ICAITM 2016

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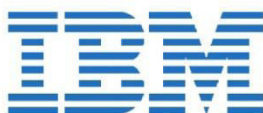
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Proceedings of

First International Conference on Advanced Trends in ICT and Management (ICAITM)

(Theme: Cloud Computing for Sustainable Development in Africa)

Date   : 28-29 April 2016

Venue : Accra International Conference Center
          Accra, Ghana

Conference Organiser(s) :

BlueCrest College, Accra, Ghana in Association with Association of African Universities, Ghana.

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Contents

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CONFERENCE SPEAKERS

S.No.	Speaker (s)
1.	Prof. Jane Nana Opoku- Agyemang Minister of Education, Ghana
2.	H.E. Mr. K. Jeeva Sagar Indian High Commissioner to Ghana
3.	Dr. Kapil Gupta Chairman, BlueCrest Group
4.	Dr. Bernice Adiku Heloo Deputy Minister of Science, Innovation &Technology, Ghana
5.	Prof. Nii Narku Quaynor Computer Scientist, Founder NITA & ITAG, Ghana
6.	Prof. Mohammed Salifu Executive Secretary, National Council for Territory Education, Ghana
7.	Prof. Etienne Ehouan Ehile Secretary, General Association of African Universities, Ghana
8.	Prof. Mawutor Avoke Vice Chancellor, University of Education, Winneba, Ghana
9.	Mr. George Atta-Boateng Director General, National Information Technological Agency (NITA)
10.	Mr. Derek Appiah Country Manager, M/s Microsoft Corp. , Ghana
11.	Ms. Estelle Akofio-Sowah Country Manager, M/s Google Inc. , Ghana
12.	Ms. Angela Kyerematen Jimoh Country Manager, M/s IBM Corporation, Ghana
13.	Mr. Asumang Joseph Country Manager, M/s Oracle Corporation, Ghana
14.	Mr. Vivek K Verma Rector, BlueCrest College, Ghana

Preface

International Conference on Advanced Trends in ICT and Management (ICAITM) is a unique international conference in Ghana. It is an interdisciplinary forum for exchange of knowledge on the latest experimental results and theoretical advances in Information and Communication Technology and Management. Every business function embraces technology. This year, the conference is designed to promote the benefits of Cloud Computing. It will bring together world recognized experts whose diverse expertise would stimulate discussions and push cutting edge research and collaborations. This conference also aims at addressing the issues relevant to Africa and to foster innovation in the all business sectors with the assistance of cloud to reduce cost and to increase sharing of much needed resources. This opens the way for Open source in research which will enable educators across Africa to come together as a family to enhance the Body of Knowledge without reinventing the wheel each time. The Conference Organising Committee will make every effort so that all important issues will be addressed clearly during the unhampered discussions which will be the hallmark of ICAITM.

The conference agenda includes keynote speeches, technical and plenary sessions. We will ensure that discussions enlighten the outcome and the unsolved questions, and explore new directions. This will be a unique opportunity for young researchers and students to gain information, training and experience in their area of expertise from the world class best established researchers and experts. During the conference participants will have the opportunity to both network and interact and collaborate with leaders and decision makers in the field of Cloud Computing in various sectors.

09.00 AM – 09.05 AM	:	Opening prayer
09.05 AM - 09.15 AM	:	Introduction of dignitaries
09.15AM - 09:20 AM	:	Cultural Display
09.20 AM – 09.30 AM	:	Opening remarks by Dr. Kapil Gupta – Chairman BlueCrest Group
09.30 AM – 09.50 AM	:	Speech by Hon. Prof. Jane Naana Opoku gyemang Minister of Education, Ghana
09.50 AM – 10.00 AM	:	Speech by Prof.Nii Quaynor, Founder NITA & ITAG
10:00 AM – 10:10 AM	:	Speech by H.E. Mr. K. Jeeva Sagar Indian High Commissioner, Ghana
10:10 AM – 10: 20 AM	:	Speech by Prof. Etienne Ehouan Ehile
10:20 AM - 10:30 AM	:	Speech by James Atta Boateng, Director General,NITA

COFFEE BREAK (10:30 AM – 11:00 AM)

11.00 AM – 11:20 AM	:	Speech by Hon. Madam Bernice, Deputy Minister of Environment, Science, Technology and Innovation
11.20 AM – 11:30 AM	:	Prof. Mohammed Salifu – Executive Secretary National Council for Tertiary Education
11.30 AM – 11.40 AM	:	Cultural Display
11.40 AM – 11.50 Am	:	Prof. Mawutor Avoke – Vice Chancellor, University of Education, Ghana
11:50 AM – 12:00 Noon	:	Mr. Eric Akumiah – Director – Operations, NITA

LUNCH BREAK (12:00 NooN – 1:00 PM)

01.00 PM – 01.20 PM	:	Technical Session – 1 Microsoft Ghana
01.20 PM - 01.40 PM	:	Technical Session – 2 Google Ghana
01.40 PM – 02.00 PM	:	Technical Session – 3 IBM Ghana
2:00 PM - 3:00 PM	:	Panel Discussion of CIO's and Deans / Heads Coordinators : Ms. Nodumo Dhlamini (AAU) Dr. Balamururgan E (BCC)

COFFEE BREAK (3 : 00 PM – 3 : 30 PM)

03.30 PM – 04.30 PM	:	Q&A Session
04.30 PM – 05.00 PM	:	Closing Remarks by Mr. Vivek Verma, Rector, BlueCrest College

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Venue : Committee Hall - I	Technical Session by : M/s Rack Africa, Ghana
Time : 09.00 AM To 09.30 AM	

S.No.	Hall	Date : 29.04.2.16 — Session I (9.30 am to 11.00 am) Session Chair : Dr. Eric Kuada, Lecturer, GIMPA,Ghana				S.No.	Date : 29.04.2.16 — Session II (11.30 am to 01.00 pm) Session Chair : Dr. Stephen Asunka, Head, ITSS,GTUC, Ghana				S.No.	Date : 29.04.2.16 — Session III (2.00 pm to 3.30 pm) Session Chair : Mr. Samuel Chirist Quist AG. HOD/Informatics, Regent University College of science & Tech.	
		Paper ID	**Paper Title / Author**				**Paper ID**	**Paper Title / Author**			**S.No.**	**Paper ID**	**Paper Title / Author**
1	Meeting Room- I	ICAITM160053	Cloud Computing and Its Related Technologies: Issues And Challenges Mr. Sulaimon, Hakeem Adewale		Tea Break	1	ICAITM160093	Statistical Modelling Of Cloud Computing Utility In Tertiary Institutions In Accra (Ghana), Mr. Akpor-Mensah Edmund Mr. Dzivor Nelson Doe		Lunch	1	ICAITM160051	Using A Remote Training Model For Technical / Vocational Education And Apprenticeship Enhancement, Mr. Emmanuel Fon Tata
2		ICAITM160058	Higher Performance And Cloud Computing, Mr. Foldestine Paye			2	ICAITM160100	A Remote Training Model: A New Paradigm for Technical and Vocational Apprenticeship In Ghana, Mr. Emmanuel Fon Tata			2	ICAITM160052	Challenges In Application Of E- Learning To Extension In Kenya: A Case Of South Western Kenya, Mr. Anakalo Shitandi
3		ICAITM160069	Development Programmes And Follow-Up Procedures For Nigeria Colleges Of Education Trainers Using Cloud Computing, Dr. A. A. Ladan			3	ICAITM160101	Cloud Computing as a Suitable Alternative to the Traditional On-Premise ERP and Massive Data Storage, Mbanzabugabo Jean Baptiste			3	ICAITM160121	A Study On Security Issues In Cloud Computing, Mr. Vijesh Krishnamoorthy
4		ICAITM160075	The Impact Of Digital Divide On Cloud Migration In Africa: A Case Kenya'S Technological State, Ms. Mainye Marcella Moraa			4	ICAITM160104	Cloud Computing: A Catalyst in the Agenda of Education for All, Professor Patrick E. Eya,Dr. Samson Sunday Afolabi			4	ICAITM160065	M-Commerce - The New Phase Of Doing Business In The 21St Century - Opportunities And Challenges, Mr. Darko-Ampem A. Emmanuel
5		ICAITM160079	A framework for Implementation of E-Classrom System, Mr. Shamsuddeen H. Muhammad			5	ICAITM160115	Cloud Computing – The Pathway and the Future Hope for Africa's sustainable education, Ms. Eva Esther Shalin & Mr. Edem			5	ICAITM160072	E-Commerce And Consumer Rights: Applicability Of Consumer Protection Laws In Online Transactions In East Africa,Mr. Sadat Mulongo Lunani
6		ICAITM160084	Security Issues Associated with Cloud Computing, Mr. Mustapha Muhammad Sani			6	ICAITM160116	Botnet Detection Using Data mining Techniques in Cloud networks, Mr. S. Nagendra prabhu and Dr. D. Shanthi			6	ICAITM160076	MOOCs In Nigeria: Awareness And Adoption, Mr. Shamsuddeen H. Muhammad
7		ICAITM160085	The Myths And Facts About Cloud Computing – Examining The Positions Of Start-Ups/SMEs, Mr. Edward Daniels			7	ICAITM160094	Adoption Of Cloud Computing As A Key Strategic Tool For Business Sustainability, Mr. Akpor-Mensah Edmund Mr. Dzivor Nelson Doe			7	ICAITM160081	Using Computer Games To Improve First Year Students' Learning Of Computer Programming, Ms. Esther Gyimah
8		ICAITM160080	The Need To Fasten Cloud Adoption In Developing Countries Of Africa, Mr. Shamsuddeen H. Muhammad			8	ICAITM160096	Politics In the Cloud : An Argument for Cloud Based Software in Politics, Mr. Nana Amankwah Peprah & Mr. Kamal Kant Hiran			8	ICAITM160089	Adolescent Socialization Environment As Predictors Of Unsafe Internet Behaviour Among Secondary School Students In Ibadan North Local Government Area Of Oyo State, Nigeria, Ruth Ochanya Adio-Moses
9		ICAITM160090	Cloud Computing, An Avenue For Enhancing E-Procurement For Sustainable Development, Mr. Omane Kofi Wilson.			9	ICAITM160109	Effective use of Cloud Computing Services in Higher Education, Mr. Sujith Jayaprakash			9	ICAITM160095	Web Based Housing Management System, Mr. Paul Adeoye Omosebi
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											11	ICAITM160119	Network On Chip: A New Frontier For Highly Scalable And Energy Efficient Multicore Systems, Mr. Charles Saah

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	Date : 29.04.2.16 — Session I (9.30 am to 11.00 am)	Date : 29.04.2.16 — Session II (11.30 am to 01.00 pm)	Date : 29.04.2.16 — Session III (2.00 pm to 3.30 pm)

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2		ICAITM160067	Small And Medium Enterprises: A Survival Strategy For Nigeria Youth Empowerment, Mr. Agboje Egbonimali Shadrack
3		ICAITM160070	Work Place Violence, Aggressive Behaviour And Organizational Productivity, Mr. Abdulsabur Hassan
4		ICAITM160071	Electricity Challenges On Small Business Enterprises In Nigeria, Mr. Sidi Jelani
5	Committee Hall - I	ICAITM160073	Change Management And Organizational Performance Measures, Mr. Agboje Chukwuma
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7		ICAITM160078	Enterprise Resource Planning In Africa: A Case Study Of University Of Ibadan, O.Osunade, O.Oladele, O.Omolola
8		ICAITM160082	Impact Of Stakeholder Consultation On The Success Of Road Construction Project Ghana, Mr. Kwame Ofori
9		ICAITM160086	The Impact Of Employee Empowerment On Service Quality Delivery And Customer Satisfaction At Chicken Republic , Mr. Daniel Adjei
10		ICAITM160087	The Influence Of Television Advertisement On The Youth Purchasing Behaviour, Mr. Daniel Adjei, Ms. Eunice Akorfa
11		ICAITM160114	Management of Technology and Innovation- Perspectives on the Indian Banking Industry, Dr. M. Thanikaivel

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Session II — Session Chair : Dr. Charles Buabeng- Andoh, HOD/IT, Pentecost University College, Ghana.

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1	ICAITM160088	Ethical Issues In Business Conduct, Mr. Daniel Adjei, Ms. Eunice Akorfa
2	ICAITM160091	The Introduction Of Human Resource Management In Ghana: Public Universities And Private Sector Perspectives, Mr. Abdul-Kahar Adam
3	ICAITM160099	Investigating the Impact of ICT on the Enhancement of Learning amongst Special Needs Students, Mr. Emmanuel Fon Tata
4	ICAITM160102	Ghana's ICT4AD Policy Document – A Diminishing Significance, Kubuga, Kumangkem Kennedy and J. Kok Konjaang,
5	ICAITM160103	Improving Health Care Delivery in Ghana: A Need of Urgency for NHIS Card Upgrade, Mensah Sitti
6	ICAITM160106	Social Networking and Interpersonal Communication: how online identities impact on off line relationships, Mr. Albert Anani-Bossman
7	ICAITM160107	Application of the Excellent Principles of Public Relations in a Different Cultural Context: The Case Study of Ghana, Mr. Albert Anani-Bossman
8	ICAITM160110	Antecedents of Employee Job Stress: Evidence from the Insurance Industry in Ghana, Ms. Evelyn Twumasi
9	ICAITM160113	Internet Use among Senior High School Students in Ghana: A Study of La Presbyterian Senior High School, Mr. Philip Dornyo & Ms. Eunice Akorfa Adiko
10	ICAITM160112	An analysis of Challenges and opportunities for using Electronic Commerce in Ethiopia, Dr. S. Anbarasu

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Session III — Mr. Jaccob Akunor, NCTE, Ghana.

S.No.	Paper ID	Paper Title / Author
1	ICAITM160105	For better or for worse: Effect of technological revolution on family communication, Mr. Albert Anani-Bossman
2	ICAITM160108	The Adoption and Deployment of Technology in Inventory Management Systems of Public Institutions. A Case Study of Electoral Commission of Ghana (EC), Ms. Priscilla Hanson
3	ICAITM160055	A Unified Customer Service Model - Optimizing Customer Service Quality for the Nigeria Electric Power Industry through the Implementation of an ITIL Based Service Management Paradigm, Mr. Femi Akin-Laguda
4	ICAITM160057	Analysis Of Train Energy Consumption Reduction By Passing Low Passenger Flow Stations In Off-Peak Hour For Addis Ababa Lrt, Ms. Eshetu Shewalema
5	ICAITM160061	Multitemporal Remote Sensing Of Landscape Dynamics And Pattern Change In Dire District, Southern Ethiopia, Mr. Berhanu Keno
6	ICAITM160066	Influnce of Digital Audio Technicals on Research and Production in the Music Industry in Africa : A case of CoTE D'ivoire, Dr. Anoha Clokou
7	ICAITM160077	Applying Rough Set Theory To Yorùbá Language Translation, Mr. Fagbolu O O, Obalalu B S, Udoh S.S,
8	ICAITM160111	Analysis of Elman Neural Networks for Wavelet Transforms Based Feature Extraction in the Classification of Epilepsy Risk Levels from EEG Signals, Dr. Vijayakumar T and Prof. T. Harikumar
9	ICAITM160117	Online Password Protection Using Persuasive Cued Click Point Method, Dr. Ra. Parivallal, Dr. V.S. Prakash & Mr. Manikandan
10	ICAITM160118	Knowledge Based Analysis of Microarray Gene Expression Data In Oncology, Dr. W. Jaisingh

Paper ID: ICAITM160051

USING A REMOTE TRAINING MODEL FOR TECHNICAL / VOCATIONAL EDUCATION AND APPRENTICESHIP ENHANCEMENT

Mr. Emmanuel Fon Tata, Department of ICT Education
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Abstract

Apprenticeship, unlike formal vocational and technical education seeks to instil in its learners basic and advanced practical skills to enable them serve society and earn a living in a sustainable way, hence contributing to national development. In Ghana, Apprenticeship has been providing the traditional solution for developing and financing vocational skills of young people in poor societies. Several affords by the government of Ghana (discuss later in this paper), to formalize apprenticeship have not been sustainable. Today, apprenticeship in the informal economy represents the main road to skills development in Ghana. Estimations suggest that about 80 per cent of the skills imparted in the informal economy in Ghana are transferred through apprenticeship. However, apprenticeship lack a training plan, the passive nature of learning, the limited entry possibilities of new technologies, an incomplete training content and the difference in quality of skills acquired due to the absence of trade testing and certification. Also, the often long training periods and the risk of exploitation of apprentices as ´cheap labour´ are criticized, as well as the lack of post-training follow-up and support for apprentices to start up their own business. This is where this study comes in.

This study suggests a much sustainable model to the management and enhancement of apprenticeship through the technical universities (polytechnics), in what will be referred in this paper as the Remote Training model (RTM). This study uses the training of some 30 apprentices, of which 15 were trained in a non-read/write and 15 in a read/write ICT training module. Data from both the technical institutions and from the private apprenticeship training centers. Was carefully analysed and the results yielded a common ground for the formalization and enhancement of apprenticeship training in Ghana. This model benefits both the technical institution as a state apparatus used here, the apprentice and the masters/mistresses, and also contributes to national development.

Keywords: *Remote Training Model(RTM), Information Communication Technology(ICT)*

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Paper ID: ICAITM160052

CHALLENGES IN APPLICATION OF E- LEARNING TO EXTENSION IN KENYA: A CASE OF SOUTH WESTERN KENYA

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Abstract

The rising enhanced connectivity to the internet and swift advance in mobile access in Africa has hastened the encouragement of e-learning to offer excellence in higher education on the continent. E-learning role in extension services has become a viable mechanism for the upliftment of education in previously marginalized communities and in the diffusion of advanced teaching. This paper examines the role e-learning in extension services to meet needs of informal sector offered in South Western Kenya. It highlights and categorizes the most prominent challenges for e-learning in the region and offers some possible solutions. Lastly, it highlights various instances of how technology has been used successfully in extension in parts of Kenya.

Keywords: *E-learning, extension, Challenges, Kenya, ICT*

Paper ID: ICAITM160053

CLOUD COMPUTING AND ITS RELATED TECHNOLOGIES: ISSUES AND CHALLENGES

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Abstract

Cloud computing can be referred to as computing on the Internet, as opposed to computing on a desktop. Internet has been a driving force towards the various technologies that have been developed so far. As cloud computing continues to gain more momentum in the IT industry, more issues and challenges are being reported by academics and practitioners. This paper discusses various types of computing technologies like distributed computing, cluster computing, utility computing, grid computing and cloud computing. It discusses how these technologies have actually contributed in the development of computing. It specifically looks at the benefits, emerging issues and challenges of cloud computing. To

end with, the paper highlights the various areas that pave ways for substantial further researches and development in cloud computing.

Paper ID: ICAITM160055

A UNIFIED CUSTOMER SERVICE MODEL - OPTIMIZING CUSTOMER SERVICE QUALITY FOR THE NIGERIA ELECTRIC POWER INDUSTRY THROUGH THE IMPLEMENTATION OF AN ITIL BASED SERVICE MANAGEMENT PARADIGM

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Abstract

The quality of customer service is critical to both the long term viability of a business and its performance as an on-going enterprise and as such requires constant development in a bid for the product/service to remain competitive in the market. This becomes even more important in the Nigeria Electric Power Industry given the deficit from which the sector, its primary product and customer service has to recover from and even though the current model of the market eliminated competition between distribution companies, it is still immensely important to revolutionise this industry's relationship with her customers. Benin Electricity Distribution Plc, the 4th largest distribution company in Nigeria by energy allocation from the National Grid, serves as our case study and this paper utilises data provided by the company's Customer Complaints Unit in evaluating the nature and intensity of the problem under consideration. The only model of service management that is mandated and whose operation is predetermined by the Nigerian Electric Regulatory Commission is complaints management in a bid to ensure optimal service quality to consumers of the product/service but this model is not far reaching enough to deliver on the requirements of this industry and so new procedures have to be found that can bring about the change required. ITIL is a public framework describing Best Practice in IT service management that delivers exceptional results for the governance of IT and focuses on the continual measurement and improvement of the quality of IT service delivered, from both a business and a customer perspective. Optimizing the protocol for service management in the Nigeria EPI is a mandatory requirement for ensuring optimal service delivery and its constant advancement is an indispensable process necessary for the survival of a business concern especially one with the problems that beset the Nigerian Electric Power Industry.

This paper proposes a unified customer service management paradigm that is set to deliver unparalleled Service Availability and Improvement alongside ensuring Service Quality that promotes customer

satisfaction through the implementation of an adaptation of portions of the IT service management framework as defined by ITIL for the Nigeria Electric Power Industry in general and the Benin Electricity Distribution Plc. in particular.

Keywords: *Optimizing, Electric, Power, Nigeria*

Paper ID: ICAITM160057

ANALYSIS OF TRAIN ENERGY CONSUMPTION REDUCTION BY PASSING LOW PASSENGER FLOW STATIONS IN OFF-PEAK HOUR FOR ADDIS ABABA LRT CASE STUDY ON THE LINE OF E-W ADDIS ABABA LRT

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Abstract

In this Research in order to make the analysis of train energy consumption reduction, the E-W line of AA LRT has been taken. The length of the route is about 16.76 km, and there are 22 stations. This gives an average of about 798 m between each two stations. The passenger flow of E-W line is forecasted as 734.4 thousands persons/day based on the passenger transport survey. There are 41 trains in four directions and it will enable the light rail transit to provide transportation service to 15,000 people per hour in one direction.

The objective of the research is to analyze energy consumption reduction of AA LRT E-W line for one complete cycle trip. The problem has been formulated by reducing number of stations in off-peak hour of train operation considering low passenger flow of stations. There has been selection of six low passenger flow stations which are EW5, EW7, EW8, EW14, EW18 and EW20. They are selected based on passenger flow of stations and spacing between stations.

The model of the train motion has been formulated by considering the important acting force components, such as tractive effort and train resistances. The method of analyzing train energy consumption model was based on power and time, and the software which is used to create the simulation of the train energy consumption has been analyzed using MATLAB SIMULINK loop. It has been observed that energy consumption of train has increased significantly with increasing number of train stops at stations. The results have shown that there is a very large difference in the energy consumption in the case of number of train stops at stations. From the analysis the train, by passing six low passenger flow stations, consumed only about 79.42% of energy consumption of the train stopping at all stations for

one complete cycle trip per train. That is, reducing the number of train stops at stations gives a large reduction of energy consumption.

Keywords: *Predict low passenger flow stations, Model of train energy consumption, Energy consumption reduction, Matlab Simulink simulation of energy consumption.*

Paper ID: ICAITM160058

HIGHER PERFORMANCE AND CLOUD COMPUTING

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Abstract

Cloud computing is the current emerging trend in delivering information communication services, and can address many of the aforementioned problem by the means of virtualization technologies, cloud computing offers to end users a variety of services covering the entire computing stack, from hardware to the application level, by charging on a paid per basis.

Cloud computing has now become a highly demanded services or utility due to the advantage of high computing power, cheap cost of services, high performance , scalability , accessibility as well as availability. Clouds vendors are experiencing growth rates of 50% percent annually. But due to being in a stage of infancy, still has some pitfalls which need to be given proper attention to make cloud computing services more reliable and user friendly. The rest of the paper is organized as following: Firstly I provided an overview of cloud computing and the history. I also discussed the definition of the value of models and models organization of cloud computing. Finally, I will discuss the higher performances, recommendations and benefits of cloud computing model.

Keywords: *E-learning, Extension, Challenges, ICT*

Paper ID: ICAITM160061

MULTITEMPORAL REMOTE SENSING OF LANDSCAPE DYNAMICS AND PATTERN CHANGE IN DIRE DISTRICT, SOUTHERN ETHIOPIA

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Abstract

Improper land-use results in land degradation and decline in agricultural productivity. In order to get maximum benefits out of land, proper utilization of its resources is inevitable. The present study was aimed to identify land-cover changes in the study area during a period of 25 years (1986-2011) and to determine the extent and direction where changes occurred. The study made use of Landsat TM 1986

and 2011 Remote Sensing Satellite Image to determine the extent and pattern of rangeland changes. Results of the land-use/land-cover changes revealed that grass land and open shrub land resource decreased significantly at a rate of 17.1 km^2/year and 12 km^2/year/, respectively. On the other hand dense Bush land, open bush land, dense Shrub land and cultivated land have shown increase in the extent at a rate of 0.23 km^2/year, 13.5 km^2/year, 6.3 km^2/year and 0.2 km^2/year, respectively within 25 years. The expansion of unpalatable woody species reduced significantly the rangeland size and availability of grasses. The consequence of the decrease in herbaceous biomass production might result in the high risk of food insecurity in the area unless proper interventions are made in time.

Keywords: Dire district, Landsat TM, Land-use / Land-cover, Multitemporal, Remote sensing.

Paper ID: ICAITM160062

ASSESSING GOVERNANCE PRACTICES AMONG MICRO-FINANCE ORGANISATIONS: A CASE STUDY OF SELECTED FIRMS IN THE MICRO-FINANCE INDUSTRY IN GHANA

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Abstract

This study sought to examine the governance practices in the microfinance industry in Ghana. The study compared the governance practices of selected microfinance institutions with globally-acknowledged best practices. The study adopts a comparative case study methodology by comparing the governance structures of selected microfinance firms against best practices around the world. This is meant to ascertain whether these firms adopt and implement governance practices that measure up to international practices. The findings showed that though there were some basic governance practices in place at all the institutions, their governance practices did not meet best practices around the world. It also came to light that though the corporate governance practices of the firms are generally in line with the provisions of the Companies Code 1963, (ACT 179), there were some notable lapses. These discrepancies occurred in areas such as board composition and board sub-committees (audit committee); and other findings like failure to perform board performance evaluation that depart from global best practices. These raise serious concerns which must be addressed if the microfinance sector is to realize its full potential of offering a major boost to the economic growth of Ghana.

 Keywords: Corporate Governance, Microfinance Sector, Ghana.

Paper ID: ICAITM160065

Proceedings of International Conference on Advances in ICT and Management (ICAITM2016)

M-COMMERCE - THE NEW PHASE OF DOING BUSINESS IN THE 21st CENTURY - OPPORTUNITIES AND CHALLENGES

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Abstract

Mobile Commerce is an evolving area of e-Commerce, where users can interact with the service providers through a mobile and wireless network, using mobile devices for information retrieval and transaction processing. M-Commerce services and applications can be adopted through different wireless and mobile networks, with the aid of several mobile devices.

As the power of wireless increases, it provides various opportunities for improving services to customers. In today's era, mobile commerce or M-Commerce has entered almost all the aspects of Business organizations like finance, retails, services, telecommunications and information technology services. This paper discusses the concept of Mobile Commerce. It studies how the technology of Mobile Commerce has facilitated new business trends. After this there is detailed description of applications of M-Commerce, its advantages & disadvantages and throws more light on the challenges that are faced by M-Commerce.

Keywords: M-Commerce, Mobile, Business, Wireless Network.

INFLUENCE OF DIGITAL AUDIO TECHNICALS ON RESEARCH AND PRODUCTION IN THE MUSIC INDUSTRY IN AFRICA : CASE OF CôTE D'IVOIRE

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Abstract

The popularization of computers and electronics equipment promotes the practice of digital audio techniques and leads to new forms of expression in music, uneducated song and research in the areas of music in Ivory Coast. Faced with the controversy on digital audio techniques, this article analyzes the influence of so-called technical on musical production and musicological research in Côte d'Ivoire.

Through the dialectical method, implemented by the techniques of participant observation, the psycho investigation, this study shows that digital audio techniques contribute to the development of music

production and reinforces the dynamic of music research at creating and producing music, reliability musical transcriptions and efficiency of field survey and analysis of collected data.

Keywords : Computers, Electronics , Musicological Research, Transcriptions

Paper ID: ICAITM160067

SMALL AND MEDIUM ENTERPRISES: A SURVIVAL STRATEGY FOR NIGERIA YOUTH EMPOWERMENT

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Abstract

The paper examines small and medium enterprises (SME) as a survival strategy for Nigerian youth empowerment. Small and medium enterprise contributes to the development of any nation, the workers, shareholders, the society, and essentially the youths who can engage in such businesses as career opportunities. In Nigeria, the introduction of GSM and Computer Information Technology (CIT) has introduced a lot of youths into small and medium enterprises in such that they have become self-employed and self-independent. From the review, it was discovered that for a country like Nigeria to achieve rapid sustainable industrial development, economic emancipation and self-reliance, SME have to be encouraged. This paper identifies and discusses the following areas: the role of small and medium enterprises in Nigerian economy, and their contributions to youth's empowerment, business startup process, and strategic youth empowerment process. Contributions and challenges faced by SME were also highlighted. The paper strongly recommends the following among others including Government should employ experts to properly managed the youth empowerment skills acquisition programs, implementation of National Directorate of Employment (NDE) on youth development programs, the need for government to initiate and sincerely execute concrete policies to promote SME, and more importantly, restructure the educational system in such a way that tertiary educational graduates will acquire sufficient technical skills, entrepreneurial skills and knowledge to be self-employed and create wealth.

Keywords: Youth Empowerment Strategy, Educational system, self-reliance, emancipation entrepreneurial skills.

Paper ID: ICAITM160069

DEVELOPMENT PROGRAMMES AND FOLLOW-UP PROCEDURES FOR NIGERIA COLLEGES OF EDUCATION TRAINERS USING CLOUD COMPUTING

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Abstract

The development programmes for the training of Nigeria College of Education Trainers has been designed as a proposal to explore ways in which Cloud Computing technologies can be leveraged to improve classroom instruction. The objective of the programme is based on twofold; firstly, to expose Nigeria College of Education Trainers to the concept of Cloud Computing and the technologies associated with it, and secondly, to help them develop curriculum units based on Cloud Computing technologies that can be integrated into different Colleges of Education subjects. Five Nigeria Colleges of Education in the North Central of Nigeria are proposed to participate in the programme. The participants' trainer areas spanned a wide array of subjects ranging from Computer Science education, Psychology, Curriculum, Guidance and Counseling, and Science subjects like Physics, Chemistry and Biology. A pre-workshop survey will be carried out to assess the trainers' knowledge of Cloud computing before beginning the programme. Post workshop surveys will be used to evaluate the impact of the programme. This paper describes the instructional material proposed for the training of the trainers development programme using cloud computing workshop, the topics for the group discussions, assignments and lessons plans to be completed by teachers, and an assessment of the workshop's impact based on an analysis of the three surveys. A follow-up survey about their classroom implementation experiences and subsequent lesson plans will be sent to all trainers at the end of the 2016-2017 academic years. Trainers' responses will provide useful feedback for future workshops.

Keywords : Cloud Computing, Education, Trainers, Impact

Paper ID: ICAITM160070

WORK PLACE VIOLENCE, AGGRESSIVE BEHAVIOUR AND ORGANIZATIONAL PRODUCTIVITY

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Abstract

There are various internal treat that exist within a formal setting which have become a serious problem, these problems seems to be in the form of inflicting injuries in the mind of employee, the study of workplace violence, aggressive behavior and organizational productivity, try to carry out a survey study in order to ascertain whether it affect the level of organizational productivity and the psychological feeling of employee toward the organization, a population sample of 400 staff of Federal polytechnic Kaura Namoda were randomly selected to represent the entire population of the institution, the data were collected through the use of survey questionnaire and were analyzed, using chi-squire statistical tool, two set of hypothesis were raised and tested, this revealed that workplace violence, aggressive behavior affect the organizational level of productivity .the researcher recommended that organization should foster a supportive, harmonious work environment so as to make workplace comfortable.

Keywords: Violence, Aggression, Employee, Productivity and Organization

Paper ID: ICAITM160071

ELECTRICITY CHALLENGES ON SMALL BUSINESS ENTERPRISES IN NIGERIA

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Abstract

The paper is on electricity challenges on small Business Enterprises in Nigeria; it looks at electricity challenges facing the small business enterprises with respect to their sustainability in their various industries. The erratic electricity supply has led to demise of so many small business enterprises in Nigeria economy. An empirical research design was adopted in the study; the instrument for gathering data for the study is questionnaire. The population sample is 120 small business firms within six geo-political zones across the country. The findings indicated that erratic electricity supply is highly responsible for small business enterprises low performances in Nigerian economy; it lead to self-generated electricity which accumulated to higher cost of production. It is recommended that government should privatize both generating and transforming stations so as to give chance for competition among the companies.

Keywords: Competition, Erratic Electricity, Privatization, Small Business Enterprises.

Paper ID: ICAITM160072

E-COMMERCE AND CONSUMER RIGHTS: APPLICABILITY OF CONSUMER PROTECTION LAWS IN ONLINE TRANSACTIONS IN EAST AFRICA

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Abstract

The huge platform that e-commerce has provided East African traders for business is noteworthy. Not only has the traders benefitted from transgressing territorial boundaries for the sale of their products the consumer of goods and services have been provided with multiples choices of products and quality goods at competitive prices. Internet has thus revolutionized the way Kenyans and the rest of the world buy and sell their products. In East Africa e-commerce is still in the formative stages and consumers are opening up to the idea of online shopping and relatively few fully fledged online companies are already in operation in the these countries. The frequent setback with trade conducted with the use of internet is data protection. Protection of data that is made available online by the consumer is misused and this is one of the major concerns that have emerged in the recent times.

Consumers have various rights that are granted to them by the provisions of our Consumer protection laws. However these laws are ambiguous as to whether such provisions would be applicable to online transactions. Generally the terms of data protection are dependent on the contract that the parties have entered into. The disclosure and non-disclosure of the same would thus depend on that contractual relationship. Another one of the major concerns of a person dealing online is the jurisdiction of the cases in case of disputes. This paper seeks to establish the challenges and benefits of online trading within the East Africa Community e-commerce sector with Kenya as a case study .Further it also seeks to establish the performance of existing online business as well as establish the relationship between e-commerce models and their performance. The paper recommends that in order to improve customer trust in online businesses, the business owners need to invest in the requisite technology and system to secure their customers and their businesses as well as create consumer awareness to negate the poor perception of the sector by the consumers.

On the other hand, the government needs to invest in the enactment of laws and regulatory infrastructure that supports online purchasing. Most importantly the consumers have to be more willing to purchase products and services online. Finally, the governments in East Africa have to look into the

policies and invest in system that will improve the current internet penetration rates across the East Africa members' states if the e -commerce is going to thrive.

Paper ID: ICAITM160073

CHANGE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE MEASURES

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Abstract

Was embarked upon to ascertain the extent to which organizational change can be used as a performance measures. Change is a major feature of life. It is an inescapable part of social and organizational life. It involves the movement from the status quo which implies that things are done differently from the original state. No doubt that there exists an increasing global competition which calls for corporate ethic and compels many organizations to change the way they do business. The aim of every organization is to increase productivity in order to make profit. The way in which changes are introduced and managed determines whether such organization will make success or failure. These changes are caused by two factors which are; internal and external factors. The internal factors are the organization itself or the human resource problems, managerial decisions, organizational product and the share or stakeholders while the external factors are Technological factors, economic factors, competitors, political, cultural and social factors. It is therefore imperative for every business manager to know that businesses are operated in a dynamic environment which implies that change is inevitable in today's world. Any organization that fails to recognize the inevitability of change is doomed for failure.

It is therefore important for business managers to use their internal environmental factors as apparatus to galvanize and explore business opportunities and use it towards the attainment of its objective of making profit while the external environmental factors can constraint business managers in exploring opportunities since most businesses are open system. Regrettably, it is not an easy task to manage change. Therefore, business managers can use their internal environmental factors as their controllable variables to successfully manage or even create change since it can be a measure to enhance performance as well as harmful to organization if it is not properly managed.

This proposition has been tested in Wetland Micro Finance Bank LTD located in Delta State of Nigeria. This institution experienced Technological, Economic and Regulatory shift which made them to change in their

Modus Operandi as well as technological and policy just to adapt and remain afloat. This tested proposition has shown that change can be of benefit to organizational performance and a survival chance if it occurs in response to dramatic restructuring of environmental conditions and if it is built on established routine and competences.

The change that occurred in Wetland Micro Finance Bank became a survival chance since it gave room for the institution to introduce software which enhance their performance as well as policies that was built on the already established rule and competences. During the period of responding to these changes, the institution introduced new software called [SAGAMY EBANKING] that will make them to remain afloat, Staff training was required to make them to be acquainting to the new system. After the training, it was gathered that the three parties benefited, these parties are; the Staffs; the Customers and the Employers. The Staffs had their value in the organization enhanced, there was job security as the organization has spent allot of money in training and developing their employees and as well as the staffs had a brighter chances in the labor market. To the employers; there were tremendous increase in their profit margin as there was a clear demonstration of technical expertise bringing about staff efficiency, reduction of mistakes as well as wastages and cost reduction while to the customers; there was an improvement of customer relation, low cost of services, quality service delivery, miscelleous services were added. There was quality assurance and many more that made the both parties to be happy.

Keywords : *Change Management , Organisation Changes, Technology, Factors*

THE LEADERSHIP AND FUNDING CHALLENGES OF UNIVERSITY INFORMATION TECHNOLOGY CENTRES: A CASE STUDY

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Abstract

The University system is one of the biggest users and beneficiary from Information Technology. The Nigerian University System has adopted information technology for non-core functions within each institution. The dependence of Nigerian institutions on IT systems for operations, decision-making, financial transactions and internal communications is limited. The ability of information technology centres to meet the demand expected has been eroded through past bitter experiences occasioned by inadequate skills and insufficient funding. This case study looks at the twin issue of leadership and funding

using Abimbola University, a fictitious university as case study for analysis. The prognosis indicates that leadership and funding are crucial to successful deployment of ICT for learning in Universities.

Keywords: *University, Nigeria, Finance, Leadership, Development*

Paper ID: ICAITM160075

THE IMPACT OF DIGITAL DIVIDE ON CLOUD MIGRATION IN AFRICA: A CASE KENYA'S TECHNOLOGICAL STATE

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Abstract

The world over is in a state of digital migration. This is meant to help the world to be a global village which will enable all the countries to be a single unit by eliminating the geographical differences that exist. Cloud migration is the way to go as Peter and Belmans (2012) put it that the "greenfield" nature of information and communications technology (ICT) in many countries creates the opportunity to "leapfrog" to cloud computing. However, African continent is still very far much behind when it comes to digital technology.

 From research that has been done, many African countries and particularly Kenya cannot be able to afford the cost of acquiring the technology since she has not developed systems herself for technology. Factors affecting such difficult include limited availability of IT skills, financial constraints, security risks, and many other socio-economic constraints. More so, there are other underlying factors that have effect on implementation of cloud computing. One of such factors is the system and structure of networks as well as governance in the country. This study is meant to unlock the gap between digital divide and cloud migration to enable the consumption of infrastructure and application services to individuals and business units possible.

Keywords: *Digital Divide, Cloud, Cloud Migration, Cloud Computing, ICT*

Paper ID: ICAITM160076

MOOCS IN NIGERIA: AWARENESS AND ADOPTION

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Abstract

Massive Open Online Courses (MOOCs) are a relatively recent online learning phenomenon. MOOCs are fast becoming a key instrument in digitally mediated learning and teaching globally. Despite its global

usage, Nigeria suffers from major drawbacks within the context of awareness and adoption. The main aim of this investigation is to assess the level of awareness and adoption of MOOCs among University students of Kano State, Nigeria. The study was conducted in the form of a survey with data being gathered via structured questionnaire administered to 300 randomly selected respondents. The most obvious finding to emerge from this study was that, there is variation in level of awareness among IT and non IT oriented students. The second major finding was that, factors influencing slow adoption of MOOCs include Internet connectivity, power stability, cost of enrollments and technicalities involved. The evidence from the study suggests that, establishment of MOOCs access hubs at strategic location will enhance its awareness and provision of national accredited MOOCs curriculum will enhance its adoption.

Keywords: *Online Courses*, *Information and Communication Technology (ICT), Factors.*

APPLYING ROUGH SET THEORY TO YORÙBÁ LANGUAGE TRANSLATION

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Abstract

The purpose of this research is to design and implement Yorùbá Language Processor using Rough Set Theory (RST). Yorùbá is a dialect of West Africa with over 50 million speakers, Yorùbá Language is spoken by well over 30 million speakers as their first language, almost 10million speakers are found in other countries in Africa, about 5 million speak Yorùbá Language in the diaspora and about 5 million speak Yorùbá Language as their second language in Nigeria which includes Akpes, Jummu, Ebira, Ao, Awori, Yagba, Iworro, Wo, Ikale, Gbedde etc. Yoruba is a tonal language which is considered third most spoken native African language.

RST approach is used in Natural Language Processing, its vagueness was used to deal with the process of analyzing natural language, convert the Source Language (SL) into its equivalent in English Language (TL), RST is applied to make approximate matches between words and phrases to be translated into its appropriate translations in another language. RST is viewed as the theory of implementing vagueness and imprecision in NLP which is expressed by a boundary region of a set and not partial membership.

This research formulated a model translation for Yorùbá phrases and words to be translated to English equivalents, its design and implementation were done on mobile and web platforms and RST helped to improve the quality of translation, rate of data retrieval of NLP and organization of NLP with the inexact, uncertain and vague set of data in the Yorùbá words and phrases to be translated.

Keywords: *Language Processor, Rough Set Theory, Translation*

Paper ID: ICAITM160078

ENTERPRISE RESOURCE PLANNING IN AFRICA: A CASE STUDY OF UNIVERSITY OF IBADAN

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Abstract

UI was established in 1948 and has grown from a college of three faculties to thirteen (13) faculties, a postgraduate school, college of medicine, distance learning centre and business school. The simple manual processes used to administer them have since become complex, bureaucratic and problematic. The university has adopted automation and computerization of several processes. In the year 2009, UI developed an ERP model for implementation. This paper examines the ERP model and the ERP system developed using requirements, and business analysis method. The results indicate that ERP systems are necessary for the management of educational institutions.

Keywords: *ERP, UI, Nigeria, MacArthur.*

Paper ID: ICAITM160079

A FRAMEWORK FOR IMPLEMENTATION OF AN E-CLASSROOM SYSTEM

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Abstract

E-learning systems are increasingly being developed to replace traditional ways of teaching and learning. Studies show that technology can be used to create much more powerful learning and teaching opportunities over and above traditional system. This paper concentrates on e-classroom. It describes the

design and implementation of the ultimate computerized classroom which uses technology to its fullest to enhance the educational experience. The benefits of the system are then elaborated and the paper also critically reviews how technology can be incorporated in school education to provide students with the critical skills needed for the 21st century.

Keywords: *E- learning, E-classroom, Technology, System*

Paper ID: ICAITM160080

THE NEED TO FASTEN CLOUD ADOPTION IN DEVELOPING COUNTRIES OF AFRICA

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Abstract

Cloud computing is an emerging computing paradigm that has been made very easy to use and adopt as a result of high level of abstraction of sophisticated complex technologies beneath; chiefly Web 2.0, Distributed computing, Virtualization, Utility computing and Service oriented computing. The consequences of slow adoption of this promising technology in African nations can no longer be tolerated. This study shifts ground from slow adoption to benefits that can be derived from rapid acceptance of cloud technologies for development in developing countries. It compares the economy and level of ICTs of four developing countries around the world (China, India, Turkey and Vietnam) against four from Africa (South Africa, Nigeria, Kenya and Ghana) in order to access them based on their status before and after massive adoption. Results indicated that there is significant rise in Cost Savings, Administrative advantage in governance, quick business takeoff among others. However, the study suggests for African developing nations to follow the footstep of cloud computing beneficiaries in developing countries in order to close the big gap and digital divide that keeps on widening as time passes by.

Keywords: *Cloud Computing, Adaptation, Acceptance*

Paper ID: ICAITM160081

USING COMPUTER GAMES TO IMPROVE FIRST YEAR STUDENTS' LEARNING OF COMPUTER PROGRAMMING

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Abstract

Computer Games may be an innovative and fun way to improve learning among students. For first year computer programming students, an introductory course in programming is challenging as there is difficulty in grasping the algorithmic concepts in the course which deals with logics.This paper investigates how computer games can improve cognition and academic performance of first year students in programming in the University of Education, Winneba. The researchers are of the opinion that if computer games are used to facilitate learning, the logical concept of game theory will go a long way to improve reasoning and hence academic performance of students taking programming for the first time. Also, the paper attempts to establish whether playing computer games from childhood years has an impact on a student's academic performance in computer programming.

Keywords: *Computer Games, Computer Programming, Cognitive Reasoning, Computer-based Learning, Game Theory, Logical Reasoning.*

Paper ID: ICAITM160082

IMPACT OF STAKEHOLDER CONSULTATION ON THE SUCCESS OF ROAD CONSTRUCTION PROJECT GHANA

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Abstract

The study investigated the impact of stakeholder consultation on the success of road construction project Ghana. The study explored two road constructions projects, to compare and establish the impact of stakeholder consultation. The study objectives were to investigate the extent to which stakeholders are involved in road construction projects as prescribed by project management principles, and to determine the impact of stakeholder consultation in project planning and execution. The research questions for the study include: To what extent are community members consulted during road construction projects in Ghana? How will community member consultation impact on the road construction project and whether community members find it relevant to be consulted before and during construction projects in their communities. The research design for the study was a case study, a qualitative approach which studied the two cases in detail. The scope of the study covered the Awoshie-Pokuase road construction project and the Dansoman highway road construction project both in Accra. The population of the study comprised of the communities where these two road projects were executed. A sample size of two hundred (200) participants was drawn from the population using the convenient sampling technique, a non-probability sampling approach. A standardized questionnaire was adopted and used to collect data

from the respondents using the survey approach, this served as the source of primary data during the preliminary stage of information gathering. Review of published works, documents available at the ministries and agencies and other publication served as sources of secondary data for the study. Qualitative data was analysed using summaries, abstracts, and coding. The Computer Assisted Qualitative Data Analyses software was also used to enhance transcription of raw data. Microsoft spread sheet package was also used to summarize qualitative data into frequency distribution table and charts.   The study found among others that it is important for road constructions organizations, contract awarding agencies, and stakeholders to direct their effort towards stakeholder expectations and allow stakeholders to experience the impact of their involvement in the road construction projects; again the value of stakeholder consultation to the success of road projects was firmly established by the findings of the study. Community member consultation positively affects road construction project to a large extent. Again, stakeholders desire to be consulted before and during the road project as they believe they have vital information that could help in better execution of the projects in their communities.

Keywords: Construction, Consultation, Project Management

Paper ID: ICAITM160084

SECURITY ISSUES ASSOCIATED WITH CLOUD COMPUTING

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Abstract

Cloud computing is becoming a key driving force in transforming modern business information technology (IT) infrastructure, making both software and infrastructure or utility available and offered as services. Thereby, creating a new opportunities for enterprises to deploy cloud computing services/models such as Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS), Infrastructure-as-a-Service (IaaS) in a form of public, private or hybrid cloud service delivery models which are available as virtualized resource over the Internet. Hence, most enterprises are trying to determine the best solution to improve their daily business activity by taking advantage of these technologies. However, cloud computing is a synonym of Virtualization that is, sharing computing and storage resources that include network, server, applications, etc. without physically inventing them in house.

On the other hand, IT professionals are facing greater challenges more than ever, to deliver IT solution almost instantly to their subscribers (customers) over the Internet for ensuring user's privacy and data

integrity are not leakage and loss through the latest technology known as cloud computing. This remarkable technology holds a large pool of resources for single or different films in the provider's datacentre. Looking at the architecture of this technology, security is one of the largest concern for adoption of cloud computing, it has associated with risks and threats, we believe provider should design and establish coherent and processes for ensuring security of user's information that would safeguard their data from the threats of intruders (internal or external).

Keywords: Cloud Computing, SaaS, IaaS, PaaS

Paper ID: ICAITM160085

THE MYTHS AND FACTS ABOUT CLOUD COMPUTING – EXAMINING THE POSITIONS OF START-UPS/SMEs?

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Abstract

The unfolding nature of cloud computing services across the globe has been touted as a codependent framework for new set-up businesses recently. The new paradigm shift from the traditional IT applications has been discovered to offer unending opportunities and advantages to managers of new business set-up in the world of which Ghana is no exception. The resolute nature of Ghanaian businesses towards cloud computing and numerous myth surrounding its adopting has called for the investigation of the myth surrounding cloud computing among managers of new business set-ups in Ghana. The study adopted qualitative phenomenology approach and sampled 16 managers for the investigation. The results show that there is high level of misconception among managers of new-set up businesses on cloud computing adoption. However, managers are aware of cloud computing services and its perceived impact on business operations and sustainability. It is recommended that, education, sensitization and stimulation on cloud computing in order to reduce the myth and ignite awareness and knowledge about this emerging technology, its product and services.

Keywords: Cloud Computing, Business, Emerging Technology

Paper ID: ICAITM160086

THE IMPACT OF EMPLOYEE EMPOWERMENT ON SERVICE QUALITY DELIVERY AND CUSTOMER SATISFACTION AT CHICKEN REPUBLIC

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Abstract

In recent years, the competition in the restaurant trade in Ghana is increasing. There is more choice for the customers and therefore the restaurants have to work harder to attract customers. With the continuous growth of competition in the restaurant trade especially in Ghana; understanding customers has become more and more an important method of marketing in the fast food industry. The study sought to find out if there were any relationship between employee satisfaction and customer satisfaction. It further, wanted to ascertain if employee-customer interaction attract and retained customers and finally, to find out the challenges encountered by employees" in carrying out their duty at the restaurant. The study employed both quantitative and qualitative method in the instruments for the data collection. In all, 300 respondents took part in the study. The results revealed that there is a significant relationship between employees and customer satisfaction, $\chi2$ (1) =197.995, $p<.001$. It was also revealed that there was a significant relationship between employees-customer interaction and attracting or retaining new customers $\chi2$ (3) = 250.00, $p< .001$. Furthermore, the employees" listed a couple of challenges they encounter in carrying out their duties. Some of these challenges included the following; "Bad attitude of customers", "Poor communication between employees and management" and also "not being allowed to eat from the restaurant". In other words, they are not supposed to eat restaurant food. The study findings suggested that employee satisfaction with working at Imperial Perkin Restaurant is important to achieving customer satisfaction. Imperial Perkin Restaurant Management should ensure that they take steps to improve and sustain employee satisfaction in order to achieve customer satisfaction.

Paper ID: ICAITM160087

THE INFLUENCE OF TELEVISION ADVERTISEMENT ON THE YOUTH PURCHASING BEHAVIOUR

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Abstract

The study seeks out the effects of advertising on youths purchasing behavior considering the consumption of alcohol in Ghana. Using a sample of 50 respondents of BlueCrest College where most of the students are youths, the study found out that television advertising does influence the youth and

pushes them to take a purchase decision. It also came to light that the more they watch the advert, the higher the drive to consume the product. Television advertising in conclusion, is a source of income of the firm. Firms therefore strategize and know when and where they should advertise. Youths on the other hand, need to be well informed about products and its effects in the adverts for such communications to be considered complete.

Keywords : *Advertisement, Purchasing Behavior, Consumption*

Paper ID: ICAITM160088

ETHICAL ISSUES IN BUSINESS CONDUCT

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Abstract

Ethics represents rules or principles that inform behavior within a particular culture of a particular group or organization. Hartman (1996): "corporate culture is important to business ethics because it is a vehicle for imparting and maintaining the moral principles and the values, good and bad, that animate life in the organization" (p. 150). Ethics in organizations is not a result of individual virtue alone, but a function of both individual virtue and contextual factors (Knights & O'Leary, 2006; Meyers, 2004).

Business organizations possessing ethical cultures should be creating and maintaining a shared pattern of values, customs, practices and expectations which dominate normative behavior in the organization. "Unique ways of thinking and implementing action that are manifested by the vision, symbols, rituals, activities, and mind-sets of the organization's members" (Briscoe & Schuler, 2009). Ethical business cultures are based on an alignment between formal structures, processes, policies, related training and development programs, consistent value-based ethical behavior of top authentic leadership (top executives and managers of the organization), informal recognition of heroes and the use of rituals, metaphors and language that inspire organizational members to behave in highly ethical manner consistent with high ethical standards that have been set by executive leadership. Personal moral development and authenticity of leaders is an important contributor to the overall ethical climate and culture of the organization [7]. When developing ethical culture programs, business organizations need to address not only formal compliance requirements, but focus on a set of corporate values and the alignment of those values with all other elements of the culture including day-to-day operations of the organization.

Keywords : *Ethical Issues , Organization, Culture, factors*

Paper ID: ICAITM160089

ADOLESCENT SOCIALIZATION ENVIRONMENT AS PREDICTORS OF UNSAFE INTERNET BEHAVIOUR AMONG SECONDARY SCHOOL STUDENTS IN IBADAN NORTH LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

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<u>**Abstract**</u>

Internet access and usage among adolescents has grown exponentially over the past decade. The internet, which has been described as a valued social and educational resource for adolescent can on the other hand, expose them to danger through their discovery of inappropriate materials and experiences. For adolescent the internet and associated technologies are amusing environment that includes not only e-mails, web browsers, instant messaging, chat rooms, peer-to-peer connections but also MP3 players, and wireless devices such as cell phones and personal digital assistants. Indeed, the internet has provided an environment for a worldwide adventure without boundaries and making it difficult to supervise their exposure to unsafe content and regulate unhealthy behaviour and addiction. Understanding the predictors of unsafe internet behaviour among in-school adolescents is thus important to provide empirical baseline data that will promote healthy and safe internet behaviour interventions. This study was designed with this aim. The descriptive research design was employed and a sample of 1154 was selected using a multi stage sampling technique. A self-developed questionnaire with a reliability of 0.84 was used for data collection and simple regression was used to analyse the date collected at 0.05 alpha level. The result showed that family, peer group, school and media influences all significantly predicted unsafe internet behaviour. In recommendation, social and health educational strategies to teach responsible, healthy and safe use coupled with technology, policy, and law enforcement to outline the environment in which adolescent choice is exercised should be encouraged. Parent involvement and supervision should be a foundational component of internet safety education.

Keywords: *Adolescent, Socialization, Environment, Unsafe Internet, Behaviour*

Paper ID: ICAITM160090

CLOUD COMPUTING, AN AVENUE FOR ENHANCING E-PROCUREMENT FOR SUSTAINABLE DEVELOPMENT

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Abstract

Ghana's procurement system has been bedeviled with several challenges in its implementation. Issues such as high cost of the procurement process born by tenderers and the procurement entities (cost of advertising and printing of tender document), corruption, arson, lack of record keeping and tracing of vital documents in procurement for the purpose of auditing and supervision. There are also concerns all over the world with the effects of the continuous use of paper (documents) in our business activities. The worlds forest cover is been eroded. This has affected the world's climate in several ways and has been on the table for discussion in several international conferences on sustainability.

The main objective of this paper is to assess the state of e – procurement in public procurement and to outline some benefits of e- procurement through cloud computing for sustainable development. I intend to use qualitative data from the internet and purposively select the public procurement authority of Ghana, the main public procurement implementation agency as my sample for this paper. In my view, every policy action that is taken should mainly consider the three bottom-lines of sustainability which include people, profit and planet. Whatever policy decisions we make today should not be at the expense of future generations. It should be aimed at bringing economic development, creating social progress and environmental stewardship. The public procurement authority of Ghana defines e- procurement as the use by government entities of the internet and other information technology processes in the procurement function. At the moment, through the e – governance system where there is a policy by government to encourage the use of information technology to improve government activities, the public procurement authority has adopted a system for online submission of procurement plans and a website to provide information, commentary, documentation (standard tender documents) and regulations. This is definitely not adequate and thorough. The procurement process encompasses planning, sourcing, evaluation, contracting and post contract administration and any e-procurement program without this is incomplete.

Cloud computing will provide a sure platform to propel any well thought out e-procurement program. It will serve as a vehicle for proper implementation of any e - procurement policy. Cloud computing serves as a means of deploying within reasonable time IT solution at lower costs. Cloud computing is a computing paradigm, where a large pool of systems are connected in private or public networks, to provide dynamically scalable infrastructure for application, data and file storage (Torry Harris 2016). An e-procurement policy through cloud computing will encourage and improve supplier collaboration and

information flow. It provides secured and reliable communication between suppliers and entities through tenders, proposals and builds relationships. Cloud computing also has the ability to process transactions electronically which drastically reduces the use of human interaction and paper work thereby reducing the incidence of corruption, error, cost and also improves accessibility and reach. Cloud computing will improve very much e-procurement and reduce the use of documents which will help in the sustainability movement. Even though there have been several concerns about security of data / information, legalities and capacity, I believe the positives of cloud computing far outstrip the negatives and I think that is most important.

Keywords: E-Procurement, Sustainability, Cloud Computing, Internet, Information Technology.

Paper ID: ICAITM160091

THE INTRODUCTION OF HUMAN RESOURCE MANAGEMENT IN GHANA: PUBLIC UNIVERSITIES AND PRIVATE SECTOR PERSPECTIVES

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Abstract

The essence of this research is to depict the various practices and adoption of the 20th century of new terminology called Human Resource Management. This new terminology has been adopted by business organizations, institutions and corporate world. These organizations are created in different countries, which mean different culture, practices, laws and ways of understanding and doing things. Hence, Human Resource Management understanding and application may not be consistent from one country to the other. In this view, the basis of this research paper is to talk several factors and activities within an organization into perspective to enable one to conclude on the HRM practices that affect Ghana as a country. Such factors to consider are the nature of HRM, its scope, functions, definition and evolution of HRM within the context of Ghana. The ideal purpose of this new term (Human Resource Management) is to make things within an organization look better in terms of employees' satisfaction as well as employers achieving their objectives.

The background of this research is to support the theory of Handy (1994), who wrote that employee society is on the wane, that new models are needed, new role models who will make life less frightening, even political society will have to make some changes so that the children of today will have something to sell to the world, so that the failures and suffering of today will not bring too much suffering or less frightening.

Keywords: *Human Resource Management, Public Sector, Private Sector*

Paper ID: ICAITM160092

STATISTICAL ANALYSIS OF KNOWLEDGE AND UTILIZATION OF CLOUD COMPUTING BY SMART PHONE USERS – A CASE STUDY OF MTN DATA SHOP CUSTOMERS

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Abstract

The mushrooming of affordable smart phones on the market has increased access worldwide to the use of on-demand internet services. This phenomenon applies to the Ghanaian populace as well, and most telecommunication companies in Ghana operate as Internet Service Providers, and they also retail smart phones and the associated accessories. Ubiquitous, as cloud computing may be too smart phone users, it appears most individuals and enterprises are not even cognizant of the ongoing benefits to them. Against this background, this research is designed to assess the knowledge and the utilization of cloud computing by smart phone users, who are customers of Ghana's telecom giant (Mobile Telecommunication Network). Data for the analysis is collected from customers who visit the data shops of the network providers by the help of structured questionnaire. The collected data is analyzed using descriptive and inferential statistical tools. A model (binary logistic regression) is developed that can be used to predict knowledge level and utility level of cloud computing.

Keywords: *Statistical Analysis, Smart Phone, Enterprise, Cloud Computing*

Paper ID: ICAITM160093

STATISTICAL MODELLING OF CLOUD COMPUTING UTILITY IN TERTIARY INSTITUTIONS IN ACCRA (GHANA)

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Abstract

There are two major components involved in cloud computing, namely a cloud infrastructure and software applications. Cloud infrastructure consists of the hardware resources required to support the cloud services being provided, and specifically includes a server, storage and network components. However, software applications support running of business applications, as provided via the internet by Service Providers. Instead of building their own IT infrastructure, enterprises can access computing

resources hosted by third parties on the internet (the 'cloud'). This study is designed to analyze the state of utility of cloud computing in the tertiary institutions in Accra. The study is also designed to develop statistical model (using logistic regression) to determine the significant factors that influence utility of cloud computing in Accra. The model is expected to be used to predict the utility of cloud computing.

Keywords: *Statistical Model, IT infrastructure, Cloud infrastructure*

Paper ID: ICAITM160094

ADOPTION OF CLOUD COMPUTING AS A KEY STRATEGIC TOOL FOR BUSINESS SUSTAINABILITY

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Abstract

The advancement in technology and IT services delivery worldwide has witnessed a model shift from traditional IT products to cloud computing. The new model promises huge advantages to businesses especially SME's across the globe of which Ghana is no exception. Despite the promised gains of cloud computing in recent times, the limited research on adoption of cloud computing as a strategic tool for business sustainability cannot be disparaged especially in Ghana. The study adopted a modified version of general regression model for analysis. Eight key indicators were adopted from literature in comparing cloud computing and traditional IT computing namely security effectiveness, meeting needs of the organization, reliability, cost effectiveness, flexibility, scalability, business performance, and sustainability. Data from 200 SME's in Ghana was collected and analyzed through the use of questionnaire. Results show that flexibility, scalability and security are favorable aspect of cloud computing. Positive relationship was established between reliability and cloud business performance. A Negative relationship was established between cost and cloud business performance as well as sustainability. The study provides an understanding of cloud computing benefits as against traditional IT computing.

Keywords: *Business Model, IT infrastructure, Cloud infrastructure*

Paper ID: ICAITM160095

WEB BASED HOUSING MANAGEMENT SYSTEM

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Abstract

This research developed a web based housing management system. The system is to manage the housing for senior staffs and to enhance easy application/update for accommodation. It also helps the housing unit to have easy access to data, increase its productivity, and save cost of production. The value of information system for an organization is generated from the value of information processed for decision making. Relevant literature on housing management, modern information system concepts, its needs and components, were reviewed to further explain the need for such an information system. Interview, observation and record inspections were used to collect data from and about the Unit. Also, the existing system has its problems, these were discussed and development of an alternative system was also discussed. In this study, the methodologies adopted for developing the web based system were Adobe Creative Suite 5 which was used to develop the front end, while the graphics on the pages were designed using CorelDraw Version 15, the XAMMP Server version 5.3.5 containing PHP and MySQL applications, were used to make the site pages dynamic. The PHP served as the middleware while the MySQL sufficed as the web portal backend.

The new system justified its need and indispensable features in the areas of information capturing and processing, database management, etc. In conclusion, the housing management system intends to process information, management data, allow for easy access to accommodation application, this must be done in order to develop mechanisms and institutional arrangement for decision making. However, recommendations were made on the need for further improvement like incorporating mobile alert, payment system notification.

Keywords: Database, Information System, Housing, Housing Management, Web.

Paper ID: ICAITM160096

POLITICS IN THE CLOUD: AN ARGUMENT FOR CLOUD BASED SOFTWARE IN POLITICS

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Abstract

Since the emergence of cloud computing (Cloud) as a modern cutting edge technology, it has seen many uses in various fields. Primarily it has been most used in Business specifically customer relations management (CRM) as well as in Health and Education. One major field where Cloud has not seen much

use is politics. Politics is here narrowly defined as the practice of making decisions and choosing leaders in a democratic society. This paper had the main aim of showing how useful cloud computing could be in the domain of politics. This was pursued according to the following objectives To demonstrate the general importance of cloud computing technology ,To show the common domains where cloud computing has been applied, To show that there was a research gap in the application of cloud to politics, To show that the political sphere had problems that could be best be solved with cloud technology, To discover applications of cloud technology in the political domain, To review the selected software in terms of purpose, Design, Usage and Advantages ,To Suggest Further areas in politics that could benefit from cloud technology application ,To show overall, that cloud technology could be useful and valuable not just in Business and Industry but also in politics. The paper began with an introduction to cloud technology, the advantages of cloud technology and the common domains where cloud was applied. The paper continued to discuss the nature of politics and how politics differed from governance; politics was thus narrowly defined as the process of decision making and choosing leaders in a democratic society. In highlighting some problems in the political arena, the legal battle in 2012 between the Ghanaian opposition and the president elect with his party, which dragged on for over eight months was used as a case in point. Problems in politics were compared with issues in health, education and business which had been solved using cloud to discover similarities. A keyword search for "cloud computing AND politics" on google scholar and other search engines was done to gauge the amount of research done in the combined fields. A perusal of the products and services of the top cloud providers was also done to disover applications meant for politics. It was found that some issues in politics were similar to those in politics, for instance, the citizens, electorate, business partners and distance students all had similar characteristics of being dispersed geographically and chronologically with the added character of being often on the move. Other common problems were also discovered. It was further discovered that research on the topic of cloud computing and politics was scanty. Of various cloud applications reviewed that were nominally meant for politics, few were extant. Yet the Obama 2012 campaign which used cloud technology heavily made a huge case for the usefulness of cloud in politics. The paper pointed out certain strategic features which cloud computing technology had, making it favourable for political application. It then concluded with some suggestions for cloud software that could be built for the political needs of Ghana.

Keywords: *Cloud, Politics, Design, Search Engine*

Paper ID: ICAITM160097

MOBILE ASSEMBLAGES AND DEVELOPMENT (MAENDELEO) IN MARAKWET KENYA

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Abstract

The debate about the link between adoption of mobile telephony and development is without a doubt both novel and curious. On one hand facilitates broad based development (Waverman et al., 2007) while on the other hand impeding development especially if monies that would naturally be allocated towards development fronts are misappropriated such that money that was to be allocated for resource acquisition is used to top up talk time at the expense of matters development(Komen, 2014). In other words it is at best counterproductive. The adoption is backed up by impressive mobile phone penetration rates in developing world however, not much empirical research exists as that proves this claim. With the help of assemblage theory as conceptualised by DeLanda (2006) ,this research observed that there was no direct correlation between mobile phone adoption and development even though there was evidence of the good that mobile phone had brought.

Key words: *Development, Maendeleo, Mobile Assemblages, Mobile Telephony, Social Interactions.*

Paper ID: ICAITM160099

INVESTIGATING THE IMPACT OF ICT ON THE ENHANCEMENT OF LEARNING AMONGST SPECIAL NEEDS STUDENTS

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Abstract

Inclusive education, unlike integrated education is concerned with making sure that Special needs Students (SNS) receive equal learning like non-SNS of the same class. The University of Education Winneba over the years has made several efforts by procuring equipment to enhance immersive learning amongst SNS in their academic work, to ensure educational equity. Such efforts include the use of embossers, scanners, and other equipment at the University's Special Education Resource Centre.

This study draws on the use of ICT to create an immersive learning environment to improve on learning amongst SNS. In this study the SNS were provided with tools and trained on skills in the use of computers

and software to improve learning. The study also involved training the staff of the UEW resource centre to provide them with advanced ICT skills to enable them manage exams relating to SNS. This study also tested a prototype of the SNS library resource server (a server intended to host and deploy special needs services like research on internet and study materials like audio books, video books, etc. to SNS). At the beginning of the study, an evaluation of the initial learning skills of the participants was carried out. A similar evaluation was also done by the end of the training workshop, a careful analysis of the data and results were obtained. From the data and analysis of the data, recommendations were made to the management of UEW in line with the aims of the workshop.

Keywords: *Special Needs Students (SNS); Information and Communication Technology (ICT), immersive learning*.

Paper ID: ICAITM160100

A REMOTE TRAINING MODEL: A NEW PARADIGM FOR TECHNICAL AND VOCATIONAL APPRENTICESHIP IN GHANA

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Abstract

Apprenticeship, unlike formal vocational and technical education seeks to instil in its learners, basic and advanced practical skills to enable them serve society and earn a living in a sustainable way, hence contributing to national development. In Ghana, Apprenticeship has been providing the traditional solution for developing and financing vocational skills of young people in poor societies. Several affords by the government of Ghana (discuss later in this paper), to formalize apprenticeship have not been sustainable. Today, apprenticeship in the informal economy represents the main road to skills development in Ghana. Estimations suggest that about 80 per cent of the skills imparted in the informal economy in Ghana are transferred through apprenticeship. However, apprenticeship lack a training plan, the passive nature of learning, the limited entry possibilities of new technologies, an incomplete training content and the difference in quality of skills acquired due to the absence of trade testing and certification. Also, the often long training periods and the risk of exploitation of apprentices as ´cheap labour´ are criticized, as well as the lack of post-training follow-up and support for apprentices to start up their own business. This is where this study comes in.

This study suggests a much sustainable model to the management and enhancement of apprenticeship through the technical universities (polytechnics), in what will be referred in this paper as the Remote Training model (RTM). This study uses the training of some 50 apprentices, training in a non-read/write and read/write ICT training module. Data was collected from both the technical institutions and from the private apprenticeship training centres. The data was carefully analysed and the results yielded a common ground for the formalization and enhancement of apprenticeship training in Ghana. This model benefits both the technical institution as a state apparatus used here, the apprentice and the masters/mistresses, and also contributes to national development.

Keywords: Remote Training Model (RTM), ICT, Information Communication Technology

Paper ID: ICAITM160101

CLOUD COMPUTING AS A SUITABLE ALTERNATIVE TO THE TRADITIONAL ON-PREMISE ERP AND MASSIVE DATA STORAGE

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Abstract

Cloud computing is one of the latest innovations of IT which claims to be all capable of driving the future world of IT within minimum costs. This concept of cloud computing being one side widely accepted by normal users while on the other hand majority of the Organizations have some serious security concerns before moving to this form of IT evolution.

Cloud computing and Security is a new buzzword in the business industry today. The idea leading to cloud computing paradigm is that the computing resources and software are available to the end user, whether an organization or an individual, in a virtualized environment (cloud) and the user can access it on demand and using a 'pay as you go' approach. These services in industry are respectively referred to as Infrastructure as a Service (Iaas), Platform as a Service (PaaS), and Software as a Service (SaaS) (Hayes, 2009). One of the issues faced by the organizations in the world today is need to make the organizational data globally accessible while taking into account the intra organizational and extra-organizational data and a cloud can be a very enabling medium for achieving this.

The innermost Concerns todays regarding a cloud based system include security, scalability, ease of migration and licensing issues. However there are some notable disadvantages that need to be overcome. Whether a very pertinent issue is regarding the security of the organizational data since data is stored in the cloud and an organization does not have a direct control over it?. Yet the security of the

organizational data is the responsibility of the service provider and this may throws up a lot of issues for an organization to consider before and after migrating to a cloud based Systems. Whether the possibility that vendors may lock in that it might disallow the organization to migrate to another service provider when it desires it? Nor if cloud service provider releases the organization's confidential data?

This research, would seek to argue the issues related to ERP's security and privacy in the cloud system and how they can be addressed to ensure the praiseworthiness of confidentiality to the legitimates users of the service in Rwanda because It was found that the general fear has been that intellectual property and other sensitive information stored in the cloud could be stolen.

Keywords: Cloud Computing, Alternative, ERP, Data Storage

Paper ID: ICAITM160102

GHANA'S ICT4AD POLICY DOCUMENT – A DIMINISHING SIGNIFICANCE

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Abstract

At the beginning of the 21st century, most developing countries found the need and actually formulated national ICT policies. The Ghana national Information Communications Technology for Accelerated Development (ICT4AD) policy was adapted in 2003. Since then, there has been tremendous development in the ICT sector. Our research argues that Ghana has not necessarily been referring to the document in its technological growth efforts. Citing examples, we show that the developments experienced thus far are far more serendipitous than planned. The policy document appears to have lost relevance outside of academia. We suggest ways to improve the situation based on best practices worldwide. The paper posits that the place to begin with is the revision of the ICT4AD policy to match current developments and trends.

Keywords: Research, Significance, Development

Paper ID: ICAITM160103

IMPROVING HEALTH CARE DELIVERY IN GHANA : A NEED OF URGENCY FOR NHIS CARD UPGRADE

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Abstract

Over the years, health care delivery has improved tremendously through the introduction of National Health Insurance Scheme (NHIS). With this scheme in operation, continuous ways of improving the health care delivery to people is sought as has provided a viable source of funding to the health sector. Under the scheme members are expected to identify themselves as they visit health post for health care services. If an individual registers under the scheme, that person will be given a card which can use to seek treatment in any hospital in the country. When that person visit a health facility with the card, that individual is treated and offered the services that are signed for without that person having to pay for anything – unless an extra service is requested, like a private ward. The bills are then sent to the scheme provider (district, private scheme or mutual scheme) which then pays the money to the hospital. The card can be used to buy prescribed drugs at accredited pharmacies or licensed chemical shops without paying at the point of delivery – the pharmacy will contact the service provider to take its money. The NHIA has improved its systems as it has upgraded to the use of the NHIS Cards to biometric cards. These cards are meant to hold a members' biometric information and can only identify that particular individual. These researches seek to look at adding a member's medical records and provide a special security mechanism for accessing such records or data from the card. With this implementation done on a wide scale, members will have little to worry about their folders getting missing and doctors and nurses will know exactly where to continue from for a patient who might not be in the position of been able to communicate.

Keywords: *Healthcare, National Health Insurance Scheme (NHIS), Bio- Metric*

Paper ID: ICAITM160104

CLOUD COMPUTING: A CATALYST IN THE AGENDA OF EDUCATION FOR ALL

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Abstract

Education is considered the bedrock of individual and national development. This paper considered the global and national efforts made to ensure that through universalization of education individuals and nations can be liberated and achieve development. This paper presented cloud computing in education as a catalyst that can enhance speedy realisation of the Universal Basic Education and ultimately Education for All. The paper thought of high degree of benefits accrued to cloud computing however, not without

threatening dangers. The authors concluded that cloud computing is an inevitable mode of educational process that can enhance realisation of reaching Nigerian population with education. Cloud computing was recommended for quick spread of education.

Keywords: *Storage, Cloud, Education, Computing*

Paper ID: ICAITM160105

FOR BETTER OR FOR WORSE: EFFECT OF TECHNOLOGICAL REVOLUTION ON FAMILY COMMUNICATION

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Abstract

The dynamics of family communication within the traditional African setting, and Ghana for that matter has been greatly challenged since the introduction of technology since the turn of the 21st century. Before technology, society thrived on face to face interaction which mainly consisted of family gatherings to reminiscent on the events of the day, tell stories and watch TV together. These meetings provided entertainment and fostered a sense of togetherness. However, the beginning of the 21st century witnessed a shift in technological advancement leading to a transformation in communication. From the internet to mobile devices, technology has transformed communication across the world. From smartphones, laptops, IPod, IPad, digital television to the internet, technology has changed the way society communicates. Technology has revolutionised the very fibre of society and is now an integral part of the communication processes of people. The past two decades have seen several studies being conducted on the effect of technology on interpersonal/ face-to-face communication with mixed results (Przybylski& Weinstein, 2012; Villegas, 2013: McGrath, 2012; Mesh, 2006). Whereas some scholars are of the view that technology has enhanced communication by helping families stay connected, regardless of the distance, others argue information and communication technology can the bonding that families share as a result of face communication as well as cause issues with stress, mental and emotional health. Drago (2015) for instance, found that technology has a negative effect on the quality and quantity of face-to-face communication.

Africa, and for that matter Ghana, has not been left behind by the technological revolution. A finding from the 2015 Ericsson Mobility Report suggests that smartphone penetration in Africa, Middle East and Asia pacific would have reached almost 80% by 2020. As at 2002 only eight percent of Ghanaians owned mobile phones. However as at 2014 the number stood at 83% with roughly 14% being smartphone

(Pewresearch, 2015). The 2015 internet statistics also put internet penetration in Africa at 9.8 percent, which although inadequate is an improvement on previous statistics. This will continue to grow and it will have implication on family dynamics, especially communication.

This research aims to examine the impact of the technological revolution on family communication, especially within the African context using Ghana as a case study. Although much research has been done on the impact of technology on a number of issues, including communication, very little literature can be found on how technology is affecting family communication. In Africa, and Ghana for that matter, the situation is even worse due to the paucity of literature on the subject. Africans in general thrive on community engagement as a means of bonding; a principle found in the concept of "Ubuntu" a Bantu word that is based on the principle of collectivity and interconnectedness (Natifu&Zikusooka, 2014:224). Communication at the interpersonal level is very strong in the African cultural settings as it allows families to sit together, listen to each other and share a common meal. The questions this research seeks to answer: how has the technological revolution influenced the nature of communication processes of the African Family? Have these new means of communication improved the quality of communication or hindered it? This paper will contribute new knowledge on family communication from an African perspective, using Ghana as a case study. It will also provide an understanding of the communication processes that defines Africans and the role technology plays in these processes.

Keywords : *Technology, Revolution, Family Relation*

Paper ID: ICAITM160106

SOCIAL NETWORKING AND INTERPERSONAL COMMUNICATION: HOW ONLINE IDENTITIES IMPACT ON OFF LINE RELATIONSHIPS

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Abstract

The introduction of the internet over two decades ago changed the face of communication across the globe, the internet allowed for new forms of social interaction due to its widespread accessibility and ease of usability. From emails to skyping, the internet ensured families and friends stayed in touch no matter the distance. The use of the internet increased with the introduction of Social Networking Websites (SNS). Since the first social networking site was launched in 1997 to date, the concept of social media has kept evolving (Boyd & Ellison, 2007). Social media was understood in the late 1990s,

as an 'Open Diary' created by Bruce and Susan Abelson. Open Diary, an example of a social networking site, is an online diary community (Kaplan & Haenlein, 2009).

From facebook to twitter, whatsapp, linkedin, myspace, Instagram, among others, the world has seen a massive growth in the usage of SNS due to its ability to connect people together, families, lost friends who can easily be found on any of these sites etc. According to Kaplan and Haenlein (2010) "Social Networking Sites are applications that enable users to connect with each other by creating personal information profiles, inviting friends and colleagues to have access to those profiles and sending emails and instant messages between each other." People are able to share photos, videos and personal blogs. SNS enable users create a webpage containing personal information to interact with friends both realistically and virtually, allowing them to meet people with a common interest (Kuss & Griffiths, 2011). Current statistics for instance shows that active users of social media per month has reached the 2 billion landmark. Facebook is leading the pack with over 1 billion users per month (Wearesocial, 2016). A survey conducted by the United Nations depicted that the number of countries using social media has tripled from 2010 to 2012 and increased by another 50 percent in 2014 (United Nations E-Government Survey, 2014). This assertion suggests that the globe seems to have become a virtual society and social media could also become a catalyst for interpersonal communication (Kugelman, 2012). Active social media users in Africa constitute approximately 129 million (11%). This is likely to grow as more and more people become active internet users. There is no doubt that social networking communities are here to stay and the attraction will increase, especially with the increasing popularity of smartphones. Social media plays a key role in enhancing and altering interpersonal relationships. In the 21st century, social media sites among young adults, especially facebook, seem to be growing rapidly in popularity (Pempek, Yermolayeva, & Calvert, 2008). Seven out of ten (70%) Facebook active users use the platform daily and 45% do so several times in a day (Duggan, Ellison, Lampe, & Madden, 2015).

Although some communication scholars argue over the physical proximity and the number of persons involved in an interpersonal communication, Hybels and Weaver (2001) explain interpersonal communication as a phenomenon, which occurs when there is communication on a one-on-one basis. Further, it is usually in an informal, unstructured setting. Nonetheless, interpersonal communication is considered by Miller and Steinberg (1975) as the kind of communication that occurs in an interpersonal relationship. They argue that if personal communication is limited to individual behaviours, characteristics and qualities of the other person, then, interpersonal communication has

taken place. On the flip side, if personal communication is not limited to individual behaviours, characteristics and qualities of the other person, then, interpersonal communication has not occurred. The close social connection or association between two people who use some consistent patterns of interaction, and have interacted for an extended period of time is what Pearson, Nelson, Titsworth, & Harter, (2003) term as Interpersonal Relationship (IR). This connection is formed when interpersonal communication takes place. Since the inception of social media, traditional relationship formation has not only been altered but has gradually moved and is being maintained on online platforms (Shah, Shah, & Sivitanides, 2012). Vitak (2008) argues that social networking sites, regardless of its benefits, cannot replace human interaction. According to Vitak, traditional relationship formation such as face-to-face communication and the visual and verbal cures that accompany non-digital interactions are crucial in any relationship. This paper examines how online interpersonal relationships affect the traditional pattern of forming offline interpersonal relationships. Many studies have been conducted on social media and relationships, especially, Facebook and the formation and maintenance of interpersonal relationships using the Social Capital Theory. This paper reviews impact of social media on offline relationships using a combination of the Uncertainty Reduction Theory (URT) (Berger & Calabrase, 1975), Social Penetration Theory (SPT) (Altman & Taylor, 1973) and the Social Exchange Theory (SET) (Thibaut & Kelley, 1959). Scholarly articles on social media and their negative influence on relationships have grown over the years (Cooper, Mansoon, Daneback, Tikkanen, & Ross, 2003; Young et al, 2000; Schneider, 2000). Nevertheless, Blumer, Hertlein, Smith and Allen (2013) argue that research in the area is not exhaustive. This research will therefore serve to contribute to the body of knowledge on the subject, especially from an African perspective. The lack of literature on key research areas, especially communication, in Africa means that it is difficult for African scholars to contribute meaningfully to relevant body of knowledge. This article will offer fresh perspectives on how social media, especially facebook affect both online and offline relationships.

Paper ID: ICAITM160107

SOCIAL NETWORKING AND INTERPERSONAL COMMUNICATION: HOW ONLINE IDENTITIES IMPACT ON OFF LINE RELATIONSHIPS

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Abstract

The practice of public relations, as we know it today, has undergone phenomenal growth since the turn of the 21st century. This development has been fuelled by a number of factors such as social, political, economic factors as well as advances in information and communication technology, and free trade agreements in what is now referred to as globalisation (Sriramesh, Goh & Lim, 2005:315). The spread of globalisation and its subsequent impact on public relations practice (in what is now described as international or global public relations) suggests that communication can now be practiced effectively without any barriers. Indeed available literature show that scholars and practitioners believe that public relations/communication now transcends cultural barriers and that PR can be practiced effectively on a global scale with the important caveats that goals be identified, pursued and gauged one public at a time, that standards of excellence be considered a desirable objective, and the need for the practitioner to take into account variations in cultural contexts and syndromes (Freitag & Stokes, 2009:6, Falconi, 2010: 2).

The discussion on global public relations resulted in a landmark study by Dozier, Grunig, and Grunig, which became known as excellent public relations. The excellence theory (Grunig, J. Grunig, & Dozier, 2002) is an essential and defining statement of what constitute effective public relations in an organisation. The theory was a result of a 15 year study by Grunig, Grunig and Dozier to determine the features of what they called 'excellent communications' and of the organisations that engage in excellent public relations. The excellence theory discusses how public relations make organisations more effective, how it is organized and managed when it contributes most to organizational effectiveness, the conditions in organisations and their environments that make organisations more effective, and how the monetary value of public relations be determined (Grunig, 2008: 1620).

Research on the excellence theory and its applicability has been undertaken in a number of countries with the exception of developing countries such as Ghana. Unlike America and Europe, research into the practice of public relations in Africa is not well known. Skinner and Mersham (2009:265) are of the opinion that research on public relations in Africa has been for the most part "sparse and fragmented", and mostly carried out on specific aspects in specific countries. A review of literature (Amujo & Melewar, 2011; Akpabio, 2009; Rensburg, 2007; Styen 2005; Van Heerden & Rensburg, 2005;Van Heerden 2004) shows a general lack of knowledge and understanding about how public relations is practiced on the African continent. Van Heerden and Rensburg (2005: 70) point out that even though most of the contributions to the literature and empirical evidence found in the field of PR

has come from countries with well-structured and established systems, it does not mean that PR is not active in developing countries. However, documents available on the practice is very limited and in some situations non-existence in developing countries. Van Heerden and Rensburg (2005:70) again argue that the lack of knowledge of the practice on the continent prevents professionals from participating in the global discussion on the essential principles of PR. Much as there is a general view that public relations in Africa is not a recent phenomenon (Odedele, 2007:14) Styen (2005:17) is of the view that commenting on the practice of PR on Africa is difficult due to the little information available. Steyn points out that research in the area is either not available or does not get published. This is especially true in the case of the excellence principles and how they fit into how PR is practiced in Africa. This study therefore explores the applicability of the global theory of excellent public relations to the practice of public relations in Ghana. This study essential because there is no known study of how the generic principles apply to PR practice in this country. The few scholarly literature on public relations practice have generally looked at professionalism, culture and the four models of public relations. Van Heerden & Rensburg (2005) are of the view that African scholars can only contribute meaningfully towards the global PR body of knowledge if they explore how PR is practiced in Africa. The problem therefore to be addressed by this article could be formulated as follows: There is a lack of knowledge on whether the principles of Excellent public relations, as postulated by Grunig, Grunig and Dozier as well as other scholars, is applicable in a different cultural setting like Ghana.

Result of this research will enhance the development of public relations theory on the continent. This comes at a time when the continent is struggling to redefine its own worldviews regarding how PR is practiced. Africa currently does not have its own body of knowledge/framework by which PR practice is defined. Mersham, Skinner, and Rensburg (2011) therefore call for a shift from the Western oriented body of knowledge, which tends not to suit developing countries, and a move towards building an African body of knowledge of public relations theory based on an African worldview so that Africa may effectively engage in the global refocusing of world economics and discussions on how PR is practiced in various countries and on different continents.

Keywords: *Social Networking, Interpersonal Communication, Impact, relations.*

Paper ID: ICAITM160108

THE ADOPTION AND DEPLOYMENT OF TECHNOLOGY IN INVENTORY MANAGEMENT SYSTEMS OF PUBLIC INSTITUTIONS. A CASE STUDY OF ELECTORAL COMMISSION OF GHANA (EC)

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Abstract

Adoption and deployment of technology is universally regarded as essential in enhancing the competitiveness of the economy of a country (Oliveira & Martins, 2011). Today, improving government service delivery has become a vital agenda for most governments. In view of this quality service delivery has become a measure for public sector management (Kaliannan, Awang& Raman, 2007)which has placed a demand on public institutions to adopt Information Technology (IT) in their operations, including effective management of inventory. According to Silver, Pyke &Peterson (1998), effective inventory management seeks to control costs through inventory in total value of the goods and the tax burden in cumulative inventory value. This study examined the adoption and deployment of technology in inventory management systems using Electoral Commission of Ghana as a specific case. A descriptive survey was used for the study. Purposive and convenience sampling procedure was adopted. The study sample was 200 employees from the Electoral Commission of Ghana. Questionnaire was the main instruments used for data collection. Microsoft Office Excel 2007 and the Statistical Product and Service Solution (SPSS) version 21 were used to analyse the data. The findings of the study indicate that IT investment leads to better inventory performance at the Electoral Commission of Ghana. It was recommended that the Electoral Commission of Ghana should ensure proper and efficient information technology in inventory management systems which would further enhance transparency, credibility and integrity of Ghana's democracy.

Keywords: Adoption, Deployment, Management, Inventory, Technology

Paper ID: ICAITM160109

EFFECTIVE USE OF CLOUD COMPUTING SERVICES IN HIGHER EDUCATION

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Abstract

Ghana has become a preferred choice of destination for higher education among other African Countries. Better Infrastructure and Quality Teaching compared to other African countries are luring international students to Ghana. Increasing number of foreign student population has not only augmented the revenue generation in the Country but also amplified a healthy competition among the public and private universities. The recent parade of cloud service providers into Ghana shows that Ghana is one of the fastest emerging economies among other African Countries and also there is an extensive opportunity for them to influence the young minds in educational institutions to familiarize their products so that they can reap benefits later when these students get into decision making positions in the industry, academia or government. Though educational institutions and service providers have made huge investments by foreseeing the demand, recent changes in the economy has given a big threat in terms of student recruitment and retention. As technology has extended its hands to solve all the socio and economic problems, it's really viable to seek the support of the same technology to crack these age old problems. This paper will focus on the services rendered by Microsoft, Google, IBM and Oracle to increase the student recruitment and retention in public and private universities of Ghana.

Keywords: *Cloud computing, Student recruitment and retention using Cloud, Cloud computing services for Higher education.*

Paper ID: ICAITM160110

ANTECEDENTS OF EMPLOYEE JOB STRESS: EVIDENCE FROM THE INSURANCE INDUSTRY IN GHANA

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Abstract

Job stress has become an issue of great concern over the last few years, both internationally and nationally. According to the African Newsletter on Occupational Health and Safety (2014, p.7), "job stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which eventually challenge their ability to cope". Hence, excessive and unmanageable demands and pressures can be caused by antecedents including role conflict, role ambiguity, and work overload.

This study therefore examined the relationship between antecedent variables (role conflict, role ambiguity and work overload) and employee job stress in the insurance industry in Ghana. The study used a descriptive cross-sectional survey as the design. In addition to that stratified sampling and simple random sampling techniques were employed to select 212 employees from the industry to participate in the study. Data collection was done with the help of a survey questionnaire which consisted of three sections. Section solicited respondents' demographic information. Section B focused on role conflict, role ambiguity and work overload. Section C on the other hand looked at the outcome variable, job stress. Using a cross-sectional descriptive survey with the help of a survey questionnaire, 212 workers participated in the study. Pearson product moment correlation and hierarchical regression were used to test the three hypotheses. Results of the study revealed that work overload and role conflict were positively related to job stress. However, the relationship between role ambiguity and job stress was not significant. The findings clearly show that role conflict and work overload triggers excessive and otherwise unmanageable demands and pressures on the workers at the insurance industry in Ghana. This study has implications for practice and for research of triggers of job stress in the work milieu.

Keywords: Role conflict, Role Ambiguity, Work Overload; Job Stress, Insurance Industry, Ghana.

ANALYSIS OF ELMAN NEURAL NETWORKS FOR WAVELET TRANSFORMS BASED FEATURE EXTRACTION IN THE CLASSIFICATION OF EPILEPSY RISK LEVELS FROM EEG SIGNALS

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Abstract

The objective of this paper is to analyze the performance of Elman neural networks in optimization of code converter outputs for the classification of epilepsy risk levels from EEG (Electroencephalogram) signals. The Code converter is used to classify the risk levels of epilepsy based on extracted parameters like energy, variance, peaks, sharp and spike waves, duration, events and covariance from the EEG signals of the patient. Elman Neural Network is applied on the classified data to identify the optimized risk level (singleton) which characterizes the patient's risk level. The efficacy of the above methods is compared based on the bench mark parameters such as Performance Index (PI), and Quality Value (QV). A group of

twenty patients with known epilepsy findings are analyzed. High PI such as 98.2 % was obtained at QV's of 20.8, for Elman optimization with soft Thresholding when compared to the value of 40% and 12.25 through code converter classifier respectively. It was identified that Elman neural network is a good post classifier in the optimization of epilepsy risk levels.

Keywords: *EEG Signals; Wavelet Transform; Code converter; Elman Neural Network; Epilepsy Risk Levels*

Paper ID: ICAITM160112

AN ANALYSIS OF CHALLENGES AND OPPORTUNITIES FOR USING ELECTRONIC COMMERCE   IN ETHIOPIA

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Abstract

The success and growth of e-commerce, depends on efficient telecommunication facility, ICT infrastructure, secure electronic payment system, automated financial network and efficient regulation. For the effective deployment of e-commerce, it is necessary to have a reliable and cost effective infrastructure that can be accessible to the majority of the population. The Africa's networked readiness continues to be at the bottom of NRI, with the majority of the region lagging in the bottom half of the NRI rankings. As in Ethiopia ranked 150th in the world and 31th in Africa. Skills sub-index: reflects the high level of achievement in developed countries as well as the nature of the proxy indicators employed. Ethiopia sits at the bottom of skill sub index indicator, which lags behind even by African standard. Ethiopia sits at the bottom with global rank of 149 out of 152 countries. Africa has the lowest number of internet users compared to the other continents which left behind in the ICT race. Development of the Internet market in Africa is still at infant stage (ITU report, 2014). Ethiopia has small number of Internet users and very small Penetration even by African standard. As shown in the table by number of internet users Ethiopia ranked 21th in Africa and 119th in the world. Internet host: An Internet host is a computer connected directly to the Internet. The number of hosts is one indicator of the extent of Internet connectivity. Ethiopia ranked 200th in the world with total internet host 151(ITU, 2014).

Keywords : *E-Commerce, Internet connectivity, Penetration, E- Commerce*

Paper ID: ICAITM160113

INTERNET USE AMONG SENIOR HIGH SCHOOL STUDENTS IN GHANA: A STUDY OF LA PRESBYTERIAN SENIOR HIGH SCHOOL

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Abstract

The paper aimed at finding out how students of La Presbyterian Senior High School in Accra, Ghana use internet technologies. A quantitative survey method was adopted to find out the students' level of knowledge on Internet usage, why they use the Internet, their points of accessing the Internet and the effects that the Internet has on their academic works. The result shows that a greater number of the students have good knowledge on Internet usage and most of the respondents used the Internet services for academic purposes. School based Internet facilities were found to be the major point of accessing the Internet by most of the respondents. Finally, the respondents also claimed that the Internet helped to improve their academic works.

Keywords: New media, social networking, gratification, Internet.

Paper ID: ICAITM160114

MANAGEMENT OF TECHNOLOGY AND INNOVATION- PERSPECTIVES ON THE INDIAN BANKING INDUSTRY

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Abstract

The economic reforms initiated by the Government of India about two decades ago have changed the landscape of several sectors of the Indian economy. The Indian banking sector is no exception. This sector is going through major changes as a consequence of economic reforms. The role of Management of Technology and Innovation-banking industry is very important as one of the leading and mostly essential service sector. India is the largest economy in the world having more than 120 crore population. Today in India the service sector is contributing half of the Indian GDP and the banking is most popular service sector in India. The significant role of banking industry is essential to speed up the social economic development. Banks plays an important role in the economic development of developing countries. Economic development involves investment in various sectors of the economy. It is widely recognized that the increased intensity of competition in the banking sector has had direct implications for financial institutions' approach to customers and how they define their business strategy. Considering that the current economic stance embraces innovation and technology as fundamental elements of strategic

management and business and economic development, new approaches to the relationship between technological innovation and financial services are essential in achieving competitive advantage. The paper mainly focus on the Management of Technology and Innovation in the banking sector.

Keywords : *Management, Technology, Innovation, Banking Sector*

Paper ID: ICAITM160115

CLOUD COMPUTING – THE PATHWAY AND THE FUTURE HOPE FOR AFRICA'S SUSTAINABLE EDUCATION

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Abstract

Housing over 40% of the worlds out of school children, more than 160 million of the population lacking literacy skills and over 70% of its population living in non-urban locations across the continent, Africa offers both a problem and opportunity with regards to education. According to UNESCO educational statistics, Over 1.1 million trained teachers are required in classrooms to achieve Primary education as at 2015. This statistics will increase drastically in the next decade, not to mention the need for adequate learning infrastructure. Countries in Africa with other stakeholders in the education industry will join hands together to implement an innovative and sustainable strategy to make education the priority for the development for the continent. Education plays a key role not just in producing the next workforce but in breeding the next generation of entrepreneurs/socio-preneurs and leaders who will drive the nations to change and aid in the growth of the society. This is the rationale behind this paper and Cloud African educational model will be the key outcome of this research. This will be the most effective method of bridging the gap in skilled manpower, infrastructure and content in terms of education. The future is technology and the hope is to bring quality education within the reach of every child or student in Africa regardless of geographic location.

Keywords : *Cloud Computing, Sustainable Education, Skilled Manpower*

Paper ID: ICAITM160116

BOTNET DETECTION USING DATA MINING TECHNIQUES IN CLOUD NETWORKS

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Abstract

Botnets are a major threat of the current Internet. Understanding the novel generation of botnets for mitigating this threat. Nowadays, botnet traffic is mixed with a huge volume of benign traffic due to almost ubiquitous high speed networks. It is most dangerous and widespread among all threats in today's cyber world. It is basically group of compromised computers connected via internet, mostly the vulnerable hosts, are remotely accessed and controlled by botmaster to deliver various network threats and malicious activities Which includes, spamming, click fraud, ID theft, backdoor entry, spoofing and phishing. Such networks can be monitored using IP but their forensic analysis form the major computational bottleneck. We propose in this paper. Data mining algorithms allow us to automate detecting characteristics from large amount of data by apriori algorithm and it can be confirmed by adapted the k means algorithm by using ecludiean distance. Recently malicious botnets evolve into HTTP botnets out of typical IRC botnets. We report experimental results highlight the performance benefits when traces from an Internet operator.

Keywords: Botnet; Apriori Algorithm, K-mean, Ecludiean Distance, Mining Techniques.

Paper ID: ICAITM160117

ONLINE PASSWORD PROTECTION USING PERSUASIVE CUED CLICK POINT METHOD

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Abstract

Normal passwords are cracked easily by intruders through shoulder surfing, dictionary attacks. To overcome this, an advanced method has been proposed using graphical password. Here, the passwords are based on images, rather than alphanumeric strings. The basic idea is that, using images lead to increase memorability and decrease the tendency to choose insecure password. This paper integrates the graphical password techniques like Passpoints, Cued Click points and Persuasive Cued Click Points which gives more security.

Keywords: Graphical password, Authentication, Security

Paper ID: ICAITM160118

KNOWLEGDE BASED ANALYSIS OF MICROARRAY GENE EXPRESSION DATA IN ONCOLOGY

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Abstract

Microarray technology offers a powerful approach to the analysis of gene expression that can be used for a wide variety of experimental purposes. Microarray data have a high dimension of variables and a small sample size. In microarray data analysis, two important issues are, how to choose genes which provide reliable and good prediction for disease status, and how to determine the final gene set that is best for classification. To precisely classify cancer we have to select genes related to cancer because extracted genes from microarray have many noises. In this paper, features and classifiers are explored using lymphoma datasets to systematically evaluate the performances of the feature selection methods and machine learning classifiers. Logistic model tree and Naive Bayes have been used for classification. Experimental results show that the ensemble with classifiers produces the best recognition rate on the lymphoma dataset.

Keywords : *Knowledge Based Analysis, Micro Array, Classification, Gene Expression*

NETWORK ON CHIP: A NEW FRONTIER FOR HIGHLY SCALABLE AND ENERGY EFFICIENT MULTICORE SYSTEMS

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Abstract

The advent of microprocessor has led to the architecture of various systems with varying degrees of processing power and efficiency. The diverse functions of the microprocessor have led to major technological advancements in chip – set manufacturing. The introduction of the various dimensions of the microprocessors, such as dual-core (or multicore) processor has extended the applicability of Moore's law. Microprocessor dependent systems rely on concurrency and synchronization in both hardware and software to enhance system performance. The bus connections that bind the various parts of the microprocessors demand prudent algorithms and concurrency in parallel processing. This makes them consume more energy and a bit slower in data processing. The extension of the traditional network between system with interconnected devices and specialized network operating systems allow routing and data dissemination between various nods on the network.

Network – on chip is to mimic the functionalities of the traditional network. Routing protocols on such chips will help reduce the overdependence of processor algorithms that tend to link the various processes

that go on between processors and buses. This will lead to efficient multicore systems. Normal networks are highly scalable with the introduction of appropriate connectors such as switches and routers. This presupposes that network on chips will be highly scalable if implemented successfully.

Keywords: Scalability, Multicore System, Microprocessor, Algorithms.

Paper ID: ICAITM160120

AUTO RECOVERY OF VIRTUAL MACHINE IN A CLOUD BASED SYSTEM AFTER MEMORY ERROR ATTACK

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Abstract

In the phase of increased hardware cost, system management and administration is becoming expensive and challenging. Virtual Machine (VM) have stepped in to offers an ease of system management and administration while cutting down on the cost of hardware. This is done through a Virtual Machine Monitor (VMM) or hypervisor which when installed directly on the hardware of the host, allows the running of multiple guest VMs on a single physical system and the guest VM possibly running different Operating System (OS).It is possible to flood the hypervisor with request which will result in memory error attack. This allows penetration of the underlying architecture and any applications such as mobile phones and other mobile devices that depend on the system for support and operation also become vulnerable.

We are proposing a process where the VM should be able to shut down and reboot when memory injection error is detected. Before shutting down, all running processes would have to be transferred to other network VM if the VM is operating in a network environment. Upon reboot, any changes that were made to the system would have to be reversed. This causes the system to be restored to what we call the previous state that is, the state of the system before the attack.

Keywords: Virtual Machine, Hypervisor, Memory Injection Errors.

Paper ID: ICAITM160121

A STUDY ON SECURITY ISSUES IN CLOUD COMPUTING

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Abstract

In current decade, the interesting features of cloud computing have been igniting the incorporation of Cloud environments in the IT and Non-IT Industries, This present Scenario consequently motivating

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the research on related technologies in the IT Industries and academia as well. The opportunity of pay-as-you-go mixed with an on-demand flexible operation is changing the enterprise computing model, (i.e.) shifting on-premises infrastructures to off-premises data centers, which is accessed over the Internet and managed by cloud hosting providers. Irrespective of its advantages, this sudden change to this computing method increases security concerns, which are the subject of this study. Moreover the issues derived from web technologies and the Internet, cloud introduce new issues that should be cleared out first in order to further allow the number of cloud deployments to increase. This paper surveys the work on cloud security issues making a comprehensive review of the literature on the subject. It addresses several key topics, namely vulnerabilities threats and attacks, proposing a classification for their taxonomy. It also contains a thorough review of the main concept concerning the security state of cloud environments and discusses several open research topics.

Keywords: *Cloud computing, Issues, Security level, Threats, Possible attacks.*

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