Services routinely do so at scale. It is quite another thing to trust those repositories and the knowledge they steward. iSchools study and teach strategies for appraisal, documentation and provenance, and the human consequences of technical efficiencies. Together with attention to changing technologies, these interests make us well-positioned to address issues of trust in many kinds of knowledge-intensive enterprises.

Brief Bio: Gary Marchionini is the Dean and Cary C. Boshamer Professor in the School of Information and Library Science at the University of North Carolina at Chapel Hill. He teaches courses in human-information interaction, interface design and testing, and digital libraries. He has published over 200 articles, chapters and reports in a variety of books and journals. Professor Marchionini has had grants or research awards from the National Science Foundation, Council

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

on Library Resources, the National Library of Medicine, the Library of Congress, Bureau of Labor Statistics, Kellogg Foundation, NASA, The National Cancer Institute, Microsoft, Google, and IBM among others. Professor Marchionini was Editor-in-Chief for the *ACM Transaction on Information Systems* (2002-2008) and is the editor for the Morgan-Claypool Lecture Series *on Information Concepts, Retrieval, and Services*. He was program chair for ACM SIGIR (2005) and ACM/IEEE JCDL (2002) as well as general chair of ACM DL 96 and JCDL 2006. He served as President of the American Society for Information Science and Technology (2010). He received the Library and Information Technology Kilgour Award for Research in Library and Information Technology (2000) and the ASIST Award of Merit (2011). His current interests and projects are related to interfaces that support information seeking and information retrieval, and issues arising from data science and ubiquitous information.

Session 2: Methods for Research and Evaluation in KM

Novel Lexicon Hierarchy Semantic Embedding for Domain Specific Text Mining (paper)

Xiaoli Chen and Tao Han

National Science Library, Chinese Academy of Sciences, chenxl@mail.las.ac.cn

Zhixiong Zhang

Wuhan Library of Chinese Academy of Sciences, zhangzhx@mail.las.ac.cn

Feature representation plays a very important role in text mining tasks, especially for domain-specific scientific documents mining. In this paper, we propose a lexicon hierarchy semantic embedding model (LHSE) for domain text mining. The novel embedding model associates each lexicon pair in the lexicon hierarchy with a distance metric. Lexicon pair's distance are calculated with respecting to their relative hierarchy in the lexicon hierarchy. We use a tree-based path weight to calculate each lexicon pair's semantic distance. To test our novel embedding model, we compare our lexicon hierarchy semantic embedding (LHSE) based CNN classification algorithm with other state of the art text classification algorithms. Text classification experiments conducted in chemical domain scientific documents show the superiority of our proposed method.

Bibliometric Analysis using Bibliometrix an R Package (Experience Report)

Hamid Darvish

Information Department & Records, Kastamonu University, hdervis@kastamonu.edu.tr

This study aims to explore the usage of Open-source software in bibliometric analysis. Bibliometrix an R package for bibliometric and co-citation analysis was used to achieve the research activities. R is an ecosystem software meaning all functions are shared in an open-source environment with the users. We have used Graphene as a subject of research for bibliometric analysis. Graphene is one of the fastest growing research fields in nanotechnology worldwide. A textual query on Web of Science (WoS) Clarivate Analytics using the term “graphene” was performed retrieving 1155 scholarly papers from 2000 to 2017 with having at

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

least one author based in Turkey. Bibliometric results indicate graphene within nanotechnology as a scientific research field is growing steadily. Graphene not only is used in engineering but also can be used in medical technology. Furthermore, this is an ongoing research exploring an Open-source software and its roles in the field of information studies.

Critical Evaluation of and Proposed Corrections for Knowledge Management Maturity

Justin Kollinger, Senior Analyst, Education Advisory Board, Washington DC

Shaqueta Pierre, Senior Technical Writer, Health Communications, Inc, Arlington, VA

Dean Testa, Manager, Knowledge Management Office, Goodyear Tire & Rubber Co., LLC, Akron OH

Denise A. D. Bedford, Faculty, Communication Culture and Technology, Georgetown University, Washington DC

Knowledge Management Maturity models and metrics have been applied to many organizations over the past two decades with varying degrees of success. In most cases the maturity models are grounded on maturity models which have their origin in the software development and business process engineering domains. This research stems from practical challenges encountered by the research team in a maturity modeling exercise. To better understand the challenges, the research team undertook a root cause analysis. The research identified seven root causes of failure common to knowledge management maturity exercises. Additionally, the research explains how to design a maturity exercise that would effectively avoid these causes. Four use case examples are presented.

Session 3: Knowledge Organization 1

Domain Knowledge Organization and Utilization—A Case in the Field of Nanoscience and Technology (Best Practice Report)

Qimei Chen

National Science Library, Chinese Academy of Sciences, chenqm@mail.las.ac.cn

Bo Zhang and Lucheng Lv

National Science Library, Chinese Academy of Sciences, zhangbo@mail.las.ac.cn,
lvlc@mail.las.ac.cn

This document shows a model used in domain knowledge organization and utilization. The publishers, research institutions, and libraries collaboratively described the overview of science and technology. By looking at publications of high quality academic papers, patent applications, key areas of development, international collaborative networks and other aspects, it reveals recent trends of the development in science and technology. Having also incorporated experts' interpretations and views, the study applies both quantitative analysis and qualitative

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

information. In this way, Springer Nature, the National Center for Nanoscience and Technology of China, and the National Science Library, Chinese Academy of Sciences collaboratively produced the whitepaper on China's development of nanoscience and technology to assess the trends of China's development in nanoscience and nanotechnology, and to identify opportunities and challenges. The Whitepaper was released at the 7th International Conference on Nanoscience and Technology (Chi-naNANO 2017) and attracted much attention and acclaim.

Developing User-Oriented, Rule-Based Systems for Knowledge Management: Demo of Expert Systems and Usability Research Discussion (Best Practice)

Deborah E. Swain

NC Central University, dswain@ncu.edu

Knowledge Management Systems (KMS) support the identification, collection and sharing of useful knowledge to enhance decision making and collaboration in organizations. Among the tools and technologies available to develop knowledge-based decision support systems is the rule-based expert system (ES). Expert systems are built from collected knowledge using rules and an inference engine to cull through knowledge bases in a specific subject domain and to provide decision suggestions from “if-then” rules or other logical algorithms. They are part of the “family” of artificial intelligence (AI) applications (Sharda, et. al., 2015) and considered some of the first successful applications of AI (Russell & Norvig, 1995). As defined in the 1990s, *expert systems* are AI computer tools that emulate a human expert's decision-making ability (Jackson, 1998). An ES can be used in almost any field or business as help desk support, early customer input, a front-end to database searches, and a planning app for travel. This demo will illustrate easy-to-use applications and procedures for creating basic expert systems. In addition, instructions on how to build one with open source software and research ideas for improving usability will be presented and discussed. Expert systems can provide best practice tools that ignite action and decision making in businesses and organizations that use KMS and seek change.

MIA: Multimodal Information Architecture (Paper)

George Hideyuki Kuroki Júnior

Information Science College, University of Brasília, kurokijr@gmail.com

Cláudio Gottschalg-Duque

Information Science College, University of Brasília, klaussherzog@gmail.com

The construction of meanings is based on Multimodal constructions. The objective existence of things is Multimodal. It is not conceivable the idea that an object is expressed by means of only one Mode – several Modes are required, several syntactic layers (stimuli) are necessary to obtain certain semantics (meaning). The existence of these various Modes is the extreme opposite to the incessant search for relevance by the human mind: it always adapts to the world it's inserted through the selection of stimuli that are relevant to signification. The work here presented sets

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

ways towards a Multimodal Information Architecture (MIA), that presents possible strategies for designing models of representation for meaning construction by selection of stimuli and its Modes translating them into logical constructions. It gives a whole new meaning for what Information Architecture can stand for: transcending from a technicist paradigm to a theory of meaning construction. In this sense, modal logic contributes to the qualification of truths, and it is no longer imperative that a proposition be qualified as true or false: it may be possible, when one becomes aware that there is a configuration of World that makes it true; or necessary, when all possible Worlds settings make it true. At last, is proposed that this new paradigm for Information Architecture can be utilized as a meta-theory for Deep Learning Neural Networks.

Session 4: Workshop 1

The Faculty IT Liaison Program: Using Participatory Design to Build Possibilities with Technology

Valerie Nessel

Department of Library and Information Studies, University at Buffalo,
vmnesset@buffalo.edu

J. Brice Bible

Vice-President and Chief Information Officer University at Buffalo,
bible@buffalo.edu

The Faculty IT Liaison Program was initiated in a large research university to foster meaningful interaction and communication between faculty members and IT professionals. The Program is intended to generate opportunities for faculty and IT professionals to meaningfully interact and share knowledge to better understand and align IT services with faculty needs. As its guiding framework, the program uses the Bonded Design methodology, a form of participatory design where users and designers of technology collaborate in the shared experience of a design team. Preliminary results indicate that the Bonded Design methodology is an effective framework for the program as it encouraged collaboration and better understanding between these two disparate groups who together created new ideas to modify technologies; outcomes that could not have been accomplished by working alone or within their respective peer groups.

Session 5: Innovation 1

Knowledge Management Practices and Innovation: A Critical Literature Review (Paper)

José Miguel Baptista Nunes

School of Information Management, Sun Yat-Sen University, miguelnunes@mail.sysu.edu.cn

Saima Kanwal

School of Information Management, Sun Yat-Sen University, saimakanval@gmail.com

Muhammad Arif

School of Information Management, Sun Yat-Sen University, muhammad_arifpk@yahoo.com

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Knowledge Management (KM) and innovation are considered as key sources for the continuous sustainable competitive advantage of an organization. This study aims at establishing the state-of-the-art of causal link between KM practices and organizational innovation. For this purpose, the study critically reviewed research published in KM and innovation domain over the last 10 years (i.e. 2008 and 2017). A systematic search strategy was employed to retrieve relevant empirical studies from the Web of Science (WoS). Thereafter, the authors applied a critical review strategy to analyse and synthesize the findings of studies which focused on theoretical frameworks, methodological approaches, key findings, gaps, limitations, and descriptive information. Findings disclosed that research in the recent past increased exponentially in this field. In terms of impact, KM actively contributes to different types of innovation associated with organizational processes, products, and services. However, it was also noted that there are several factors, e.g., organizational learning, corporate culture, IT application, organizational capabilities, knowledge-oriented human resource practices, reverse knowledge transfer, and dynamic capability, which interplay significantly between KM processes and innovation in a mediating role. From a methodological perspective, the scholars used mainly quantitative approaches in preference to qualitative or mixed methods. This is clearly an issue that needs to be addressed by the KM research community since qualitative and pragmatic studies tend to provide better explanatory and descriptive findings. This study contributes to the body of knowledge offering insights for academics and practitioners and suggests future research directions to strengthen the KM and innovation field.

Innovation in the Internationalization Process of Brazilian Exporting Companies (Paper)

Julio Cesar Zilli

Universidade do Extremo Sul Catarinense, zilli42@hotmail.com

Amanda Locks

Universidade do Extremo Sul Catarinense, amana_s_locks@hotmail.com

Patricia De Sá Freire

Universidade Federal de Santa Catarina, patriciadesafreire@hotmail.com

Jaime Dagostim Picolo

Universidade do Extremo Sul Catarinense, jaime@unescc.net

The internalization process carried out in interaction with innovation is an alternative to organizational performance when facing a competitive scenario. Putting both together form a strategic pair in the pursuit of international competitiveness. Considering such scenario, this study aimed to identify the role of innovation in the process of internationalization of the exporting companies of southern Santa Catarina state. Methodologically, it was characterized as a quantitative, descriptive research comprising secondary data analysis and field survey. Data collection was carried out with the application of a questionnaire via Google Docs, together with

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

12 exporting companies from a variety of industries. In the scope of innovation, these companies invest mainly in products and processes, without using financing tools. Finally, it is comprehended that the majority only allocates between 1% and 5% of its revenues towards innovation, concluding that innovation still has an average performance in the internationalization of its activities.

Knowledge Management Initiatives Implemented in the Tourism Industry and Contributing to Innovation Generation (Paper)

Carla Zandavali

Federal University of Santa Catarina, setteca@gmail.com

Emerson Cleister Lima Muniz

Federal University of Santa Catarina, eng.prod.emerson@gmail.com

Gertrudes Aparecida Dandolini

Federal University of Santa Catarina, gtude@egc.ufsc.br

João Artur De Souza

Federal University of Santa Catarina, jartur@egc.ufsc.br

The tourism industry represents a lot for the world economy and provides jobs and income for the population of the touristic destinations and surrounding localities. Thus, managing knowledge within this sector can be useful for generating innovation and improving competitiveness. In this context, this article aims to analyze knowledge management initiatives applied to touristic services and that contribute to their innovation. To accomplish it, the research is based on a systematic integrative review of publications obtained on Scopus, Web of Science and Scielo. Among the main results, it is possible to notice that knowledge management initiatives with a focus on people stand out more than others, since the knowledge obtained from the clients through their lived experiences and the employees of the companies are essential for innovation. Knowing the importance of this knowledge for innovation, it is also noted many of the identified initiatives focus on structuring the means to enable the knowledge to be used, shared and disseminated. Thus, actions focused on structuring processes and strategies, changing organizational culture and deploying information technology tools are actions with greater emphasis on the analyzed works. Finally, it is still noticeable that the publications on the topic under study are recent, with gaps to be explored in further research, mostly aimed at the study of tacit knowledge.

Session 6: Knowledge Sharing

Harnessing Knowledge Management Systems (KMS) in the Era of Cloud Computing (CC): a New Horizon for Organizations and the Approach of Leading Service Providers (paper)

Tereza Raquel Merlo

Adjunct Professor, University of North Texas, terezamerlo@my.unt.edu

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Technological advances in the fields of information and communication have been, increasingly, reshaping the range of information systems, affecting the data management processing, use, and accessibility, and impacting the knowledge management systems in an unimaginable scale. Developers and consumers of information seek the most efficient platform for solid infrastructure in offering web-based services, on demand, to their end users anywhere, anytime in a growing digital workspace that is user centred and that benefits from the paradigm of cloud computing. Organizations are facing challenges in information and knowledge management that include, but are not limited to, data management: retrieval, processing, storage, and security, to mention a few. Numerous information systems seem to present the most effective format for data management, protection and sharing, including on premise solutions and on cloud based options: public, private, hybrid, in some cases with scalability issues, as an example. The well documented shift from on-premises storage to cloud based services results from the incredible volume of data collected and processed daily in organizational operations and systems vulnerability, storing capacity issues, and challenges in migration and compliance. This paper investigates the principles of clouding computing and its impact to knowledge management process in organizations. It brings a literature review and the analysis of some real case of companies users and or developers of cloud computing services, concluding that there are unquestionable benefits of cloud computing (CC) and that an effective combination of an information architecture plan, business strategy, and solid information infrastructure platform aligned with management support will contribute to a successful KMS process in organizations.

Creating a Knowledge-Sharing Culture Using the Implementation of a Digital Asset Management System: A Case Study (Experience Report)

Jane Leuchter

Content Librarian, The Institute for Functional Medicine, janeleuchter@ifm.org

This case study examines the process the Institute for Functional Medicine (IFM) took to implement a digital asset management system and the increased focus on a knowledge sharing culture that we were able to create with its implementation. We utilize the knowledge management maturity model developed by APQC and have measured our progress from the first stage, initiate, to the third stage, standardize, over the last three years. Our journey shows that incremental changes at any organization can have far-reaching effects. This case study will be a good resource for individuals working in any organization in the first two stages of the knowledge management maturity model.

Session 7: Workshop 2

How Does Your Knowledge Flow? Exercises in Spatial Syntax

Jayne Sappington

Texas Tech University, United States, jayne.sappington@ttu.edu

Denise A. D. Bedford

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Georgetown University, db233@georgetown.edu

Alexeis Garcia-Perez

Coventry University, United Kingdom, ab1258@coventry.ac.uk

In the 21st knowledge economy organizations must invest in and leverage their knowledge and intellectual capital assets. The circulation and sharing of knowledge and intellectual capital is critical to investment and value. While the literature discusses four categories of factors that influence knowledge sharing, one category has been neglected – the design of the physical-spatial environment. This program introduces participants to the practice of spatial syntax and provides a hands-on opportunity for participants to map and assess the knowledge flows of their working environments. Session leaders will provide a Quick Reference Guide describing Hillier's (Hillier et al, 1983) fourteen spatial metrics, and instructions for applying them. Session leaders will act as coaches in applying justified graph methods to determine how an architecture enables or impedes knowledge flows. The program will conclude with participants sharing their observations.

Session 8: Posters (Full Abstracts Listed later in Program)

Application Of QR Codes In Library Services: Beyond Q

Bridging, Bonding, And Maintained Social Capital As Predictors Of Psychological Well-Being In A Whatsapp Group

Survey On The Graduate Attitudes And Needs Toward Data Literacy And Library Instruction

Using Augmented Reality To Navigate Campus

Usage Patterns Of E-Journal Databases: A Transaction Log Analysis

A New Model Of Information Architecture Associated With Multimodality For Training High Performance Professionals

Document Expansion For Short Text Conversation

Source Preferences In Everyday Life Information Seeking

Developing Data Systems For Evidence-Based Policy Making And Implementation: A Study Of The Ns Student Attendance And Engagement

The Analytics Edge: Use Of Analytics In University Libraries

Characterization Of A Semantic Relations Taxonomy In Biomedical Science

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

A Rosetta Stone For Provenance Models

Deep Learning For Predicting Scientific Growth Trends (File Corrupt, Waiting For New One)

Exploring The Relationship Between The Motivation And Behavioral Predisposition Of Self-Disclosure On Social Media Applications

Accelerating Student Learning For Taxonomy Design Work: Rapid Onboarding Through Consultant-Internships

Mining Linked Open Data For Semantic Predications To Inform Literature-Based Knowledge Discovery

Building Agency Within The Agency And In The Community: Improving Web Access To Public Health Data In New York City

Fostering Scholarly Creativity: Modeling Functional Browsing Through The Lens Of Complexity

Towards An Understanding Of Data Ethics In Lis

Session 9: Organizational Change Management

The Knowing Model: Encouraging Behavior Change in Organizations through Awareness, Integration, and Knowing (Paper)

Darin Freeburg

University of South Carolina, darinf@mailbox.sc.edu

Leadership is often responsible for behavior change in their organizations. This paper outlines a context-based model—utilizing existing theories and models in Knowledge Management and Library and Information Science—to increase leadership’s effectiveness in this area. The Knowing Model approaches behavior change as an issue of information content, dissemination, and use of that information—all within a complex environment with additional social barriers. A behavior—one that an organization has unsuccessfully attempted to change in the past—is identified by leadership. These previous attempts serve as a baseline from which to measure success of the proposed model. The target behavior change is one that is considered beneficial by both leadership and other organizational members. Leaders analyze the existing social field and context surrounding this behavior. They consider whether or not individuals are aware of previous efforts to change the behavior, the extent to which they integrated this as knowledge, the extent to which individuals actually changed their behavior, and perceived threats related to not adopting the behavior. Through a careful analysis of a variety of factors surrounding these issues, the Knowing Model proposes strategies for a new information dissemination campaign

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

that should be more successful in changing behavior. As leadership learns more about organizational members, they can change the content of information about a behavior change to account for barriers to its adoption. The model includes ways to measure various stages and strategies to take at each stage. There is extant literature about how to provide access to information that people want. This model continues research about information people do not want—information avoidance—by outlining strategies for overcoming it in organizational contexts. In addition, it adds an action element that suggests the possibility that information—when strategically informed and developed—can change organizational behavior.

Effective Knowledge Transfer and Behavioral Change in a Training Environment (Paper)

Amy Rosellini

University of North Texas, Amy.rosellini@gmail.com

Current models of knowledge transfer are insufficient in defining the factors that address the impact of knowledge transfer at different cycles of the process where a firm employs traditional training programs. The purpose of this study is to examine the relationship between effective knowledge transfer and behavioral change in the training environment. The main area of this study is concerned with how training affects knowledge transfer, how knowledge transfer impacts behavior change and how behavior change affects overall job performance. The concept paper examines existing KM models such as SECI model, complexity theory, an entrepreneurship model and knowledge-to-action with the aim of developing an enhanced version of knowledge transfer measurement model (KTMM) that requires further testing.

Session 10: Data, Information and People

Information Overload and its Effect on High School Students (Paper)

Tara Zimmerman

College of Information, University of North Texas, tarazimmerman@my.unt.edu

Information overload is a phenomenon which likely has existed since Gutenberg invented the printing press; however, sources, types, and sheer volume of information have increased exponentially over the past three decades, making the term more relevant today than ever before. Regardless of age, occupation, or social status, most people experience information overload daily. Huge quantities of digital information are always available via ubiquitous mobile technology. While this seems to be a great advantage on the surface, it can also lead to feeling overwhelmed, confused, and unable to make a decision. High school students are particularly susceptible to information overload because of their strong reliance on smartphones as well as their designation as “digital natives,” or those having grown up using and understanding digital technology. The focus of this exploratory study is how high school students experience information overload, as well as their specific physical, emotional, and mental reactions. Students of Piedmont High School in Piedmont, Oklahoma, are the population for this study. Qualitative data will be collected from participants using questionnaires, interviews, and diaries, and then analyzed to identify themes and patterns. Results of this research will result in greater

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

understanding of how high school students' experience information overload and will give teachers, parents, and healthcare providers guidance in dealing with teenagers in this situation.

Scientific Knowledge Management Practices in the Big Data Era—A Case Study of the Chinese Academy of Sciences (Best Practice Demo)

Qimei Chen

National Science Library, Chinese Academy of Sciences, chenqm@mail.las.ac.cn

Hanyu Li

National Science Library, Chinese Academy of Sciences1, lihy@mail.las.ac.cn

Lili Wang

Dalian Institute of Chemical Physics, Chinese Academy of Sciences, wendywang@dicp.ac.cn

In the big data era, scientific and technological innovation activities require more intensive and demanding analysis of data and resources. Scientists and researchers have more demands for research information and collaborative interaction. This increased demand for better communication has made scientific knowledge management more important today. In order to provide scientists and researchers an easy way to access and manage knowledge, the National Science Library of Chinese Academy of Sciences (CAS) developed the SciThink App, a mobile knowledge management tool. The app helps scientists and researchers query, download and read scientific and technological literature. As a result they may be able to discover, manage and use more information anytime and any place. SciThink can also assist scientists and researchers to grasp progress and trends in global scientific research. Furthermore, SciThink has also added a science interaction function to support self-organization of personal information. The SciThink App is supported on Android and iOS mobile devices. In order to satisfy the information-using habits of different groups of people, SciThink recently has successively released versions for multiple media platforms, including in addition to a mobile phone App, WeChat and web page support. Overall the tool provides convenience to users doing scientific research as they seek knowledge and new ac-tions.

Using Information from Word Clouds to Generate and Create Knowledge in Assessments (Paper)

M Asim Qayyum and David Smith, Charles Sturt University, aqayyum@csu.edu.au

Students in higher education environments typically work with information discovered to gain and create knowledge required for their assessments and other course work. Much of this research happens online now as a required activity for students at all education levels and settings. When these students access study material via the Internet and without the presence of an instructor, especially in distance education settings, they may face difficulties in understanding the complete purpose of an assessment. Such difficulties can lead to poor information search practices resulting in poor creativity and low knowledge gain, which may in

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

turn lead to mediocre information synthesis and low levels of knowledge creation. To address this problem, this study focuses on the use of an information tool by novice and experienced university students to gain and create knowledge for their assessment tasks. An intervention in the form of a word cloud application was introduced to create a visual and textual support scaffolding for the students. Results indicate that this intervention provided students some relevant learning cues to improve their knowledge gain and creation, and their engagement with online assessments tasks.

Arts and Humanities Academics Information Needs in Digital Era (Paper)

Alia Arshad

Department of Information Management, University of the Punjab, alia.im@pu.edu.pk

Kanwal Ameen

Department of Information Management, University of the Punjab, kanwal.im@pu.edu.pk

The purpose of this study was to examine arts and humanities academics scholarly information needs and their means of accessing scholarly e-content in today digital environment. The design of the study was quantitative and self-administered questionnaire was distributed to all regular and contractual academics of faculty of arts and humanities, oriental learning and Islamic studies. The findings showed that majority of the humanities academics were users of the Internet. They heavily relied on online reference sources, print information sources and discussion with colleagues to meet scholarly information needs. They frequently used general search engines, Google Scholar and open access e-journal websites to locate journal articles.

Session 11: Workshop 3

Open Science and Open Data for Sustainable Development: A Global View

Abebe Rorissa

University at Albany, arorissa@albany.edu

Daniel G. Alemneh and Suliman Hawamdeh

University of North Texas, Daniel.Alemneh@unt.edu and Suliman.Hawamdeh@unt.edu

Shimelis Assefa

University of Denver, Shimelis.Assefa@du.edu

Kris Helge

Texas Woman's University, khelge@twu.edu

Elise Lewis and Samantha K. Hastings

University of South Carolina Columbia, elewis@mailbox.sc.edu and hasting@sc.edu

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

A movement has grown over time to make scholarly and scientific data more open and accessible. While the movement has gained momentum and achieved some successes with impacts on various aspects of the information society in which data and information are created, organized, managed, processed, accessed, disseminated, retrieved, and used; there is still a long way to go and a considerable amount of work to be done. Especially if the promises of open science and data are to be realized globally. One of the ways to keep the movement continuing in its current trajectory is to engage stakeholders in discussions that could lead to concrete recommendations and policy ideas. In this panel, panellists, with the help of an active and engaged audience, intend to do just that. They will also provide an overview of the global landscape of open science and data that will assist in a thorough discussion by panellists and the audience in the context of sustainable development.

Session 12: Plenary Session II

The Art of Participatory Leadership

Working in complexity requires that we learn how to convene teams and meetings to induce many different voices and ideas. Beyond good facilitation, this requires us to develop a leadership practice based on good dialogue and rigorous practices to make sense of our world.

In this plenary session, Chris Corrigan will introduce you to the Cynefin framework and discuss its implications for developing our leadership practices. We will also engage in dialogue exercises to ground the learning about this framework in our real life challenges.

Brief Bio: Chris Corrigan is an Art of Hosting practitioner, a well known facilitator and writer who has been working in the field of dialogic organizational development for twenty years. He has focused his work on teaching about the intersection of dialogue, leadership, facilitation and complexity. He lives on Bowen Island, British Columbia and runs Harvest Moon Consultants with his partner Caitlin M. Frost.

Session 13: Collaboration

Jealousy In Cooperation – A Comparison of Two Game Based Approaches (Paper)

Franz Barachini

BIC-Austria, barachini@bic-austria.at.

Manfred Bornemann

Intangible Assets Consulting , Austria, bornemann@ia-consulting.at

We are interested in the question of how to motivate people to share valuable information, so that group performance can be leveraged. In a previous article we investigated the impact of power and jealousy on cooperation. By using intelligent agents, a stochastic updating process has been used, so that artificial agent populations could be modelled. In the current article we investigate update procedures based on deterministic dynamics for populations arranged in a

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

lattice. Compared to stochastic processes our findings show that populations behave and react far more dynamically, in certain parameter regions, when spatial cooperation is applied.

The Case for Research Collaboration and Alignment: Social Informatics and Knowledge (Paper)

Denise Bedford, Georgetown University, db233@georgetown.edu

Alexeis Garcia-Perez, Coventry University, United Kingdom

Mark Sallos, Coventry University, United Kingdom

Social Informatics and Knowledge Sciences represent two research domains with selective common areas of interest. This paper begins with the perspective of Social Informatics and considers the challenges it faces in a dynamic and rapidly evolving digital world. The research team sets out to consider how knowledge sciences theories and methods might apply to the original and current Social Informatics challenges. The authors propose a comprehensive and inclusive conceptual model for social informatics that may be used to map relevant research and literature in other domains, particularly those beyond information science. The authors also discuss the need for a fully elaborated and extensible classification scheme and vocabulary for social informatics to support automated discovery of relevant research. The research suggests there are areas of common interests between the fields of social informatics and knowledge sciences, and highlights potential areas of future collaboration.

Barriers to Active Participation in VCoPs of a Brazilian Public Sector Company (Paper)

Nara Viana Costa Ribeiro

Independent Researcher, Brazil, naravcr@gmail.com

Julieta K. Watanabe Wilbert, Gertrudes Aparecida Dandolini, and João Artur De Souza
Federal University of Santa Catarina, Brazil, julieta.wilbert@gmx.net, gtude@egc.ufsc.br, jartur@rgc.ufsc.br

Virtual Communities of Practice (VCoPs) are used by multinational companies such as Xerox, IBM, and HP, among others, as a tool for sharing and disseminating knowledge for increasing organizational performance. In this context, some theoretical and practical studies have been conducted to identify barriers and facilitators for the functioning of Communities of Practice in organizations. This article describes the research that was undertaken in a Brazilian company of the public services sector with the objective to identify the reasons why participants of VCoPs do not actively participate in their communities. The applied method was a survey of members of VCoPs in the target organization, where an attempt was made to qualitatively understand the quantitative results with the aid of semi-structured interviews with three focus groups. The results of the selected case study confirm inhibiting factors for active participation of VCoP members mentioned by other researchers, and no evidence was found that would suggest

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

different factors for organizations of the public sector. The study contributes to the understanding of the main reasons why people do not actively participate in VCoPs in organizations and provides elements useful in the management of VCoPs.

Session 14: Innovation 2

Knowledge Management Initiatives Applied to Social Innovation (Paper)

Carla Zandavali

Federal University of Santa Catarina, Brazil, setteca@gmail.com

Yohani Dominik Dos Santos Figueiredo, Gertrudes Aparecida Dandolini, and João Artur De Souza

Federal University of Santa Catarina, Brazil, yohanidominik@gmail.com, gtude@egc.ufsc.br, jartur@egc.ufsc.br

Currently knowledge is considered the main mechanism of production, either of goods and services, or as a source of competitive advantages for innovation. In this sense, the management of this knowledge becomes strategic for the organizations. Assuming that knowledge management is a deliberate and systematic coordination of people, technology, processes and organizational structure to add value through re-use and innovation in an organization (Dalkir, 2005), its use can contribute for actions in Social Innovation. In this context, this article aims to analyze knowledge management initiatives used in actions of Social Innovation. To accomplish it, the research was based on a systematic integrative review of empirical publications obtained on Scopus, Web of Science and Scielo. Among the results obtained, it was observed that, in terms of knowledge management initiatives in people, processes or technologies, of the thirteen final articles fully analyzed, nine feature process-oriented knowledge management actions, seven aim technology-oriented actions and only one article brings actions directed to people.

The Guided Innovation Model: Messy Human Innovation (Paper)

Darin Freeburg

University of South Carolina, darinf@mailbox.sc.edu

This paper outlines the theoretical foundation and framework for the Guided Innovation Model, which puts nonprofit organizations in a position to increase innovation through the application of Knowledge Management tools. This is facilitated by information and knowledge professionals. It also outlines a suggested approach for implementation of the model. The purpose of the paper is to provide an in-depth foundation which future work can build upon in specific contexts. Given the complexity and constancy of social change, nonprofits must continually innovate to meet the needs of their community. This model provides a framework for how they can do this without extensive technological investment. In doing so, it also provides a unique approach to research itself that repositions research roles, modalities and knowledge transfer. Once a social need is identified, representatives from the various nonprofit groups that play a role in addressing the need are brought together. This group is a Complex Adaptive System (CAS), which has

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

implications for how it adapts, the role of the unique agents within it, and the nature of predictability. A Community of Practice is intentionally designed to allow room for the full expression of each of these natural CAS elements. It does this while simultaneously manipulating control parameters that move the system closer to the edge of chaos where innovation happens (Stacey, 1996). The CoP meets regularly to identify existing information about a shared practice, engage in a culture of sharing and knowledge pooling that promotes idea generation, and experiment with these ideas through the shared practice. In doing so, it innovates to better meet the identified community need.

Innovation Structure Framework (Paper)

Patricia De Sá Freire

Federal University of Santa Catarina, Brasil, patriciadesafreire@gmail.com

Julio Cesar Zilli

Universidade do Extremo Sul Catarinense, Brasil, zilli42@hotmail.com

Innovation needs a structure based on paradigmatic values that allow the transmutation of an organization towards the survival into an organization ready to learn. To understand this context, it was performed a theoretical rereading, constructing a parallel between the structure of scientific revolutions to the progress of science and the innovation structures for organizational development. This study goes beyond the discussion of the technological paradigm for the understanding of the innovation and people paradigms, building, in the end, Innovation Structure Framework, which promotes the understanding of internal organizational processes that cause the necessary state of crisis for the creation, implementation and acceptance of innovation. This applied qualitative approach can be considered as an exploratory descriptive of bibliographic order. The proposed Framework is a relevant tool to the understanding of organizational behavior and development in the different processes of innovation, whether incremental, distinctive or radical ones.

Session 15: Workshop 4

Managers or Librarians: Roles and Competencies in RDM

Zhenjia Fan

Department of Information Resources Management, Nankai University,
fanzhenjia@nankai.edu.cn

Focusing on the main research question what the critical roles and competencies of data curators are in supporting research data management lifecycle, this paper adopts multi-case study method, with data curation and data governance models, to analyze the roles and their competencies of data curators based on different contexts such as enterprises and academic libraries in mainland China. Via the data lifecycle analysis in different contexts, the critical roles such as data supervisor, data steward and data custodian in guaranteeing data quality and efficiency of data reuse are put forward. Based on the general factors of capability summarized via existing

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

literature, suggestions for empowering data curators' competencies are raised according to the corresponding contexts. Findings of this paper are as follows: Besides digital archiving and preservation, more emphasis should be put on data governance in the field of data curation. During different contexts of data curation practices, roles of data curation are not equivalent to stakeholders of data governance. Different roles of data curators would take their own parts in the process of data curation and should be specified according to given contexts. The roles, competencies and empowerment strategies might have significance for the fields of both data curation and data governance.

Session 16: Intellectual Capital

Examining the Integration Engineering and the Mergers and Acquisitions processes through the evaluation of intangible assets and knowledge management in organizations: A Brazilian case (Paper)

Patricia de Sa Freire

Division of Engineering and Knowledge Management, Federal University of Santa Catarina, Brazil, patriciadesafreire@gmail.com.

Tereza Raquel Merlo

Organizational Management and Information Technology, University of North Texas, terezamerlo@my.unt.edu

The Mergers and Acquisitions (M&A) process is perceived as a foundation for fast organizational growth in a competitive market, however, there are challenges related to intellectual capital as valuable and intangible assets which remain unaddressed and result in the loss of brand and stock values for participating companies. Although this phenomenon is greatly impacting integration engineering and M&As, the international accounting organization has not identified the proper tool for the measurement of intangible assets. In that context, and in light of a knowledge-based society, the question this study aims to answer is: How should intellectual capital be measured as an intangible asset in companies applying the M&As? To answer this question, the researchers present a solid literature review and an analysis of the management and measuring of intangible assets principles as an element of the intellectual capital from companies participating in M&As, using a Brazilian case as an example. The literature review presented as the theoretical basis for the case study explores the measuring models of intellectual capital according to the seminal works of Nonaka (1995), Drucker (1993), Polanyi (2009) and Vucic (2003), as well as contemporary researchers. This study explores six critical reference models, including Integration Engineering, which was developed and applied with the objective of specifically measuring the intangible assets from companies involved in mergers and acquisitions in correlation to intellectual capital and knowledge management processes. The conclusion will highlight how the digitalization and virtualization of the workspace changes the knowledge consumption process, both tacit and explicit, bringing a new light to intangible assets for companies aiming at competitiveness and innovation.

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Spatial Syntax and Knowledge Flows in American Grocery Stores (Paper)

Denise A. D. Bedford, Georgetown University, Washington D. C., db233@georgetown.edu

Spatial syntax and geometry are established architectural and cultural methods dating back to the early 1980s. While theoretically grounded, these methods have not been widely applied to work environments. This research anonymously applies seven spatial syntax methods to seven grocery stores for the purpose of identifying and characterizing work space genotypes. The genotypes are further defined in terms of their knowledge flows. The goal of the research is to determine whether spatial syntax and knowledge flow factors align, and if so how such an alignment affects workers' intellectual capital asset development. The motivation for the research is to establish a set of work environment genotypes that may serve as a foundation for assessing the knowledge value of work in the knowledge economy. The value of work is assessed not to the organization or company rather as the opportunity for workers to develop their intellectual capital assets.

Conceptual Relationships between Quality Management and Intellectual Capital Reporting – a Case Study (Paper)

Manfred Bornemann

Intangible Assets Consulting GmbH, Austria, bornemann@ia-consulting.at

Franz Barachini

BIC-Austria, barachini@bic-austria.at

An intellectual capital statement identifies knowledge and competences according to the requirements of the ISO 9001:2015 standard. The current state of knowledge and competencies of an organization is evaluated by the relevant employees in the context of strategic requirements. The deviations from the strategically desired status result in a clear prioritization and specification in order to develop additional knowledge. Possible risks due to lack of a systematic approach to knowledge and competencies are identified and prioritized in order to improve them in the next step.

Session 17: Knowledge Organization 2

Toward a Universal Document Model for Active Knowledge (Experience Report)

Dagobert Soergel

Department of Library and Information Studies, University at Buffalo, ds@dsoergel.com

Felipe S. Iturralde Escudero

World Bank, Washington DC 20433 USA, fturraldeescude@worldbankgroup.org

This paper presents a universal document model that can represent a document comprehensively and at any level of granularity to make knowledge active, for example, through integrating information into workflows for actively pushing just-in-time, just-what-is-needed information. In

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

In addition, there are many other functions to be served, including; document analysis; linguistic annotation, information extraction; flexible search, navigation, and browsing; presentation / rendering of pre-existing documents or documents arranged on the fly; commenting and annotating; composition of new documents using templates and reusing content; general version management. The model uses a hypermedia approach on steroids; it represents a document as a collection of document units in a database / hypermedia base. These units are independent objects; document structure, including the document composition hierarchy, is expressed through links among the units, quite different from nested XML tags and similar approaches. The power of the model lies in the possibility to specify many types of data about and links among document units. The model is presented at a conceptual level and illustrated with a policies and procedures document from the World Bank. Depending on the application, implementation will require considerable effort.

Data, Information, and Knowledge Management: University Of North Texas and Texas Woman's University Institutional Repositories Initiatives / Experiences (Best Practice Demo)

Kris Helge and Amanda Zerangue

Library, Texas Woman's University, khelge@twu.edu and azerangue@twu.edu

Daniel Gelaw Alemneh and Pamela Andrews

Library, University of North Texas, Daniel.Alemneh@unt.edu and Pamela.Andrews@unt.edu

This best practice forum conveys how the University of North Texas and Texas Woman's University Libraries utilize digital information repositories to facilitate scholarly communications endeavors that consist of managing data, information, and knowledge via data collection, storage, and promotion for faculty. This forum also describes these universities' knowledge management systems that consist of creating, maintaining, hosting, and modifying data management programs and life cycles; electronic thesis and dissertations preservation; open access e-journals; and scholarly repositories for both students and faculty.

Use-Oriented Information and Knowledge Management: Information Production and Use Practices as an Element in the Quality and Impact of Information (Paper)

Isto Huvila

Department of ALM, Sweden, isto.huvila@abm.uu.se

There is a broad consensus that better models for assessing the impact of information in the context of information repositories and digital preservation efforts are needed. This paper discusses premises for directing the evaluation of the impact of information towards the assessment of knowledge process with an empirical focus on the management and evaluation of archaeological information. Rather than proposing new quality measures for the information itself, which has been a common approach in earlier proposals, this text probes into a problem identified in earlier research that in spite of the existence of multiple definitions and standards

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

for information quality, the usefulness of information tends to have multiple problems. The aim of this text is to examine how to take into account the current information production and management practices and the present and anticipated use of these resources as an aspect of the impact and usefulness of information. A better understanding of how the impact of archaeological information relates to its production, management and use inform the development of appropriate infrastructures, repositories and procedures for the management of the preservation and use of these resources.

Session 18: Young Researcher Presentations

The Scientific Memory of the Brazilian National Institute of Technology (Int/Brazil) Public Library Under the Perspectives of Control Devices and Information Policy Regime

Patricia Pui Yue Lee

Communication/ Information Science Faculty (ECO/IBICT), Federal University of Rio de Janeiro (UFRJ), patricialohlee@gmail.com

Ricardo Medeiros Pimenta

Communication/ Information Science Faculty (ECO/IBICT), Federal University of Rio de Janeiro (UFRJ), ricardopimenta@ibict.br

The theme of this research is the analysis of the scientific memory of the public library in the Brazilian National Institute of Technology (INT/Brazil), under the perspective of control devices and information policy regime. As main research issue, it is presumed that the storage and preservation of physical and digital documents supported by the library are links for the formation and consolidation of memories, such as individual, collective, social and scientific. A technical library would be responsible in part for the development and maintenance of scientific memory, and furthermore the development of knowledge. Its importance is justified by the human need to counteract scientific and technological events, to accumulate traces of facts and feelings experienced by representations, materialized by artifacts and relics, such as written documents and supporting materials as films, photographs and sound recordings. The library is responsible for scientific communication and also has a physical infrastructure and provides supporting facilities, such as internet accessibility, and the availability of web platforms and applications to search for digital documents. Society holds informational capital and scientific memory, whereas it controls or limits access to the technical and scientific collection of libraries through control devices. Therefore, as a research objective, this thesis studies the maintenance of informational power through technological artifacts as it is presumed that scientific memory is not free from contamination by these control devices and technical objects. Another objective of the study is the analysis of the social control exercised by the public administration that reaches the publication of the act of storage and retrieval of public information, in which the information policy regime and the law on access to information (LAI) n.12,527/2011 commit the availability, authenticity, integrity and firstness of public information. This presenting contribution belongs to a PhD research in the middle stage of development.

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Development of an Electronic Resource Management Model for Science & Technology Institutions in India

Vijay Kumar Verma

Central Library, Indian Institute of Technology, vkverma@library.iitd.ac.in

This paper, is in the early stage of research, highlights the complexities associated with the management of electronic resources in an institution.. It opines that electronic resources are the needs of the hour and libraries all over the world are procuring them, but managing these resources is quite challenging task. The paper primarily focus the objectives to be decided and methodology to be followed to develop an Electronic Resource Management (ERM) model for central government funded technical institutes in India. Based on the review of literature, it says that none of these institutions are practicing ERM, although a large part of the budget is spent to procure electronic resources. Hence, the paper recommends that there is an urgent need of development of ERM model which fulfil the needs of these institutions and at the same time it should not be expensive. The paper talks about the development of Electronic Resource Management System (ERMS) by customisation of open source software CORAL as per the need of the surveyed institutions.

How to Classify: The Information Resource Relating to Intangible Cultural Heritage of Databases in China

Lin Wanwan

School of Information Management, Sun Yat-sen University, linww9@mail2.sysu.edu.cn

Chen Runhao

School of Information Management, Sun Yat-sen University, chenrhao@mail2.sysu.edu.cn

The paper proposed that it is necessary to incorporate the awareness and measures concerning the establishment and management of intangible cultural heritage information resources into practice, and to generate a special assorting technique for intangible cultural heritage information resources so as to achieve effective integration of quantitative resources, ensure data storage, data management and data access, which will promote the preservation and inheritance of intangible cultural heritage.

Understanding Driving Factors of Science for Predicting Scientific Dynamics

Jianguan He,

Department of Information Science, Drexel University, jh3328@drexel.edu

Scientific literature offers opportunities to explore the complex dynamics of science. My research focused on building quantitative understanding of key factors driving scientific dynamics and predicting scientific dynamics based on the understanding. We mainly develop the metrics and representations of novelty and uncertainty in science and investigate their roles in scientific evolution. By the investigation, we can obtain insights about the mechanisms of how

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

science advances, for example, a burst of novelty identified among studies on a research topic may be an early sign of the rapid knowledge growth of the research topic. Thus, we build predictive models of science dynamics by machine learning approaches. At last, I build visualization systems for investigating the identified factors and prediction results in a context-aware environment.

Session 19: Plenary Session III: Plenary Closing Panel: The Nexus of Knowledge Management and Information Science: What Past and Present Trends Tell Us About the Future

PANELISTS:

Darin Freeburg, University of South Carolina (Moderator);
Jay Liebowitz, Harrisburg University;
Gary Marchionini, University of North Carolina;
Suliman Hawamdeh, University of North Texas;
Joyline Makani, Dalhousie University;
Jayne Sappington, Texas Tech University

The influx of digital information and the recent advances in information and communication technologies bring about new opportunities and challenges for research and practice. The fields of Knowledge Management and Information Science have been at the forefront of these developments. This panel brings together leaders from each field to discuss the trends and opportunities for collaboration within and between them. This marks an important moment of reflection and renewed purpose as researchers and practitioners attempt to harness new opportunities to create value.

POSTER ABSTRACTS

Application Of QR Codes in Library Services: Beyond Q

Vijay Kumar Verma

Central Library, Indian Institute of Technology, vkverma@library.iitd.ac.in

Manish Ranjan

Tata Consultancy Services, India, manish2.r@gmail.com

New and emerging technologies have always been playing the vital role in shaping the different services of libraries. These technologies not only help the users to quick, quality and efficient services but also provide a chance to library and information professionals to think outside the box to make their services effective and responsive. With the arrival of affordable smart mobile phones, libraries all over the world have been trying to utilise them for the betterment of their services. QR code is one of the technologies which can be used with a smart mobile phone.

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Although in most of the cases libraries are the end user of these technologies, they make the life of all the stakeholders of the library smart and comfortable. QR code came into existence in 1999 but has not made a significant impact on libraries to date. This write up explores the possibilities of using QR codes in providing different libraries services and making the users more informed. It discusses the features and functionality of this technology and tell about how it can help libraries to make their services more attractive and efficient. It also discusses the issues involved in the application of QR code and emphasises that “Quality” along with “Quick” should be the prime aspect of services.

Bridging, Bonding, and Maintained Social Capital as Predictors Of Psychological Well-Being in a Whatsapp Group

Noah Oluwafemi Samuel

School of Information Sciences, University of Illinois at Urbana-Champaign,
nosamue2@illinois.edu

This paper reported part of the findings from a study conducted to understand how participants build and maintain social capital through group communication on WhatsApp. We collected data from 75 participants who were members of a high school WhatsApp group. The participants all graduated from the same high school in 2003, and they currently use WhatsApp to keep in touch. We used QuestionPro; an online survey platform, for data collection. Participants were compensated with mobile phone call credits in the local currency. We tested a single hypothesis to see if bridging, bonding, and maintained social capital in the group are predictive of individual group member’s self-reported measures of psychological well-being based on Ryff & Keyes (1995). Regression result shows that of the three, only bridging social capital is a significant predictor of psychological well-being. This result adds to the findings by Ellison, Steinfield, & Lampe (2007).

Survey on the Graduate Attitudes and Needs Toward Data Literacy and Library Instruction

Wu Ming

National Science Library, Chinese Academy of Sciences, wum@mail.las.ac.cn

Hu Hui

National Science Library, Chinese Academy of Sciences, huhui@mail.las.ac.cn

By means of the statistical analysis of questionnaire survey, the current situation and needs of graduates’ data literacy competences are revealed. It shows that the graduates are facing complicated problems managing their research data, such as inefficient data retrieval, data screening and data evaluation, and strongly hope to receive data literacy education and training. On the basis of demand investigation, the education contents around research data lifecycle are designed, which include three levels of learning model , i.e., basic learning, advanced learning and promotion learning. The implementation aim, scenes and evaluation are also provided for

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

graduate students to improve their data literacy competencies. We hope it would give beneficial assistance for libraries as a reference to design of library data literacy education service.

Using Augmented Reality to Navigate Campus

Dr. Erin Colvin

Western Washington University, Computer Science Department, erin.colvin@wwu.edu

Inyoung Cho, Trevor Donnelly, Nguyen Le, and Moustafa Naquib

Western Washington University, choi@wwu.edu, donnelt@wwu.edu, len2@wwu.edu, naquibm@wwu.edu

This paper describes a new approach to the standard campus tour using an augmented reality campus application. Due to the many choices of colleges students face, scheduling campus tours becoming less plausible due to scheduling conflicts. Most campuses offer no real portable option available for large campus directories found around campus and scheduling a guided tour by other campus employees is difficult and limiting. We propose a new augmented reality application that will allow students, visitors and staff to quickly and easily find buildings, identify which departments are in each building and faculty offices located in the buildings with the use of a smart phone.

Usage Patterns Of E-Journal Databases: A Transaction Log Analysis

Azra Rafique

Department of Information Management, University of the Punjab, azra_haroon@hotmail.com

Kanwal Ameen and Alia Arshad

Department of Information Management, University of the Punjab, kanwal.im@pu.edu.pk, alia.im@pu.edu.pk

The study explores the evidence-based usage patterns of Higher Education Commission (HEC) e-journals' usage at the University of Engineering & Technology (UET), Lahore in Pakistani scenario through SAWMILL and MS Excel. The poster contents share the most used and less used databases, by education level and gender. The results revealed that usage of scholarly publishers' databases was more as compared to subject specific databases in the field of science, engineering and management. Moreover, female users frequently accessed e-journals from hostels as compare to boarding male users. Individuals identified through their user names were mostly from undergraduate programs as compare to graduate, post graduate students and faculty members. The results will help HEC in access management, budget allocation; and information professionals in designing digital literacy skills programs.

A New Model of Information Architecture Associated with Multimodality for Training High Performance Professionals

Tomás Roberto Cotta Orlandi

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Information Science Faculty - FCI, University Of Brasília, Tomasroberto@Gmail.Com

Claudio Gottschalg Duque

Regimento Group, Information Science Faculty- FCI, University Of Brasília - Klauss@Unb.Br

Alexandre Mori

Regimento Group, Information Science Faculty- FCI, University Of Brasília,
Xmorihome@Gmail.Com

Claudio Gonçalves Bernardo

Regimento Group, Information Science Faculty- FCI, University of Brasília,
claudiogbernardo@ig.com.br

This poster proposes an Information Architecture model, associated with Multimodality, applied into informational spaces, towards to meet the information needs of high performance professionals. The permanent training of professionals in any area of knowledge is a challenge to be achieved today. It is no different with high-performing professionals, they must master a wide range of disciplines ranging from human relationships to the domain of enterprise risk management, and the multimodality applied in professional training can help the reach of the learner's information needs. This research shows a model that applies the concepts of information architecture, informational spaces and multimodality as a proposal to meet these professionals' demands. The proposed model captures some of the key concepts of information architecture models, multimodality, relevance theory, gamification and user experience, applied in informational spaces for professional training to provide a significant help for learner's information needs, for a better performance of daily technical and managerial activities.

Document Expansion for Short Text Conversation

Jianqiang Wang

Department of Library and Information Studies University at Buffalo, jw254@buffalo.edu

We report a study on improving the retrieval of comments made to previous posts that can potentially be relevant to new posts in the open social media domain. This retrieval task, known as an important component of “short text conversation,” is challenging due to various reasons, among which is the fact that both posts and comments are usually very short, thus not providing enough context for typical information retrieval systems to be very effective. We used a “document expansion” technique to enrich each comment by adding terms contained in the post that the comment previously responded to. Our comparative evaluation experiment shows that while helpful in some cases, the technique hurt in some other cases. Initial analyses are discussed and future directions are outlined.

Prototype User Interface for Studying the Effect Of Suggested Tags and Autocomplete on Tagging Behavior

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Chris Holstrom

University of Washington, cholstro@uw.edu

We built a prototype social tagging UI that can enable and disable suggested tags and autocomplete features. We ran a pilot study to determine the suitability of the prototype for studying how these UI elements affected tagging behavior. We did not find a significant effect for these UI elements in the pilot study, but we did find prototype utility. This paper reports on the design of the prototype and makes suggestions for designing adaptable user interfaces for social tagging experiments.

Source Preferences in Everyday Life Information Seeking

Emily Anne Dill, Kimdy Le, and Joan Poulsen

Indiana University-Purdue University, eadill@iupuc.edu

People today have a wealth of options when it comes to the information sources used to make everyday decisions, including in the workplace. Many variables can contribute to which sources people choose and what the rationale is for choosing those sources. This paper reports on the results of a study of the information source preferences of college students (n=95). The questionnaire asked participants which information sources they would use in specific situations and which qualities of those sources were most important to them. Respondents rated using family and friends as sources more often than consulting experts, print media, or electronic sources. We also tested for individual differences in which sources are preferred using the Big Five personality framework. For example, extraverts were more likely to indicate seeking out expert advice and using social media as a source. The results of this study help explain why some individuals are more likely than others to use social media, internet, friends and family members, and print media in different everyday life information seeking scenarios and may be useful in understanding how information might best be shared within organizations.

The Analytics Edge: Use of Analytics in University Libraries

Prodip Kumer Roy Aalia (DCP)

School of Business Information Technology & Logistics, RMIT University,
prodip.roy@rmit.edu.au

Dr. Paul Mercieca

Lecturer - Information Management and Digital Publishing, School of Business IT & Logistics
Melbourne, Victoria, paul.mercieca@rmit.edu.au

Dr. Pradip K. Sarkar

Lecturer -Information Systems (U-Grad) Major Coordinator, School of Business Information
Technology & Logistics, RMIT University, pradipta.sarkar@rmit.edu.au

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

The role of analytics is becoming universal and influencing the way information is used, analysed and applied. It is claimed that organizations can lead, decide, measure, manage and optimize performance to achieve greater efficiency and benefits by using analytical tools. In recent years university libraries have adopted evolving data-driven approaches as a means to improve services. This study will explore how libraries use data analytics for decision-making on various aspects of day-to-day library operations. This research will also examine how analytics have been used with the intention to improve services. The research question, therefore, asks: How does analytics influence library decision making within a university environment? There are two theories that are deemed relevant; Social Construction of Technology and Structural Model of Technology are considered to explain the relationships between technology and the changes in librarianship practices. More explicitly, the research will explore the inter-relationship between technology and the library professional community and how they influence each other. This study will use qualitative methods through multiple case studies, which provide to explore the research questions. This research will draw data from nine university libraries that are within the state of Victoria, Australia. The research outcome will support libraries in understanding how current analytical systems/processes can be used as part of the library decision making and to find potentiality to improve library services and systems. The study will add to the existing body of knowledge on critical theoretical perspectives that provide us understanding on how the digital technology in the library affect the users and local practice of librarianship. Further, it will help university libraries to use analytics to meet their needs by helping librarians identify, from the vast range of functionalities, the analytical datasets required to inform their decision-making processes.

Characterization of a Semantic Relations Taxonomy in Biomedical Science

Yejun Wu

School of Library and Information Science Louisiana State University, wuyj@lsu.edu

Li Yang

School of Computer Science Southwest Petroleum University, China, yangli0027@163.com

Semantic relations have many applications in ontology construction and knowledge discovery, but are rarely studied. This paper characterizes the Ontobee relations ontology in the biomedical science domain with comparisons to the Conflict and Mediation Event Observation (CAMEO) relations taxonomy and the UMLS semantic network relations. The findings can be used to understand and build domain-specific semantic relations taxonomies for codifying domain knowledge.

A Rosetta Stone For Provenance Models

Michael R. Gryk, Pratik Shrivastava, and Bertram Ludäscher

University of Illinois, gryk2@illinois.edu, pratiks2@illinois.edu, ludaesch@illinois.edu

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

With respect to scientific workflows, provenance refers to the documented lineage of how one dataset was produced from others. Provenance comes in at least two forms: retrospective provenance entails execution logs and provenance traces stored after a scientific workflow has been executed, and which describes the execution itself; prospective provenance refers to what a scientific workflow is designed to do, or in other words, prospective provenance describes the predicted lineage one would expect to have after a workflow has been executed. Not only are there various notions of provenance, there are also various models for tracking provenance. In this poster we compare and contrast four different provenance models: the prospective models of Common Workflow Language (CWL) and YesWorkflow, and the retrospective models of PROV and PREMIS. This comparison is made by documenting each of the various modelling constructs on the same workflow records – providing a Rosetta Stone for translating the provenance semantics between the various models.

Deep Learning For Predicting Scientific Growth Trends (File Corrupt, Waiting For New One)

Exploring The Relationship Between The Motivation And Behavioral Predisposition Of Self-Disclosure On Social Media Applications

Kijung Lee

School of Information Technology, University of Cincinnati, kijung.lee@uc.edu

Il-Yeol Song

College of Computing and Informatics, Drexel University, song@drexel.edu

In this study, social media users' self-disclosure is examined. Diverse motivations for voluntary self-disclosure and communicative characteristics of self-disclosure are investigated with regard to causality. Based on underlying factor structures, we aim to examine links among different factors of motivation and self-disclosure. This study will contribute to understandings of why users share their private information on social media, how they cope with self-disclosure on this contemporary channel of communication, and how particular set of motivations is represented as a function of self-disclosing predisposition.

Accelerating Student Learning For Taxonomy Design Work: Rapid Onboarding Through Consultant-Internships

Virginia M. Tucker

School of Information, San José State University, virginia.tucker@sjsu.edu

Consultant-internships are effective for rapid onboarding of higher education students into knowledge management (KM) positions, supporting them in bridging concepts and theories from their coursework into real-world information design and analysis projects. Building on a recently completed case study, this research uses template analysis methodology to examine skills and competences relevant to taxonomy design work, and the soft skills that employers both demand and struggle to articulate. This dual combination of information professional abilities is highly sought after in collaborative and virtual KM professional settings.

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Mining Linked Open Data For Semantic Predications To Inform Literature-Based Knowledge Discovery

Kathleen J Padova

College of Computing and Informatics, Drexel University, Kathleen.Joan.Padova@Drexel.Edu

Recent research into Literature-Based Knowledge Discovery (LBKD) has been focusing on extracting and identifying the context of relationships between discovered concepts. That is, it seeks to determine a positive, negative, or even the specific nature of the relationship or influence between two concepts. For example, in the seminal paper introducing the practice and applicability of LBKD, Swanson (1986) was able to identify the connection between Dietary Fish Oil and Platelet Aggregation, and Platelet Aggregation and Reynaud's Syndrome; but his initial technique was not able to identify that Dietary Fish Oil reduces platelet aggregation or that Platelet Aggregation is a symptom of Reynaud's Syndrome. These contextual relationships are expressed in a form sometimes called semantic predications (subject-predicate-object) and are often in RDF triplestore standard format. My research proposes to source semantic predications from Linked Open Data to provide the context of the relationships between the entities extracted from scholarly literature.

Building Agency within the Agency and in The Community: Improving Web Access to Public Health Data in New York City

Laura Marcial¹, Wes Quattrone¹, Megan Affrunti³, Kinjia Hinterland², Jeff Laufenberg¹, Martin Duparc¹, Daniel Dine², Tedd Mullally², Hannah Gould², Grant Pezeshki², Shahar Brovender², Charon Gwynn²

Organization(s): 1: RTI International; 2: New York City Department of Health and Mental Hygiene; 3: Clinton Foundation

lmarcial@rti.org

In the interest of open government data, public health departments have been making public use data available via their departmental websites. The New York City (NYC) Department of Health and Mental Hygiene (DOHMH) has been making survey, surveillance, and administrative data available to the public since the early 2000s. In an era of increased public use of health data and increased demands on public health practitioners' time, NYC DOHMH is investigating ways to make these data more widely attractive and usable and at the same time easier to maintain. To do this requires internal coordination, user-centered design, software development and testing, and plans for outreach and evaluation. One important enhancement in this redesign is to improve the site's dynamic data visualization capabilities using modern tools. This work catalogues NYC DOHMH's redevelopment efforts as it better understands users and reimagines uses for its public use data.

Fostering Scholarly Creativity: Modeling Functional Browsing Through The Lens Of Complexity

ICKM 2018 Draft Program

Posted 9-27-2018

14th International Conference on Knowledge Management

November 9th – 10th, Vancouver, Canada

Sahar Behpour

Information science, University of North Texas, sahasahar@my.unt.edu

Brian O'Connor, Abbas Goudarzi and Suliman Hawamdeh

University of North Texas, brian.oconnor@unt.edu, agoudarzi.kp@gmail.com,
suliman.hawamdeh@unt.edu

New Knowledge has long been the hallmark of scholarly work. This requires, of necessity, abandoning goal oriented deterministic notions of searching. Subject searches and known item searches and classification schemes are of little use for they are founded on what is known. One cannot walk into a library or log into a search engine and ask for “That new model we are trying to develop” or even for “Those documents that would catalyze ideas spinning about in our head into a unique solution of this intractable problem.”

Towards An Understanding Of Data Ethics In Lis

Ana Roeschley

University of North Texas, USA. Ana.Roeschley@unt.edu

Malak Khader

University of North Texas, MalakKhader@my.unt.edu

With the rise of available data online, ethical use of this data has come into question. From corporate abuses of client information to questionable research methods in the academic sector, data misuse is clearly a social problem that requires both attention and understanding. In the library and information sciences (LIS), data ethics continues to be an area of increasing focus. However, while literature on data ethics in LIS exists, there is little agreement of the topic's scope in the LIS fields. What is precisely meant when the phrase “data ethics” is used in LIS literature? What are the main themes within the scholarly literature on data ethics in LIS? The purpose of this visual presentation is to answer these questions and comprehensively delineate data ethics in the LIS fields based on the diverse body of literature on the topic.