Heading Toward the Cloud: Integrating

About the IIMA

The International Information Management Association was founded in 1989, with the mission to provide a unique blend of high-quality academic research combined with social interaction.

As an example of that commitment to academic research, IIMA publishes the Journal of International Technology and Information Management (JITIM), a double blind reviewed publication; as well as the Communications of the IIMA (CIIMA) a double blind reviewed publication. Each are published on a quarterly bases. Manuscripts are solicited year around from all interested scholars and practitioners. All iournals are listed in Cabell's Publishing Directories of Academic Journals. All Journals are Indexed and available in the following products: ProQuest, ABI, PQCentral, Science, TECH, Technology and EBSCO Host.

The conference combines academic excellence and friendly interaction to create a collegial atmosphere that is usually missing from other conferences. The majority of our members know each other on a first name basis and regularly communicate and collaborate throughout the year.



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Proceedings

FDA's Inspection of Foreign Pharmaceutical Manufacturers Adis, W.

One of the FDA's tasks is to monitor domestic and foreign pharmaceutical production. There are challenges to this task, particularly with overseas sites. This study explores and evaluates FDA performance outside the US through a multi-year study of foreign inspections. It reviews workload and performance using the 10 largest exporters to the US, during the 2002 through 2007 timeframe.

The Role of Information Technology in Integration of Supply Chain Management Practice, a Literature Review Azubuike, V.

Supply chain management (SCM) is as a customer driven value chain management, which in addition to pursuing improvements in efficiency recognizes the importance of consumer needs and attempts to capture its subtleties of consumer value. This study attempted to examine the application of information and communication technology in integration of the. Supply chain management practices. Based on the literature evidence and logical reasoning, the various functions of the critical dimensions of SCM and ICT were portrayed. The study was carried out with focus on a number of factors raised by other researchers and writers relating to ICT and supply chain management, like issues affecting workflow and information flow among supply chain members, strategic relationships with suppliers and supply chain performance measures. The study noted that effective use of ICT in supply chain management provided opportunities to create sustainable competitive advantage and enhanced the competitive position of the companies. The study concluded that finding the right ICT facilities, suppliers, and fostering trust with the right partners have a great impact on current as well as future business performance.

Multitasking and Multiple Team Membership: An Integrated Perspective Benbunan-Fich, R. and Altschuller, S.

Contemporary workers are faced with multiple work demands resulting not only from their job duties but also from their participation in multiple teams simultaneously. Most of the current literature has examined these two topics (multitasking and multiple-team membership) separately. The aim of this study is to integrate both perspectives by reviewing relevant studies in both fields and analyzing data gathered via focus groups. Our results indicate that participation in more than one team simultaneously multiplies the number of project activities assigned to individuals. People cope with these multiple demands by juggling their individual and team related assignments. This juggling depends upon situational factors such as deadlines and deliverables, and personal factors such as multitasking skill and expected outcomes. The results of this study pave the way for further research examining the interaction between multiple-team membership and multitasking activity.



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Provision and Utilization of Information and Communication Technology for Effective Records Management in Federal Capital Territory's Secondary Schools

Ejimonu, C.

This study investigated the provision and utilization of information and communication technology for records management in Federal Capital Territory's secondary schools. The main objective is to examine the provision and utilization of information and communication technology for effective records management in Federal Capital Territory's secondary schools. Descriptive research design was used in this study to gather the necessary data; the data were collected from primary source. A sample of 347 teachers drawn from 3335 population was used in the study which was analysed using descriptive statistics and t-test statistics. The result showed that ICT facilities were not adequately provided and that administrative utilization of ICT was ineffective. It is also showed that provision of ICT facilities are more in schools within urban Area Councils than schools within semi-urban Area Councils. Furthermore, the study discovered that Male gender utilizes ICT more than their female counterparts. Based on these findings, the study therefore recommended that there should be adequate provision and effective utilization of ICT infrastructure for effective records management in FCT senior secondary schools. There should be parity in the provision of ICT infrastructure in schools within urban and semi-urban area councils. Female teachers should be given a greater opportunity for capacity building workshops on the use of ICT in records management to help bridge the observed gender imbalance in ICT utilization.

Collecting Big Data: A NoSQL Teaching Case

Fowler, B., Godin, J. and Dodla, S.

With the increasing popularity of big data, many organizations are turning to NoSQL databases as their preferred system for handling the unique demands of capturing and storing massive amounts of data. Today's employees in any size organizations will likely encounter NoSQL databases. College students need to be exposed to this technology and begin to have a functional understanding of how it works and how to use it. Stainer (2012) recommended that instructors teaching database courses follow the pace of the database industry and incorporate NoSQL into the curriculum.

Participatory Hyperlocal News Website

Kanamori, Y., Drinka, D. and Yen, M.

Retrieving useful news from the Internet is often easy, however, it can sometimes be very difficult to collect reliable information due to the vast amounts of often conflicting information stored there. Collecting national news is relatively easy because there are many traditional news sources, each of which generally report the same, or similar, information about nationwide events. For local news, the number of sources is smaller, but, nevertheless, it is still relatively easy to collect reliable information about a city or town. However, when people start looking for hyperlocal news, that is, information confined to a very small and specific area within a town, on their block, around their houses, or near their children's schools, they may find it difficult to collect reliable information from the Internet—if it can be found at all.



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Social Media Perceptions of Today's Millenials and Advice for Students, Employees, and Employers Kiser, S., Prater, T., Johnson, K. and Smith, S.

In today's world, everyone is seemingly connected. Everyone is on their smartphone or tablet every waking hour of the day checking their Facebook or LinkedIn page, watching YouTube, or a movie on NetFlix or Hulu, to name a few. This research examines the thinking of millennials with regard to some of the different ways they connect, how they connect, and what are their beliefs about some of this interconnectedness. A survey was developed to gather information on student/employee views and opinions about social media sites and their "civil" rights when using these sites. The survey was administered through SurveyMonkey to students at one private college and two public institutions. A total of 219 students participated in the study. Based on the findings, there is a general understanding of the "state" of social media but guidance is needed. Study results indicated both employees and employers are having trouble understanding what can and cannot be done as it relates to social media. From these findings, advice is given as to what should be considered by both students, employees, and employers with regard to social media use and expectations. Future research should be conducted to further the findings of this study. As social media changes, additional studies can collect data on the new social media trends such as Vine and Google+(Salomon, 2013) and the increased "selfie" trend (Pew Research Center Survey, 2014).

The Business Analytics Application for Supply Chain & Logistics in Michigan

Lee, H. and Chen, K.

The purpose of this paper is to apply big data, social media, and business analytics to create an information web hub for supply chain and logistics management for businesses in Michigan. This information web hub provides interactive features, blog, and analytical tools for supply chain and logistics information. This paper describes the motivation and functions of the information web hubs.

A Gamification Design for Teaching Introductory Programming

Lee, H., Long, J., Shah, J. and Mehta, M.

Course design, instructional approach and programming languages have been adapted to address high-attrition rates in introductory programming classes. In this study, a gamification system is designed to provide a dynamic and engaging learning environment. Using the system, the students are given an exercise to train an artificial agent used to complete required tasks. This exercise is designed to provide game experience and more enjoyment than traditional programming exercises, and also focus on learning activities related to coding, testing, and analyzing required program logic. The unique design of this system provides students with a playful learning environment that allows them to involve friends and family members with no programming knowledge to play and be part of the exercise. This social aspect is likely to motivate students to learn computer programming and enhance their learning experience. The Self-Determination Theory (SDT) is used as the conceptual framework to design this social gamification system. The experiment design includes two introductory programming classes at a university, one class is used as a treatment group and the other as the control group, respectively. Student learning in these classes is to be compared using the measures suggested by SDT.



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Enterprise Architecture for Decision Making

Lin, F.

This article provides an updated review of the literature and practice of Enterprise Architecture (EA) since its inception article of the topic published in IBM Systems Journal by Zachman (1987) and discusses the various roles that EA can play in organizational decision making. It covers what an EA is, why and what are the benefits/values of implementing EA in an organization, obstacles of implementing EA in an organization, EA framework, EA and organizational alignment, EA and organizational transformation, examples of EA implementation and research findings. Finally, it illustrate how EA can be the knowledge hub and be used for decision making in organizations.

SAP ERP Implementation Case Study: A Long Journey to Success

Mahfouz, A., Blackmon, K. and Opara, E.

The food and beverage industry includes organizations who process raw food materials and components, package them, and then distribute them. The definition includes fresh, packaged and prepared foods along with alcoholic and non-alcoholic beverages. Production and Distribution of edible goods comprise the two segments that identify organizations that operate in this space. Pharmaceuticals are the only products that are not considered part of the food and beverage industry. Any other product fit for human consumption falls in the category. This includes bakery items, beverages, meat, dairy, fruit and vegetables, confectionary items, grains and oilseeds, dairy, seafood, feed, and other.

Future of Dutch banks after introduction of innovative payment solutions

Mager, T., Van Der Hulst, M. and Miggelbrink, J.

Banks encounter severe challenges with the introduction of new digital solutions. New technological oriented players, which heavily disrupted diverse other sectors, now enter the new digital payments industry. With new product offerings driven by the same intentions as within the other sectors: to disrupt. This paper intends to provide an answer to the research question: what are the current active parties and their (future) services involved in the development regarding payment services in The Netherlands now new parties are being introduced to the digital payments ecosystem.

Press Release Engineering: Leveraging the Power of Press Releases to Manage Stock Price Maida, N. and Schumaker, R.

We look at the idea of press release engineering in terms of managing stock price through press release manipulation. The data needed for this study was collected and analyzed by the CentralFinance system which we developed to find correlations between stock price and financial press releases. The hypothesis was that it would be possible to not only find a correlation between stock price movement and the release of a news article, but to find specific variables that factor into a news article which would increase, decrease, or help stabilize a stock. Through our research, we discovered a significant correlation between financial press releases and increased stock return.



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Academic Impact of Facebook Use among African American and Hispanic Students: Perception vs. Reality Mathiyalakan, S., Heilman, G., White, S. and Brusa, J.

Facebook is one of the world's leading social networking sites. It is pervasive in students' lives and can impact their academic careers in a variety of ways. However, little research exists evaluating the potential use of Facebook in a minority academic setting. An early step in this direction is to gain an understanding of how different student demographic groups use Facebook. An interest in further assessment of Facebook's role in diverse segments of academia motivates the collection and analysis of Facebook-related data from minority serving institutions such as Historically Black Colleges or Universities (HBCUs) and Hispanic Serving Institutions (HSIs). In this study, we present the results of a comparative examination of African American students at an HBCU and Hispanic students at an HIS regarding their perception of Facebook use for academics. The findings reveal significant differences between the two groups of students. When compared to African American students, the Hispanic students use Facebook more for academics, even though they perceive it to have a negative impact on academics. This perceived negative impact of Facebook is not directly translated into actual differences in self-reported GPA.

A Planning Methodology for IT Projects Using PRINCE2 and Agile SCRUM Meijer, P., Nijman, R. and Vinckhof, E.

In the spring of 2014, the Dutch government issued an investigation after reasons why some IT projects in the public sector fail. One of the recommendations the investigation committee is to make sure to deliver products in every stage that can be used independently. This calls for an approach in which projects can be managed both solid and on the other hand offers sufficient flexibility in the development of products. Our research focused on the strength of PRINCE2 as a best practice in project management and the agility that the SCRUM software development methodology entails. This paper addresses the question what the planning process look like for IT projects that are managed by PRINCE2.

Enterprise Architecture – A Means to Meeting an Organization's Business Requirements Mortenson, G. and Steinke, G.

The business environment is driving the need for organizations to create or enhance their capabilities in order to meet market needs at a faster rate than ever before. Enterprise architecture provides a method to systematically define how these organizations can realize their core strategies and objectives though mapping how these strategies and objectives are met by the business, data, application, and technology architectures that will tactically enable their capabilities. The Open Group Architecture Framework (TOGAF) provides both the framework and methodology to create and maintain Enterprise Architecture through a life cycle approach. The TOGAF methodology is recommended for adoption because it provides both the tools and flexibility for business leaders to better understand and leverage their enterprise capabilities in order to create greater productivity and competitiveness within the marketplace.



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MIS Needs to Teach HCM: A Comparison of SAP's HCM Suite and Oracle's PeopleSoft Nelson, J. and Elder, K.

Every year the teaching of Management Information Systems gets harder as we add to the core body of knowledge and we don't want to stop teaching anything previously taught. We are forced to make some tough choices as some things get added, and some things lose emphasis in our programs. As we are currently adding more enterprise information systems topics to our curriculum we need to start covering Human Capital Management with a greater exposure to our students. This paper is a comparison of the two most widely used platforms for HCM, SAP's HCM Suite and Oracle's PeopleSoft. From this comparison we hope educators can craft what aspects of HCM they want to include in their programs and where.

Cyber Security Risk, Observations: an Analysis

Opara, E. and Soluade, O.

Cyber security risks and concerns have become major issues virtually every week as the internet continue to evolve. Continuous systems and network breaches, fraud, theft and a whole host of other cybercrime events are growing exponentially. Enterprise systems are continuously reporting increased cyber defense spending's, more info-sharing and collaborations, new technical solutions and breakthroughs, organizations investing more on cyber security, governmental agencies legislating cyber safety through governance and regulations, and a flurry of other recent activities that have been implemented to keep the internet safer, yet, these concerns continue to made their way to the front of our everyday news. In spite of all the efforts and technological breakthroughs by IT security professionals to secure enterprise systems from attacks by cyber criminals and others seeking to steal private and confidential data for financial gain, organizations continue to report a steady stream of high-profile breaches against established security infrastructures.

Combating Learning Plateaus and Arrested Development in Cybersecurity Education: DeterLab in the Classroom Pike, R. and Manson, D.

This paper investigates the current state of cybersecurity education and practice with a specific look at general and vocational education required to foster expert performance in aspiring cybersecurity professionals. It then explores how research and lessons from the fields of medicine, psychology and sports can inform cybersecurity education, including the potential role of expert performance, deliberate practice and competition. Finally, this paper explores DeterLab as a platform for extending classroom learning and enabling deliberate practice and competition for students. This research was funded in part by NSF Grant sub-award #54807131 – Revitalizing Cybersecurity Education and Research through Competitions.



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Is it Time to Think Differently in Cyber Security?

Rohm, C.E., Lin, F. and Zhu, J.

Cyber Security has been increasing in the news as private enterprises like Sony, Target, Home Depot, JPMorgan Chase and like have been hacked. The cost per organization for hacks in 2014 has been reported at as an average of \$20.8 million for financial services, \$14.5 million in the tech sectors and \$12.7 million in the Communications sectors (Ponemon Institute, 2014). While these organizations as big, private enterprises have suffered these losses, what about the small businesses that make up over 80% of all organizations in the US. This presentation focuses on thinking differently than has been done so far. Instead of looking at government and big private enterprises, it is time to start focusing on Cyber Security for small businesses. Small business are connected to internet and do not think in term of cyber hacks and what it could mean to their organizations. A paradigm shift is presented in the form of a new model.

Privacy Concerns of Using Location-based Services - Big Data Analytics Perspectives Shin, H.

Location technologies that are used by cellular phone carriers provide a good estimate of the user location, and the accuracy of location identification can be improved by using the GPS technology. Also, indoor positioning system is available based on the utilization of location sensors, wireless network, and Bluetooth. Location-based services (LBS) utilizes the location as an input to their providing services so that more personalized services can be offered based on the current user location. For example, if a user tries to find the nearest restroom in a building, the system can identify the nearest restroom from the user's current location without requiring any manual user input of location. Recently, Big data analytics brought a lot of attention due to the rapid increase in the size of dataset. Big data analytics that are intended to help users may impose privacy/security threats. Big data analytics can be applied on the LBS dataset to identify sensitive patterns that users would like to hide. For example, the user preference information can be found by analyzing the frequent patterns of visits to shops. The paper identifies the privacy concerns of using LBS from Big data analytics perspectives.

The Innovation Value Chain and Adaptability of Organizations Smit, J.

This paper reports on a study of adaptability of organizations and how that relates to their ability to generate innovations. Constructs from an organizational culture model and the innovation value chain was used as the foundation for a cross-sectional study in 7 organizations in Ireland. The findings reveal that adaptability is indeed related to innovativeness. Organizations that are good at creating change, learning and creativity are better able to generate new ideas. Subsequently organizations that are also flexible can convert these ideas into outputs and subsequently disseminate them internally as well as outside the organization.



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Modeling Consumer Preferences in Financial Institutions: A Statistical Approach Soluade, O. and Munsch, A.

When marketing financial products to consumers, it is important that the financial institution understands the preferences of its customers. A survey is carried out on JPMorgan Chase consumers. It examined the influence of four major factors that impact consumer preference: Performance of the company's investments in the past 5 years, Fees charged for services rendered, Portfolio Diversity and Extent of online services. Each of these factors has five (5) levels ranging from "Extremely Important", to "Not Important at all". Although there are other factors, these are considered the most important factors that affect a consumer's preference in terms of investing in a company. The survey is analyzed using IBM SPSS Conjoint Analysis and the results are presented in this paper.

The State of Cryptocurrencies, Their Issues and Policy Interactions

Subramanian, R. and Chino, T.

This paper focuses on the evolution of cryptocurrencies. It traces the history of the early cryptography, 'cypherpunk' movement, and how the work of some cyber libertarians and cryptographers enabled the emergence of cryptocurrencies such as Bitcoin. The paper then delves into the technology behind the Bitcoin architecture, and how exactly this technology works. The paper then does an analysis of security and regulators considerations that affect the growth of Bitcoin based businesses. Finally the paper concludes with some suggestions for future work in the area.

Evolution of Enterprise: Achieving Value Co-Creation in IT Outsourcing Sun. S. and Chen. L.

Over the past few decades, information technology outsourcing has become a widely used and researched means for enterprises to change their performance. In this article, we attempt to link value co-creation to the information technology outsourcing satisfaction of enterprises. We argue that although enterprises may be able to increase their value co-creation through information technology outsourcing, this is only true up to a point, beyond which customer participation, customer orientation, service quality, communication culture, trust, affective commitment, continuance commitment, and normative commitment actually impact on a consequence of value co-creation. There is, in other words, a positively impacted relationship between value co-creation and information technology outsourcing. To bridge this gap, structural equation modeling is applied to test this study. We empirically confirm these arguments through a survey data analysis containing 207 CEOs' or senior managers' valid measurements. Finally, we find that all factors have important effects on inter-organizational value co-creation.

Learning styles and online learning

Van Alem, O., Kreeftenberg, C. and Obbink, D.

We live in a multimedia world in which Information and Communication Technology plays an ever more important role. This also affects the way education is given to scholars. The increasing possibilities regarding ICT in general and the Internet in particular paves the way for new forms of education. Optimal use of ICT can increase the accessibility and flexibility of higher education by decoupling learning from time and location. This can, for example, be interesting for adults who want to study outside the regular education hours. As for regular education, an optimal match between the student's preferred learning style and preferred instructional practice is also an important success factor in blended learning.



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Focus on Non-Functionals! The Effect of Focusing on Non-Functional Requirements on the Maturity of the Requirements Engineering Process

Vermeulan, D., de Weger, M. and Ravesteijn, P.

When developing IT systems it is important to know the requirements of the system. Requirements can be classified into different categories. In this study we look at functional and non-functional requirements. Respectively these describe the behaviour of the system (functional requirements) and the criteria under which the system works (the non-functional requirements). Furthermore this paper contributes to the understanding of the relation between the focus on non-functional requirements and the maturity of the requirements engineering process. The research question this paper addresses is: "How does the focus on non-functional requirements influence the maturity of the requirements engineering process?" The method of the International Requirements Engineering Board is used as the standard for the requirements engineering process. Based on this a questionnaire was developed to measure both the maturity of the requirement engineering process and whether non-functional requirements are taken into account or not. This questionnaire was then sent to a population of people with an IT function, like IT architects and developers. 69 people from different organizations participated in the survey; of this 65 responses were valid and used for the analysis. The results of the analysis show that there is a positive correlation between the focus on non-functional requirements and the maturity.

Learning by Doing: A Study of Two Community Engaged Courses in an Accounting Curriculum Yen, M., Hsaio, W. and Orley, S.

The community-based learning experience has been playing a major role in the fields of higher education in recent years. A community engaged course involves the student(s) in some kind of work outside of the classroom that contributes to the public good. Accounting programs across the country have been challenged to better prepare students for the accounting profession, especially in the areas of dealing with unstructured problems and how to prepare students with real world experiences. The Accounting Education Change Commission (AECC) notes that students should be active participants in the learning process and not passive recipients of information. This paper is to study and evaluate two community engaged courses in an accounting curriculum which were designed to focus on enhancing the learning results through experiential learning, community service learning, and project-based collaborating learning processes. Forty-two participants completed a survey after finished their community engaged courses. The qualitative data provided information of participants' learning experiences and reflection about the real world projects while the quantitative data provided information of participants' beliefs and satisfactions about their community engagement learning experiences.