

## DR. KELVIN KABETI OMIENO, Ph.D

BSc. (Computer Science-First Class Honors), MSc. IT, PhD. BIS



### 1. PERSONAL INFORMATION

**Date of Birth:** 12<sup>th</sup> March, 1984  
**Place of Birth:** Busagwa Village, Busia County  
**Citizenship:** Kenyan  
**Telephone:** +254 726-849197/ +254 734-849197  
**Marital Status:** Married  
**Residence:** Kakamega, Kakamega County  
**Language:** English, Luhya (Very Good), Kiswahili (Good), French (Basic)  
**Address:** Box 190-50100 Kakamega, Kenya  
**Religion:** Christian  
**Website:** [www.mmust.ac.ke/schools/sci](http://www.mmust.ac.ke/schools/sci) OR <http://www.kelvinomieno.com>  
**Email (s):** [komieno@mmust.ac.ke](mailto:komieno@mmust.ac.ke) OR [kelvinkabeti@yahoo.com](mailto:kelvinkabeti@yahoo.com)

### 2. EDUCATION

#### **Postgraduate**

Jaramogi Oginga Odinga University of Science and Technology, Kenya

PhD in Business Information Systems (2013/14-2016/17).

**Thesis Title:** “**Usability Maturity Assessment for Virtual Learning Systems in Kenya**”

**Supervisors:** Dr. George Raburu, Dr. Pamela Raburu & Prof. Omollo Ongati

Masinde Muliro University of Science and Technology, Kenya

MSc. in Information Technology (2009-2012).

**Thesis Title:** “**A Framework to Measure Intranet Usage in Kenyan Public Universities**”

**Supervisors:** Prof. Patrick J. Ogao & Mr. Simon M. Karume

#### **Undergraduate**

Masinde Muliro University of Science & Technology, Kenya

Bachelor of Science (Computer Science), **First Class Honors** (2004-2008).

**Specialization:** “**Software Engineering**”

#### **High School {Kenya Certificate of Secondary Education}**

Teremi High School, 2002: 6 Plain A's and A- Aggregate Score

### 3. BRIEF RESUME

Dr. Kelvin Kabeti Omieno is a Lecturer and Ag. Dean, School of Computing and Informatics (SCI), Masinde Muliro University of Science and Technology, Kenya ([www.sci.mmust.ac.ke](http://www.sci.mmust.ac.ke)). He holds a PhD in Business Information Systems of Jaramogi Oginga Odinga University of Science & Technology (Kenya). Besides, he has MSc in Information Technology and **First Class Honors** Bachelor of Science in Computer Science from Masinde Muliro University of Science and Technology (Kenya). Dr. Omieno has been involved in a number of research projects of ICTs and development, including Data Analytics, Computational Grid Project, Health Informatics, E-learning systems and E-waste management in Kenya. Besides, he has published widely in journals and conference proceedings in Information technology and ICTs for development. He is a professional member of the Association for Computing Machinery (ACM), the largest association of computing professionals globally and is a reviewer with three International Journals.

#### 4.1. TEACHING EXPERIENCE

**October 2013- Present: Lecturer**, Department of Computer Science, *Masinde Muliro University of Science & Technology, Kakamega-Kenya*

**November 2012-October 2013, Assistant Lecturer**, Department of Computer Science, *Masinde Muliro University of Science & Technology, Kakamega-Kenya*

**January 2009-October 2012, Graduate Teaching Assistant**, Department of Computer Science *Masinde Muliro University of Science & Technology, Kakamega-Kenya*

#### 4.2. OTHER UNIVERSITY-LEVEL APPOINTMENTS

##### 4.2.1 NON-TEACHING APPOINTMENTS

1. **Acting Dean**, School of Computing and Informatics, Masinde Muliro University of Science and Technology-Appointed by **Vice-Chancellor**
2. **Chairperson**, MMUST Webometrics Advisory Committee, Appointed by **Vice Chancellor**
3. **Member**, ISMS Management Committee to oversee Implementation of ISMS ISO 27001:2015 Standard, Appointed by **Vice Chancellor**
4. **Member**, School of Open Learning And Continuing Education (SOLACE) Board Member for Short Courses, Appointed by **Deputy Vice Chancellor (Planning, Research and Innovation)**
5. **Member**, Library/ICT Committee, Appointed by **Vice-Chancellor**
6. **Member**, Task force on Transforming MMUST into Paperless University by 2017, Appointed by **Deputy Vice Chancellor (Planning, Research and Innovation)**
7. **Member**, Steering Committee for MMUST Professional Centre, Appointed by **Deputy Vice Chancellor (Planning, Research and Innovation)**
8. **Internal Quality Auditor** on ISO 9001:2008 Standard and QMS Documentation
9. **Member** of Senate, Deans Committee and various other University Senate Committees, and short-listing committees for Teaching and Non-Teaching staff

##### 4.2.2 PART-TIME TEACHING

***In the process of gaining exposure and technical skills, I have taught in several other universities in Kenya including:***

- *Jomo Kenyatta University of Agriculture & Technology–Kenya,*
- *Kaimosi Friends University College(KAFUCO), Kenya*
- *Jaramogi Oginga Odinga University of Science and Technology,-Kenya*
- *Kibabii University (while a constituent College of MMUST),-Kenya*
- *Mount Kenya University,-Kenya; Kenya College of Accountancy University (KCAU) -Kenya*

#### 5. RELEVANT EXPERIENCE

##### 5.1. TEACHING, APPRAISAL & SCHOLARSHIPS

###### 5.1.1 Taught Courses

Over Eight (8) years of teaching experience at Masters, Undergraduate and Diploma levels

###### **Masters Courses Taught:**

- ❖ Advanced Database Systems
- ❖ Software Architectures and Emerging Issues
- ❖ Object Oriented Analysis and Design
- ❖ Enterprise Application Development and Architectures
- ❖ Research Methodology
- ❖ Advanced Cryptography and Security Analysis

**amongst others**

**Undergraduate Courses Taught:**

- Introduction to Programming
- Procedural programming
- Data Structures and Algorithms
- Fundamentals of computing
- Object Oriented Programming
- Object Oriented Analysis and Design
- Logic Programming
- Mobile Application Programming
- Programming with C#
- Computer networks
- Software Engineering
- Operating Systems
- Multimedia systems and Graphics
- Database systems
- Computer Architecture
- Network Design and Implementation

**Programming languages –**

Pascal, C, C++, PHP, Java, Python, VB.NET, Prolog, C#, J2ME, Java Script, XDK

**Environments:** Custom Software Development, Mobile App Development, Web App Development

**Diploma level:**

- Object oriented Programming, Rapid Application Development, Computer skills and applications, Procedural Programming, Web development and Software Engineering

**Programming languages –** VB 6.0, C, C++, Java, HTML, CSS, VB Script

**5.1.2 Appraisal performance and Commendations**

- **Vice Chancellor’s Commendation** during the 1<sup>st</sup> MMUST Gala Dinner and 2015 Awards Ceremony-1<sup>st</sup> December 2015, MPH, MMUST
- Typically, 70% - 90% performance as evaluated by students
- Staff performance appraisal has been Exceeds Expectations year-by-year

**5.1.3 Scholarships**

- 2009-2011: MMUST Partial University Scholarship for MSc in IT, MMUST
- 2004-2008: Joint Admissions Board (JAB) and Higher Education Loans Board, Kenya for Undergraduate programme, MMUST

**5.1.4 Student Thesis Supervision**

I am currently co-supervising PhD and MSc students some at advanced stages of their research work. **NB:** DPS- Directorate of Postgraduate Studies. They include the following

| S/ No | Name                        | Level/ Institution | Thesis Title   | Status                      |
|-------|-----------------------------|--------------------|--|-----------------------------|
| 1     | Mr. Kennedy Ondimu          | PhD, MMUST         | Visual Analytics for Business Process Improvement in Healthcare  | Approved and Writing Thesis |
| 2     | Mr. Samson Munialo          | PhD, MMUST         | An Effort Estimation Method for Service Oriented Architecture Systems Based on Size Metrics                          | Proposal Approved by DPS    |
| 3     | Mr. John Ndia               | PhD, MMUST         | A Complexity Metrics Model for Analyzing the Maintainability of Sassy Cascading Style Sheets                         | Proposal Approved by DPS    |
| 4     | Mr. Michael Ujunju          | PhD, MMUST         | Resource Usage Control Approach for Secure Multi-Tenant Application Environments in Cloud Computing Systems in Kenya | Writing Proposal            |
| 5     | Mr. Shadrack Metto          | PhD, MMUST         | A Model for Security in Internet of Things for Smart Homes   | Writing Proposal            |
| 6     | Mr. Augustine Prince Ngomeh | MSc, MMUST         | Security Architecture in Mobile Banking in Kenya   | Approved Writing Thesis     |
| 7     | Mr. Hillan Rono             | MSc, MMUST         | An Interoperability Framework for E-Government Heterogeneous Information Systems, Kenya                              | Approved Writing Thesis     |
| 8     | Mr. Victor Kamina           | MSc, MMUST         | A Model for Cyber Security Vulnerability Assessment in County Governments, Kenya                                     | Approved Writing Thesis     |

|    |   |               |   |                                |
|----|---|---------------|---|--------------------------------|
| 9  | Mr. Samuel Shitote                            | MSc,<br>MMUST | Optimization of Content Management System to Improve Website Ranking in Organizations | <b>Approved Writing Thesis</b> |
| 10 | Mr. Adrian Oteng'i                            | MSc,<br>MMUST | Successful Factors for Mobile Learning Adoption in Kenyan Universities                | Writing Proposal               |
| 11 | Mr. Benjamin Kiprono ( <b>PhD IT, MMUST</b> ) | PhD,<br>MMUST | Deductive Tool for SOA Systems in Multilayers Architectures                           | Writing Concept                |

### 5.1.5 Thesis Examination

I have examined the following Master thesis in areas related to Information Technology:-

1. **Philip Kipkurui Bittok** (MMUST, 2017)- Critical Success Factors for Adoption of Cloud Computing in National Referral Hospitals in Kenya-MSc
2. **Perez Nelima** (MMUST, 2016)- Enhanced Model to Measure Information Systems User Satisfaction in Kenyan Universities-MSc
3. **Abdi Halima** (MMUST, 2016)- Influence of Information Communication Technology on dissemination of agricultural market information to vegetable farmers in Vihiga County, Kenya
4. **Khanda Jackson** (MMUST, 2016)- A Framework for Mobile Payment Adoption in Kenyan Secondary Schools-MSc
5. **Bethwel Kipchirchir Okello** (MMUST, 2015)- Evaluation of the Learnability Principles of Mobile-Wireless Information Systems' Application Software for Children in Kenya-MSc
6. **Kabii Cosmas Muthama** (MMUST, 2015)- A Framework to Evaluate the Impact of Open Source Software in a software Market in Kenya-MSc
7. **Emily Tarus** (MMUST, 2015)- Contribution of ICT to Extension Service Delivery for Horticulture Farmers in Uasin Gishu County, Kenya-MSc
8. **Chebet Willyster Mibei** (MMUST, 2014)- Integrating Computer Technology in learning Cell Biology in Secondary Schools in Kenya-MSc
9. **Peter Soita** (MMUST, 2014) - Factors Affecting Software Project Implementation in Public Universities-MSc

### 5.1.6 Student Innovations/ Projects

I am currently leading Software Incubation Research Group (SIRG'17) hosted in the School of Computing and Informatics, MMUST. Some of the successful Innovations include:

1. KTN Leo - 19th March 2018 - Makala ya Teknologia: Mwanafunzi wa MMUST aunda teknolojia mpya: **Accessible Via** <https://www.youtube.com/watch?v=6IkLpqZHCag>
2. Teknologia: Uvumbuzi unaotumia ujumbe wa simu kujua waliofika shuleni: **Accessible via** <https://www.youtube.com/watch?v=D17MF4beUMs>

## 5.2 FUNDED RESEARCH PROJECTS & CONSULTANCIES

### 5.2.1 Research Interests

ICT4D, Technology-Supported Learning, E-Science and E-Governance

### 5.2.2 Research Projects

#### a) Grant Proposals Applied:

- **Principal Investigator (Dr. Omieno K., Prof Oboko R., Dr. S. Ogara, & Dr. Kokonya D.):** A Multi-Disciplinary Research Grant Proposal by the title "**Enhancing ICT in Healthcare Organization: Culture, Challenges and Issues of technology Adoption and Implementation in Kenya**", for Funding by National Research Fund-Kenya (NRF) in 2017/208 FY; Amount: KShs. 19.6M
- **Co-Researcher (Dr. Ojera P, Dr. Barasa B.O, Dr. Otuya W., & Ngala C. & Dr. Omieno K):** A Multi-Disciplinary Research Grant Proposal by the title "**Creation of Food Hub in Kakamega County, Western Kenya**", for Funding by National Research Fund-Kenya (NRF) in 2017/2018 FY; Amount: KShs. 18.7M



b) Current Successful Grant Projects

- **Co-Researcher (Dr. Mugeni G, Prof Wabwoba F, Dr. Omieno K, & Prof. Karume S):** A Multi-Disciplinary Research Grant Proposal by the title “**A Model and Implementation Framework for Internet of Things (IoT) Based Big Data Analytics System for Disaster Prediction and Management**”, Funded by National Research Fund-Kenya (NRF) in 2016/207 FY; Amount Granted: KShs. 10.8M

c) Previous Projects

- **Principal Investigator-Dr. Karume S.(Director ICT, MMUST)**  
UNESCO-HP, Developing “**E-learning Content**” for E-waste management program (August 2011 to Nov. 2014).
- **Principal Investigator-Dr. K’Owino I, Dr. Karume S.**  
HP Catalyst Initiative, Masinde Muliro University of Science & Technology  
Computational Chemistry Grid project: “**Virtual Chemistry Lab- simulators**” (Sept. 2011 to August 2014)

5.2.3 Consultancies and Research

- **Chairperson**, Software Incubation Research Group” – **SIRG’17 MMUST**
- **Developed** Kibabii University, Kibabii University Website ([www.kibabiiuniversity.ac.ke](http://www.kibabiiuniversity.ac.ke) )
- **Director and Founder**, Kelsoft Technologies Ltd, IT solutions firm. [www.kelsoft.ac.ke](http://www.kelsoft.ac.ke)
- Bucodev, Community Development Programme, Busia-Kenya ([www.bucodev.org](http://www.bucodev.org) )

5.3 ADMINISTRATION AND RESPONSIBILITIES

a) **Ag. Dean**, School of Computing and Informatics, Masinde Muliro University of Science and Technology (**3<sup>rd</sup> January 2017 to Date**)

**Duties/ Responsibility**

- Articulating and Implementing the Mission and Objectives of the School
- Convening and Chairing School Board Meetings
- Represent the School of Computing in the Deans Committee, Senate and other Boards of the University as required
- Promoting and maintaining a conducive working environment within the School
- Planning and Budgeting for the School
- Preparing School of Computing and Informatics reports
- Overseeing Examinations as Chief Examiner in the School
- Managing Academic Programmes in the School as required by Senate
- Supervising and Appraising the performance of academic and other staff in the School
- Making recommendations with respect to discipline, probation, advancement, and promotion of academic staff within the School

**Some of Achievements**

- ❖ **Established** a working Memorandum of Understanding between University of Nairobi-School of Computing and Informatics and MMUST-School of Computing and Informatics and County Government of Kakamega-CHMT
- ❖ **Chaired** a Senate Committee in Writing Report that led to Restructuring of the Directorate of Postgraduate Studies (DPS), ODeL and SOLACE for service delivery
- ❖ **Developed** School of Computing and Informatics 2016-2020 Strategic Plan
- ❖ **Developed** Two (2) Draft Postgraduate programmes to be launched by January 2018: MSc in Computer Science, MSc in Information Systems.
- ❖ **Developed** proposal creating Research Group known as “**Software Incubation Research Group**” – SIRG’17 and Chair of the Research Group
- ❖ **Revised** Curriculum for Bachelor of Technology Education (Computer Studies) and **Approved** by Senate on 13<sup>th</sup> January 2017.
- ❖ Involved in the recruitment of Prof. John Gallagher (from UK) as Adjunct Professor of Computer Science

b) **Chairman**, Department of Computer Science, Masinde Muliro University of Science and Technology (**21<sup>th</sup> August 2014 to 2<sup>nd</sup> January 2017**)

**Duties/ Responsibility**

- Articulating and Implementing the Mission and Objectives of the Department
- Convening and Chairing Departmental Board Meetings
- Represent the Department in the Faculty, School, Institute, Centre or Board, Senate and other Boards of the University as required
- Promoting and maintaining a conducive working environment within the Department
- Planning and Budgeting for the Department
- Preparing Departmental reports
- Overseeing Examinations as Chief Examiner in the Department
- Managing Academic Programmes in the department as required by Senate
- Supervising and Appraising the performance of academic and other staff in the Department
- Making recommendations with respect to discipline, probation, advancement, and promotion of academic staff within the Department

**Some of Achievements**

- ❖ **Spearheaded** the Creation of School of Computing and Informatics (SCI) of Masinde Muliro University of Science and Technology.
- ❖ **Developed** BSc in Information Systems and Knowledge Management Programme for MMUST with first KUCCPS intake in Sept. 2016/2017.
- ❖ **Spearheaded** the development of Bachelor of Technology Education (Computer Studies/Maths) Programme with first KUCCPS intake in Sept. 2016/2017
- ❖ **Developed** TVET programmes: Diploma in Technology in Computer Systems and Diploma in Software Development Programme
- ❖ Ensured resumption of admission of MSc and PhD students in IT, at MMUST and currently has many postgraduate studies
- ❖ **Reviewed** 4 programmes: BSc in Computer Science, BSc in IT, MSc in IT and PhD in IT based on CUE standards and guidelines
- ❖ **Registered** MMUST as an Oracle Academy
- ❖ Spearheaded the recruitment of 3 Adjunct Professors in Computer Science: Prof. Patrick J. Ogao (Kenya), Prof. Sunday O. Ojo (SA) and Prof. Olugbara Oludayo (SA)
- ❖ Spearheaded recruitment of 4-teaching staff, as Lecturers in 2014/2015 academic year: Mr. Michael Ujunju, Ms. Dorothy Apondi, Mr. Jasper Ondulo and Dr. Samuel Liyala.
- ❖ Oversaw Furnishing computer laboratory with machines and furniture (N-Computing/Thin-Client Technology)
- ❖ **Member**, Joint Management Committee on Collaboration between Tswane University of Technology (SA) and MMUST (Kenya)

c) **Ag. Dean**, Faculty of Science, Masinde Muliro University of Science and Technology (**25<sup>th</sup> November 2014 to 28<sup>th</sup> November 2014**)

- ✚ Attend university meetings
- ✚ Chaired 1<sup>st</sup> Ad-Hoc Committee Meeting organizing for the 1<sup>st</sup> International Conference to be held in 2015

d) **Ag. Chairman**, Department of Computer Science, Masinde Muliro University of Science and Technology (**12<sup>th</sup> July 2014 to 20<sup>th</sup> August 2014**)

**Duties/ Responsibility**

- Attend senate meetings
- Convening and Chairing Departmental Board Meetings
- Represent the Department in the Faculty, School, Institute, Centre or Board, Senate and other Boards of the University as required
- Promoting and maintaining a conducive working environment within the Department
- Planning and Budgeting for the Department
- Preparing Departmental reports

e) **Ag. Chairman, Departmental Graduate Studies Committee**, Depart. of Computer Science (**Jan. 2014 to August 2014**)

**Duties/ Responsibility**

- Chairing DGSC meetings

- Board Member, School of Graduate Studies
- Scheduling for DGSC board meeting by Liaising with Chairman, Computer Science Dept.
- Organizing for graduate seminars during the period

#### **Some of Achievements**

- Organized three (3) departmental graduate seminars
  - Helped 6 PhD students graduate and several masters students in July 2014 and Dec 2014 graduations
- f) **Secretary to Departmental Graduate Studies Committee**, Depart. of Computer Science (**March. 2013 to August 2014**)
- Writing Minutes of DGSC proceeds
  - Scheduling for DGSC board meeting by Liaising with Chairman, DGSC
- g) **Coordinator, Research & Publications**, Depart. of Computer Science (**March 2013- Aug. 2014**)
- #### **Duties/ Responsibility**
- Organizing for departmental seminars and workshops
  - Coordinating research work in the department including postgraduate research
  - Coordinating exhibitions by department
  - Organizing research publications in the department
  - Developed proper ISO procedures and documents to aid in effective processing of postgraduate proposals and thesis, in the department.
- h) **Member, Seminars and Workshops**, Faculty of Science-MMUST (**March 2013-to Nov. 2014**)
- Organizing for seminars and workshops in the faculty of science
  - Developing strategic plan for seminars and exhibitions in the faculty
  - Assembling and disseminating research publications by the faculty members
- i) **Departmental Publication, Conference, Workshops and Exhibitions coordinator**, MMUST (**Feb. 2011 – Feb. 2013**)
- Involved in organizing ICT conference at MMUST
  - Organizing publications and exhibitions in the department
- j) **Secretary, MMUST Innovation Team (2012 to January 2014)**  
Aims at creating University short courses on innovation, Leadership and Professional development and ICT & Pedagogy
- k) **Departmental Examinations Coordinator (2010/2011 Academic year)**
- Appointed by COD the Diploma and Certificate Examinations Coordinator whereby I was tasked with streamlining overall examination processing in the department, MMUST

#### 5.4 OTHER ACTIVITIES/ACHIEVEMENTS

- **Member** of Scientific Committee Organizing for World Conference on Transformative Education, to be held on 26<sup>th</sup>- 2018<sup>th</sup> July 2018, MMUST
- **Member** of the Scientific and ICT and Publicity Sub-Committees organizing for The First Pan African Research Congress on Knowledge Generation and Dissemination, to be held on 17<sup>th</sup>- 22<sup>nd</sup> June 2018, MMUST
- **Chaired** Senate and Deans Committees (Appointed in January 2017) that led to Restructuring of Directorate of Postgraduate Studies, Directorate of Open Distance and E-Learning and SOLACE.
- **Created collaboration** between UoN School of Computing and Informatics and MMUST School of Computing and Informatics on HealthIT Project, December 2016
- Developed Draft MMUST Antiplagiarism Policy to be approved by University Senate
- Developed Two (2) new TVET Diploma programmes: Diploma in Software Development and Diploma in Technology in Computer Systems
- Participated in Developing proposed BSc in Computer Security and Forensics programme
- **Programme Leader** for BSc in Information Systems and Knowledge Management, MMUST

## 6. PROFESSIONAL AFFILIATIONS AND OTHER ACTIVITIES

- A Professional Member, Association of Computing Machinery (ACM).  
Member No: **5904126**
- Board Member, Busia Community Development Programme, a Non-Gov't Organization

## 7. PUBLICATIONS, CONFERENCES AND WORKSHOPS

### 7.1. PUBLICATIONS AS LECTURER

#### 7.1.1. Books and Book Chapters & Modules

1. **Omieno K. K (2018)**. *Evaluating the Usability Maturity of Enterprise Resource Planning Systems,* for the upcoming book, *"Metrics and Models for Evaluating the Quality and Effectiveness of ERP Software."* IGI Global.
2. **Omieno K. & Matoke N (2014)**. *Fundamentals of Computing: A Simplified Approach.* A University Teaching Book. Published by Scholar's Press, ISBN: 978-3-639-70591-1
3. **Omieno K, Otanga D, & Rambim D (2015)**. *BCS 110-Fundamentals of Computing- University-wide e-Module.* Published by Masinde Muliro University of Science & Technology

#### 7.1.2. Refereed Journal papers

1. **Paper Accepted: Omieno K.K. (2017)**. An Approach to Evaluate Usability Maturity of e-Learning Systems: A User's Perspective. *IRACST-International Journal of Computer Science and Information Technology & Security.* ISSN 2319 5940 Vol 5. November- December 2017 Issue
2. **Omieno K.K & Rodriguez A. (2016)**. Usability Maturity Model and Assessment Tool for Virtual Learning Systems. *International Journal of Advanced Research in Computer and Communication Engineering.* (E-ISSN 2278-1021/ ISSN 2319 5940) Vol 5. No.12 December 2016 pp:78-84 DOI 10.17148/IJARCCCE.2016.51217
3. Omol, E.J., Abeka, S.O., **Omieno, K.K. (2016)**. Relevance of Demographic profile on Acceptance of Mobile Money Payment in Enterprise Management. A Case of MSEs in Kisumu City, Kenya. *MR Journal of Information Science and Technology;* ISSN: 2518-8844. Vol. 1, No. 1, pp. 35 - 43.
4. Omol, E. J., Abeka, S. O., Ogalo, J. O., **Omieno, K.K. (2016)**. Mobile Money Payment Acceptance Model in Enterprise Management: A Case Study of MSE's in Kisumu City, Kenya. *MR Journal of Information Science and Technology;* ISSN: 2518-8844. Vol. 1, No. 1, pp. 1 – 12
5. **Omieno K.K, Raburu P. & Raburu G. (2015)**. Performance-Based Usability Maturity Assessment Framework for VLS in Universities. *International Journal of Advanced Research in Computer and Communication Engineering.* (E-ISSN 2278-1021/ ISSN 2319 5940) Vol 4. No.12 December 2015 pp:6-14 DOI 10.17148/IJARCCCE.2015.41202
6. Shirandula A.H; Rono L. & **Omieno K (2015)**. Evolving Information Technology: Opportunities and Challenges. *International Journal of Computers and Technology.* ISSN:2277-3061 Volume 14 No. 8,May-2015 pp: 6001-6008
7. **Omieno K.K, & Raburu G. (2014)**. Usability Maturity Indicators for Virtual Learning Systems. *Journal of Emerging Trends in Computing and Information Sciences.* (E-ISSN 2218-6301/ ISSN 2079-8407) Vol 5. No.5 May 2014 pp:377-382
8. Kitone K.M & **Omieno K.K (2013)**. Role of Information Systems in Organizational Business Process. *International Journal of Management and Information Technology.* ISSN:2278-5612 Volume 8 No. 1,Dec-2013 pp: 1214-1220  
<http://cirworld.com/index.php/ijmit/article/view/813200/2225>
9. Okinyi M. O, **Omieno K.K, & Kitone K. M. (2013)**. The Value of Human Resource Information Systems in Human Resource Management *International Journal of Computers and Technology.* ISSN:2277-3061 Volume 11 No. 10,Dec-2013 pp: 3085-3089  
<http://cirworld.com/index.php/ijct/article/view/3190>



7.1.3. **Upcoming Conference Accepted papers**

- i). **Omieno, K.K** (2018). Role of ICT in Improving Quality of Education in Kenya. *World Conference on Transformative Education, 26<sup>th</sup>- 2018<sup>th</sup> July 2018, MMUST*
- ii). **Omieno, K.K** (2018). Effective Adoption Indicators of Management Information Systems in the Kenya's Economy. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17<sup>th</sup>-22<sup>nd</sup> June 2018*
- iii). **Omieno, K., Ogara S & Ronoh H. (2018)**. A Review of Cybercrime Law and Practice: A Kenya's Perspective. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17<sup>th</sup>-22<sup>nd</sup> June 2018*
- iv). **Munialo S & Omieno, K. (2018)**. A Review of Software Effort and Cost Estimation Methods. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17<sup>th</sup>-22<sup>nd</sup> June 2018*
- v). **Ronoh H., Omieno, K. & Mutua S. (2018)**. Expandability of e-Government Heterogeneous Information System database to achieve Interoperability. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17<sup>th</sup>-22<sup>nd</sup> June 2018*
- vi). **Shitote S & Omieno, K. (2018)**. Investigating factors that determine performance of content management systems for effective dissemination of knowledge in organizations. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17<sup>th</sup>-22<sup>nd</sup> June 2018*
- vii). **Ondimu K., Muchiri G., Omieno, K. & Lukundu I. (2018)**. Improving the Healthcare Process: A Process Mining and Visual Analytics Approach. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17<sup>th</sup>-22<sup>nd</sup> June 2018*

7.1.4. **Past Conference Presentations**

- i). **Omieno, K.K, Raburu G, Raburu P (2015)**. A Usability Maturity Framework for Virtual Learning Systems. International Conference ....., JOOUST 7th and 8th June 2015

**7.2. PUBLICATIONS AS ASSISTANT LECTURER**

**7.2.1. Books and Book Chapters & Modules**

1. **Kelvin Omieno (2013)**. Rapid Application Development. A University teaching module. E-Learning Model, Published by Masinde Muliro University of Science & Technology
2. **Kelvin Omieno (2012)**. A Framework to Measure Intranet Usage in Kenyan Public Universities: Concepts, Design and Practices of Intranet usage. LAP Lambert Academic Publishing. ISBN: 978-3-659-22565-9

**7.2.2. Refereed Journal Papers**

1. **Omieno K.K, Oenga L. & Raburu G. (2013)**. Usability Maturity Model for VLS: Conceptual Framework. *International Journal of Computers and Technology*. ISSN:2277-3061 Volume 6 No. 2, May-2013 pp: 317-320 <http://cirworld.com/index.php/ijct/article/view/1229>
2. **Omieno K.K & Oenga L & Matoke N. (2013)**. The Use of Social Networking Sites in Education. Accepted for publication in *International Journal of Computers and Technology*. ISSN:2277-3061
3. **Wabwoba F., Mutua S. M & Omieno K.K. (2013)**. A review of the role of Information and Communication Technology in meeting the millennium development goals and the vision 2030 in Kenya. *East Africa Journal of Engineering, Science and Technology*. Vol.1 No.2 ISSN: 2219-8598 Pp: 127-133
4. **Omieno K.K, Wabwoba F. & Matoke N. (2013)**. Virtual Reality in Education: Trends and Issues. *International Journal of Computers and Technology*. ISSN:2277-3061 Volume 4 No. 1, Jan - Feb, 2013 pp: 38-43 <http://cirworld.com/index.php/ijct/article/view/717>

5. Wabwoba F., Wanyembi G., Omuterema S. & **Omieno K.** (2013). Green ICT Readiness Model for Developing Economies: Case of Kenya. *22(IJACSA) International Journal of Advanced Computer Science and Applications*. U.S ISSN : 2156-5570(Online) U.S ISSN : 2158-107X(Print) Vol. 4, No.1.  
[http://thesai.org/Downloads/Volume4No1/Paper\\_8-Green ICT Readiness Model for Developing Economies Case of Kenya.pdf](http://thesai.org/Downloads/Volume4No1/Paper_8-Green ICT Readiness Model for Developing Economies Case of Kenya.pdf)
6. **Omieno K. K** & Khabamba I (2012). ICT in Disaster Risk Reduction: Kenyan Experience. *International Journal of Disaster Management and Risk Reduction*. ISSN: 1992-2744 Vol. 4(2).  
[http://www.admcrk.org/journal/abstract\\_14.php](http://www.admcrk.org/journal/abstract_14.php)
7. **Omieno K.K.** (2012) Integrating Virtual Reality in Education using Intranet Grids. *IOSR Journal of Engineering*. ISSN-2250-3021. Vol. 2(4) pp: 644-649  
[http://www.iosrjen.org/Papers/vol2\\_issue4/X024644649.pdf](http://www.iosrjen.org/Papers/vol2_issue4/X024644649.pdf)
8. **Omieno K.K.** & Wanyembi G. (2012) Managing Knowledge Sharing: Mutual understanding, Strategic Alignment and Contribution of Corporate Intranets in Knowledge Management in Kenyan Public Universities. *International Journal of Science and Technology*. ISSN-2224-3577. Vol.2.No.1.Pp:51-54 [http://ejournalofsciences.org/archive/vol2no1/vol2no1\\_8.pdf](http://ejournalofsciences.org/archive/vol2no1/vol2no1_8.pdf)
9. **Omieno K.K.**, Oteng' S.B.B & Khabamba I. (2012). Towards the negative roles of social networking sites on society. *International Journal of Disaster Management and Risk Reduction*. ISSN: 1992-2744 Vol.4. No.1 [http://www.ijdmrr.info/paper\\_1.pdf](http://www.ijdmrr.info/paper_1.pdf)

### 7.3. PUBLICATIONS AS TEACHING ASSISTANT

#### 7.3.1. Refereed Journal Papers

1. **Omieno K.K.**, Wanyembi G & Mbugua S. (2012) Integrating Virtual Worlds and Virtual Learning Environments in Schools in Developing Economies. *International Journal of Information and Communication Technology Research*. ISSN-2223-4985. Vol.2No.1.Pp:17-21  
[http://esjournals.org/journaloftechnology/archive/vol2no1/vol2no1\\_3.pdf](http://esjournals.org/journaloftechnology/archive/vol2no1/vol2no1_3.pdf)
2. Karume S.M & **Omieno K.K.** (2011). Synergizing E-infrastructures Initiatives to Foster e-Research in Higher Education Institutions in Africa. *Journal of Emerging Trends in Computing and Information Sciences*. E-ISSN 2218-6301/ISSN:2079-8407. Vol.2.No.11.Pp:632-640  
[http://www.cisjournal.org/journalofcomputing/archive/vol2no11/vol2no11\\_12.pdf](http://www.cisjournal.org/journalofcomputing/archive/vol2no11/vol2no11_12.pdf)
3. **Omieno, K. K.**, Kilwake J.H. & Wabwoba F. (2011) Promoting Quality Outcomes in Higher Education using new Learning Technologies. *Journal of Education and Social Sciences*. ISSN:2223-490X, Vol. 1. No.1. Pp: 145-151 (offline)
4. Wabwoba F., **Omieno K.K.**, Simiyu C.N. & Sisungu Z.W. (2011). The role of wireless technologies in taking education to rural villages in developing countries. *International Journal of Information and Communication Technology Research*. ISSN-2223-4985. Vol.1No.7.Pp:300-305  
[http://esjournals.org/journaloftechnology/archive/vol1no7/vol1no7\\_2.pdf](http://esjournals.org/journaloftechnology/archive/vol1no7/vol1no7_2.pdf)
5. **Omieno, K.K.** & Karume M.S. (2011). Adaptability of intranet grids in HEIs to leverage Africa Connect Initiative. *International Journal of Information and Communication Technology Research*. ISSN-2223-4985. Vol.1No.7.Pp:292-299  
[http://esjournals.org/journaloftechnology/archive/vol1no7/vol1no7\\_1.pdf](http://esjournals.org/journaloftechnology/archive/vol1no7/vol1no7_1.pdf)

#### 7.3.2. Refereed Conference Proceedings

1. **Omieno, K.K.**, Karume M.S., & Ogao J.P (2011) A framework to measure intranet Usage in HEIs: A case of Selected Kenyan Universities. *Proceedings of 7th International Conference on Computing and ICT Research in Special Issues on ICT for Development 2011*. ISSN:2223-490-8-1.Pp-182-197 <http://cit.mak.ac.ug/jccir/downloads/ICCIR11.pdf>

2. **Omieno, K.K.**, Karume M.S., & .Ogao J.P (2011) The Grid as a driving force for e-learning and OERs. *Proceedings of 7th International Conference on Computing and ICT Research in Special Issues on ICT for Development 2011*. ISSN: 2223-490. Pp-298-312. <http://cit.mak.ac.ug/iccir/downloads/ICCIR11.pdf>
3. Karume S., & **Omieno K.** (2011). Grid computing technology as a driving force for E-learning and Open Educational Resources in Africa. *IST-Africa 2011 Conference Proceedings, Paul Cunningham and Miriam Cunningham (Eds), IIMC International Information Management Corporation, 2011, ISBN: 978-1-905824-24-3*
4. **Omieno, K.K.** (2010). ICT for Information economy through network-optimized computing. *Proceedings of the 1st Engineering, Science and Technology conference, Kenya 2010*. ISBN: 9966-779-11-6. pp: 156-160

### 7.3.3. Conference Presentations

1. **Omieno, K.K.**, Khabamba I 2012. ICT in Disaster Risk Reduction: Kenyan Experience. International conference of Disaster Risk Reduction and Conflict Resolution for Sustainable Development 18th-20th July, 2012,MMUST, Kenya
2. **Omieno K.K.** & Wanyembi G 2012. Corporate Intranet as a vital tool for Knowledge management in Kenyan Universities. 13th Strathmore University Annual ICT Conference. ICT and Society: Adaptive Computing and Technologies. 7th and 8th September 2012.
3. **Omieno K.K.** 2012. Virtual Reality in Education: Trends and Issues. 13th Strathmore University Annual ICT Conference. ICT and Society: Adaptive Computing and Technologies. 7th and 8th September 2012
4. Karume S.M. & **Omieno K.K.** (2011). The grid as a driving force for e-learning and OERs in Africa. Oral presentations of 3rd ACDE Conference & General Assembly on Bridging the Development Gap in Africa through Open and Distance Learning 12th to 15th July, 2011, Dar es Salaam, Tanzania. [http://www.out.ac.tz/acde/index.php?option=com\\_content&view=article&id=64&Itemid=81](http://www.out.ac.tz/acde/index.php?option=com_content&view=article&id=64&Itemid=81)
5. **Omieno K. K.**, Karume S.M., & Ogao P.J (2011). Use of intranet grids in higher education institutions to leverage Africa grid connect Initiative.12th Strathmore University Annual ICT Conference. 2<sup>nd</sup> -3<sup>rd</sup> September 2011.
6. **Omieno, K.** & Wanyembi, G. (2010). Managing Knowledge Sharing: Mutual understanding, Strategic alignment and contribution of corporate intranets in Kenyan public Universities. Conference proceedings of 11th Strathmore University ICT conference, 2010, Kenya
7. **Omieno, K.K.** & Wanyembi, G. (2010). A Framework to measure corporate intranets use in institutions of higher learning: Case of Kenyan public Universities. Conference proceedings of 11th Strathmore University ICT conference, 2010, Kenya
8. Wabwoba, F. & **Omieno, K.** (2010). The Role of wireless technologies in taking education to rural villages in developing countries. Conference proceedings of 11th Strathmore University ICT conference, Nairobi, Kenya, 3-4 September, 2010, Kenya
9. Karume, S. & **Omieno, K.** (2010). Open knowledge resources and Research: The role of grid computing for knowledge creation and sharing, Proceedings of the 2nd International conference on Internationalization of Higher Education and Research in Africa: Responding to Opportunities and Challenges, Kampala, Uganda. 4th -5th November, 2010. <http://www.anienetwork.org/content/2nd-anie-annual-conference-presentations-kampala-uganda-4-5-november-2010-1>

#### 7.4. REVIEWER FOR INTERNATIONAL JOURNALS

Omieno Kelvin is a reviewer with three International Journals:

- International Journal of Computers and Technology <http://cirworld.com/index.php/ijct/index>
- European Journal of Science and Engineering (EUJSE)  
[http://www.journalsgate.com/journalsgate/index.php?route=product/category&path=92\\_98](http://www.journalsgate.com/journalsgate/index.php?route=product/category&path=92_98)

#### 7.5. WORKSHOPS/ SEMINARS/ CONFERENCES

##### 7.5.1. Workshop/Seminars

- i). MoH and Universities Health Information Research Consultative Workshop Organized by HealthIT Project 12th – 13th March 2018 in Homa Bay
- ii). Workshop on DHIS2- Health Information System organized by HealthIT, University of Nairobi and Ministry of Health, Egon Hotel, Thika, 18<sup>th</sup> -22<sup>nd</sup> December, 2017
- iii). Workshop on Review of MMUST 2015-2020 University Strategic Plan 10<sup>th</sup> -11<sup>th</sup> November 2017, Golf Hotel, Kakamega
- iv). Organized for the 1<sup>st</sup> School of Computing and Informatics Inaugural Postgraduate Seminar, MMUST SPD 004, 27<sup>th</sup>-28<sup>th</sup> April 2017.
- v). Workshop on Africa Computer Human Interaction (AfriCHI'2016), University of Nairobi Towers, Nairobi, 21<sup>st</sup>-25<sup>th</sup> November, 2016
- vi). ISO 9001:2008 Standard and QMS Continual Improvement Training, Bishop Stam, Aug 29-30, 2016
- vii). Organized for 5<sup>th</sup> MMUST ICT Post-Graduate Seminar 29<sup>th</sup> March 2016- SPD 004, Masinde Muliro University of Science and Technology
- viii). Attended TVET stakeholders workshop at Bishop Stam, Kakamega for TVET Programmes March 2016
- ix). Attended Workshop on Module Writing by MMUST in Busia Farm view 7<sup>th</sup>-9<sup>th</sup> Sept. 2015
- x). Attended workshop training on Grant proposal writing by MMUST in Busia ATC, 1<sup>st</sup> -5<sup>th</sup> June 2015
- xi). Attended Workshop on Technical, Vocational, Education and Training in MCU, MMUST, 26<sup>th</sup> May 2015
- xii). Attended Training workshop on Confidentiality and Security of Information by NSIS, MMUST, 20<sup>th</sup>- 22<sup>nd</sup> May 2015
- xiii). Attended workshop on Deans, Directors, Coordinators and HODs Induction organized by MMUST University Management, Bishop Stam- 28<sup>th</sup> April-29<sup>th</sup> April 2015
- xiv). Organized for an International Women's Day Workshop, for Computing Students by Safaricom, MMUST, 19<sup>th</sup> March 2015
- xv). Organized for Public Lecture on Internet Critical Resources and Governance: The role of Academia by ICANN, MMUST, 29<sup>th</sup> January 2015
- xvi). Organized for Workshop on Catalyzing employability skills by Microsoft and ACWICT, MMUST, 23<sup>rd</sup> January 2015
- xvii). Published an Article in MMUST Magazine-“ Eye on MMUST” on “*ICT Usage for Information Administration in MMUST*” October/December 2014 Pp: 19
- xviii). Organized for Workshop on Mobile BootCamp for mobile applications development and USSD by iHub, Ushahidi and Africa's talking, MMUST, 14<sup>th</sup> -15<sup>th</sup> November, 2014
- xix). Auditors Training Workshop at Bishop Stam on ISO 9001:2008 and QMS Documentation- by Apex Management Systems Consultants 3<sup>rd</sup> -5<sup>th</sup> November 2014
- xx). Participated in 1<sup>st</sup> ICT seminar on the Theme: Emerging Trends in ICT held at MKU-Kakamega 16<sup>th</sup> Nov 2013
- xxi). 3<sup>RD</sup> Departmental Seminar, Computer Science, MMUST. Paper Presented “**Which Way to Go: Open Access or Subscriptions Publications?**” 27<sup>th</sup> June 2013
- xxii). Organized 2<sup>ND</sup> Departmental Seminar, Computer Science, MMUST. Paper presented “**The Importance of Research: Goals and Implications**” 28<sup>th</sup> March 2013
- xxiii). Workshop on Module Writing organized by School of Open Learning and Continuing Education (SOLACE), held in Busia-Kenya FarmView Hotel, February 2013. Module developed: DIT 052 Rapid Application Development



- xxiv). Workshop on the changing face of strategic management: development within a difficult global economy through technology, creativity and innovation for strategy policy implementation, Imperial Hotel Kisumu-Kenya by DALC-MIT, 8th Dec, 2011
- xxv). Workshop on HIV and AIDs Integration in University, held at Busia ATC, Kenya from 4th July-6th July, 2012
- xxvi). 2nd Symposium on Academic Linkages on the theme: Academic linkages: strategies, opportunities, challenges and future. Technical paper presented “**Improving Virtual Knowledge Transfer: Strategies and Practice**”, 3rd December, 2011, Masinde Muliro University of Science & Technology  
[http://www.mmust.ac.ke/index.php?option=com\\_content&task=view&id=376&Itemid=203](http://www.mmust.ac.ke/index.php?option=com_content&task=view&id=376&Itemid=203)
- xxvii). Published an Article in MMUST Newsletter on “**New Learning Paradigms: Why choose online Education at MMUST?** Volume 1, Issue 12 July-August 2011
- xxviii). ISO 9001:2008 Training in Quality Management, MMUST, March 8-9, 2011 by KEBS
- xxix). Workshop on Internationalization of higher education, ANIE workshop, Munyonyo-Resort, Kampala, Uganda, November 2- 3, 2010
- xxx). Teal –Research4Life and Prota Training Workshop, Masinde Muliro University, Kenya, May, 6 - 7, 2010

#### 7.5.2. Seminar Talks/Presentations

1. Presentation on “**Preparing for Job market, Technologies Required and How to be Marketable in Dynamic Environment**” , Career Week, SCI- 12<sup>th</sup>-15<sup>th</sup> February 2018, MMUST

#### 7.6. HONORS AND AWARDS

- a) 2017 Certificate of Appreciation by the Deputy Vice Chancellor, Academic and Student Affairs for Excellent organization during 12<sup>th</sup> MMUST Graduation on 15<sup>th</sup> December 2017
- b) 2017 Certificate of Participation as a Team Leader and Module Writer for CSC 109: Computer Applications Module for University Level use
- c) 2017 Certificate of Participation as a Team Leader and Module Writer for BCS 101: Fundamentals of Computing Module for University Level use
- d) 2016 Certificate of Participation in AfriCHI Workshops, Nairobi, Kenya
- e) 2015 Certificate of Participation in TVET workshop
- f) 2015 Certificate of Publication in Journal International Journal of Advanced Research in Computer and Communication Engineering
- g) 2015 Certificate of Participation in Module Writing by MMUST
- h) 2015 Certificate of participation in Deans, Directors, Coordinators and HODs Induction, by MMUST, Kenya
- i) 2014 Certificate as Internal Quality Assurance Auditor, by KEBS
- j) 2012 Certificate of participation in publishing article in IOSR Journal of engineering
- k) 2012 Certificate of participation in International Conf. on Disaster Risk Reduction, MMUST
- l) 2011 Certificate of participation in 1st Engineering, Science & Technology conf., MMUST.
- m) 2010 Certificate for completion of TEAL training, MMUST, Kenya
- n) 2008 Certificate for Completion of Database and Actuate Training, G7 Systems Kenya.
- o) 2007 Certificate for Industrial Attachment at G7 Systems Kenya.
- p) 2007 Certificate of participation: Budalang'i Constituency Education Day: Topic Controlling Aids among Youths in Secondary Schools, Busia, Kenya.
- q) 2007 Certificate for participation in IEEE exhibition by Centurion Systems, Nairobi, Kenya
- r) 2007 Award of First runners up in IEEE exhibition done at MMUST, Kenya

#### 7.7. OTHER PERSONAL ATTRIBUTES

- ❖ Team- work and Self-determination
- ❖ Experience in the development of web-based database systems

- ❖ Willingness to travel both regionally and internationally.
- ❖ Able to establish and maintain professional contacts with relevant people and organizations.
- ❖ Ability to think logically and implement solutions to problems.
- ❖ Good communication ability in English, spoken and written.
- ❖ Excellent interpersonal communication and good personal organization skills, including skills in mentoring and capacity building.
- ❖ Good judgment and willingness to take initiative; ability to work under pressure often to meet tight deadlines without compromising the quality of deliverables

## 8. REFERENCES

✚ Prof. Egara Kabaji, Professor & Ag. Principal Turkana University College, A Constituent College of Masinde Muliro University of Science & Technology, Box 190 Kakamega 50100 Kenya.

Email: [ekabaji@gmail.com](mailto:ekabaji@gmail.com)  
Tel: 0722-646539

✚ Dr. George Raburu, Senior Lecturer, School of Informatics and Innovative Systems, Jaramogi Oginga Odinga University of Science and Technology.

E-mail: [graburu@yahoo.com](mailto:graburu@yahoo.com)  
Tel: 0700 911 917

✚ Prof. Joseph K. Rotich, Deputy Vice Chancellor Administration and Finance, Masinde Muliro University of Science & Technology, Box 190 Kakamega 50100

Email: [jrotich@mmust.ac.ke](mailto:jrotich@mmust.ac.ke)  
Tel: 0729 717466

SIGN:...



April 18 : Dr. Kelvin K. Omieno, Ph.D