

## Factors Influencing Utilization of Library E-Resources in Academic Delivery: The Case of Multimedia University of Kenya

Diki, P.M

Meru University of Science and Technology, KENYA

**Correspondence:** *pdiki@must.ac.ke*

### Abstract

*The study investigated utilization of library e-resources for academic delivery among faculty members of the Multimedia University of Kenya. The study sought to (a) Establish the benefit of library user education in library e-resources utilization; assess utilization frequency of library e-resources; explore the impact of utilizing library e-resources and identify the factors that hinder utilization of library e-resources. The study was informed by Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology theoretical frameworks. The study used descriptive survey research design with a population sample of seventy-One. Data collected using questionnaires distributed to faculty and analyzed using; Statistical Package for Social Sciences (SPSS) software. Majority of the respondents rarely visited the library to access the e-resources since they have access to them from their offices or anywhere within the university. The study also revealed that the faculty members adopted e-resources for their teaching and learning and it greatly impacted their academic delivery. The major challenges faced when accessing and utilization of digital information was slow Internet, lack of adequate computers, lack of awareness and ICT skills. It is recommended that university stakeholders should formulate policies and ensure extensive training is offered to library users and provide hardware and software to increase reliability of internet connectivity and user awareness of e-resources services through effective marketing and promotion strategies to enhance utilization of e-resources by faculty to support academic delivery.*

**Keywords:** Utilization, E-resources, Academic delivery

Received:  
June 23,  
2022

Accepted:  
Sept 19,  
2022

Published  
: 9<sup>th</sup> Nov  
2022

## Background of the Study

In modern day academic libraries, electronic resources are crucial academic tools which compliment print based information resources as academic tools. Where library users are restricted because of geographical location and finances, e-resources still provide access to the information needed. There is currency in information contained in e-resources, because they are frequently updated (Perpetua, 2012). Instruction and research rely on what skills an individual has and the appropriate information is accessible to faculty members. Library user education takes more than good information searching skills (Allison, 2010). Availability and usage of library e-resources in the modern time has been made possible by the advent of Information Communication Technology (ICT). In this digital era the advent of ICT has posed challenges to academic libraries in their attempt to meet their library clients' user needs. Library users are thus exposed to various e-resources through the internet and for this, academic libraries are now investing a lot of monies on e-resources subscription (Swain & Panda, 2009). According to Shulling (2007), many university libraries have gradually adopted e-resources to become a major information resource.

## Statement of the Problem

In universities worldwide today, access to library e-resources is a major requisite for academic delivery. Through learning, teaching and research, universities have become the centres for the propagation and generation of knowledge.

Multimedia University of Kenya library, like other academic libraries in Kenya, has invested heavily in acquisition of books, non-book materials and e-resources. To ensure access to e-resources the library has made significant investments with an annual budget for subscription and maintenance of the e-resources. The library has thus subscribed to thousands of e-resources through the KLISC programme. Despite the many advantages like authoritativeness, timeliness and accurate literature that are derived from adoption of e-resources in academic pursuits, there is low utilization of the e-resources by faculty compared to students and non-teaching staff. The library has rich e-resources package which include, journals and e-books, full text electronic, bibliographic databases and routinely conducts current awareness services on availability of the e-resources and training to its users on how to effectively access and utilize the resources. That utilization by faculty has not been optimal is a matter of concern to the university library management and other stakeholders. This study investigated utilization of e-resources for academic

delivery by faculty of multimedia University with the view to identifying factors leading to utilization and to recommend the way forward.

### Objectives of the Study

This study sought to; (i) determine the benefit of libra user education on library e-resources utilization by faculty at Multimedia University of Kenya (ii) assess frequency of utilization by faculty (iii) explore the effects of utilizing theresources for by faculty and (iv) identify the factors that hinder utilization by faculty.

### Literature Review

#### *Role of user education on e-resources, frequency of utilization and impact*

Many researchers have conducted studies on awareness and use and of electronic resources. Interestingly, previous reports have indicated that search engines like Google were highly utilized compared to other electronic resources (Manda 2014, Rehman and Ramzy 2004). Use of these resources can presumably be enhanced through creation of awareness on existence and user training on retrieval and application of the said resources for research and academic delivery.

According to Deng (2010), Australian universities have effectively adopted utilization of e-resources into teaching, learning and research due to advancement of ICT infrastruced and the fact that adoption is and utilization of the said resources is a common practice in Australia.

Perception of the value of the e-resources is a major factor that determines whether or not the faculty would utilize the e-resources for research and academic delivery, in that one can only utilize what they find relevant to their needs. The purpose for which the library users utilized various resources is what has prompted many researchers to investigate the subject (Ali 2007, Madhusundan 2010). Use of these resources by faculty have been closely associated with availability of skilled library staff, technical support and security of e-resources as well as user education and availability of ICT infrastructure and reliability of internet (Armstrong 2011). A London-based International African Institute (IAI) carried out a survey on the current situation of utilization of e-resources among universities in African and observed that use of e-resources was hindered by cuts in library budgets, insufficiency of ICT infrastructure, reliance on donor support and hosting or irrelevant resources (Kisiedu, 2009).

*Technology Acceptance Model & Unified Theory of Acceptance and Use of Technology (UTAUT)*

One of the theories associated with technology adoption and use is the Technology Acceptance Model, TAM (Davis 2003). The model postulates that user behavior towards adoption of technology is affected by external variables namely perceived usefulness and ease of use. Thus adopting technology is influenced directly or indirectly by user intentions, approach, anticipated usefulness and perceived ease of use as well as peripheral factors affecting objectives and actual utilization through communicated effects on intended purpose and perceived ease of use (Davis 2003)

This study was also informed by UTAUT model. Thus according to Oye (2012) indicated that the Technology Acceptance Model (TAM) is only able to predict the success of technology adoption by 30 percent and its expansion can only predict 40 percent, while UTAUT effects on moderating factors have increased the efficiency of prediction to 70 percent which is an important progress over the previous models.

**Methodology**

Research Design: A descriptive survey design was used. Quantitative and qualitative data was collected and used to establish a relationship between the study variables.

Population and Sample: The population in this study comprised five faculties of the Multimedia University of Kenya namely faculty of computing and Information Technology, Faculty of Engineering, Faculty of Business and Law, Faculty of Media and Communication and Faculty of Science and Technology (Table 1).

**Table 1: Study population**

<b>Faculty</b>	<b>Total Members</b>
Faculty of Computing and Information Technology	38
Faculty of Engineering	30
Faculty of Business and Law	56
Faculty of Media and Communication	60
Faculty of Science and Technology	19
<b>Total</b>	<b>203</b>

**Sampling and Sampling Procedure:** Sample population was 71 faculty (respondents) drawn from the five faculties of Multimedia University of Kenya (table 1) based on the Israel (2003) model. The model takes sample size for  $\pm 3\%$ ,  $\pm 5\%$ ,  $\pm 7\%$  and  $\pm 10\%$  for Precision Levels Where Confidence Level is 95% and  $P=.5$ . Going by the model, if  $\pm 10$  was taken for precision when the population is 203, the sample was 71.

**Data collection and Analysis:** Data was collected using closed and open ended questionnaires physically distributed to faculty. Quantitative data was coded, analysed and analysed using Statistical Package for Social Sciences (SPSS) software and presented in form of graphs, charts, tables and percentages (tables 2,3,4 and figures 1, 2 and 3)

## Results and Discussion

### *Demographic Information of Respondents*

The study response rate was 81%, Seventy-One (71) questionnaires were distributed with a return rate of 58%. The distribution by gender was consisted of 47 (81.0%) males and 11 (19.0%) females. Faculty of Media and Communication and Faculty of Business and Law registered the highest number of respondents both at 15 (25.9%) respectively, Engineering 10 respondents (17.2%) Science and Technology 9 (15.5%), and Faculty of Computing and Information Technology 8 (13.8%) respondents (table 2).. 55.2% of respondents were lecturers and 1.7% professors

**Table 2: Respondents teaching position**

Rank	Frequency	%
Tutorial Fellow	12	20.78
Lecturer	32	55.2
Senior Lecturer	9	15.5
Associate Professor	4	6.9
Professor	1	1.7
<b>Total</b>	<b>58</b>	<b>100</b>

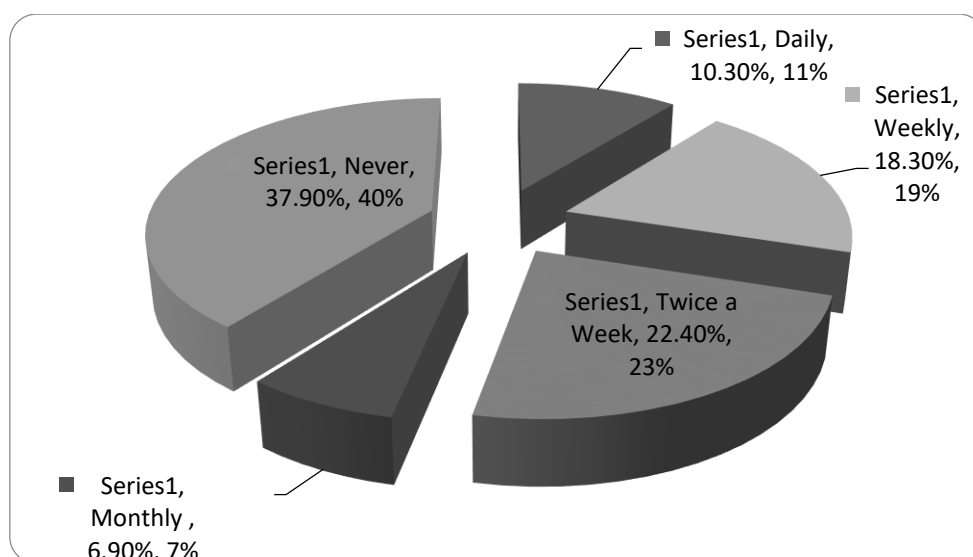
There are great benefits resulting from creation of awareness and training for faculty.. 10.3% of respondents indicated that they had benefitted from user training offered by library staff on how to access and utilize the e-resources. 25.9% indicated that they were made aware of the existence of the e-resources and the categories of e-resources the library has subscribed to. 13.8% respondents indicated that user education enabled them acquire the technical knowhow and skills needed to accessing and utilize the e-resources for research and curriculum delivery.

**Table 3: Benefits of library user education**

<b>Benefit</b>	<b>Frequency</b>	<b>%</b>
Access to knowledge	6	10.3
Created awareness	15	25.9
Tutored on how to access	8	13
Didn't indicate	29	50
<b>Total</b>	<b>58</b>	<b>100</b>

*Frequency of access to library e-resources*

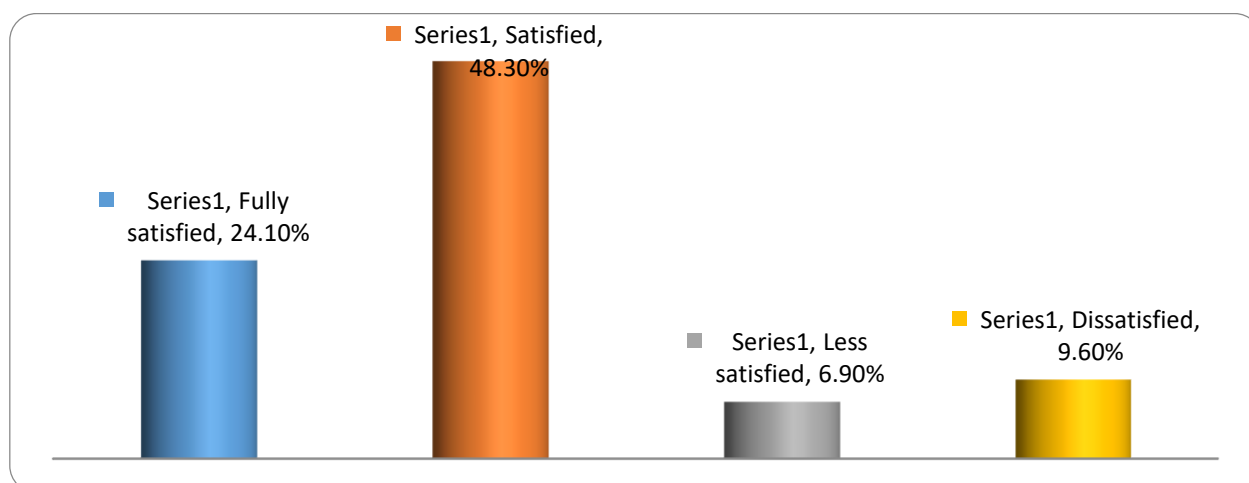
The study sought to establish the respondents' rate of visiting the library to access and utilize electronic resources. Results showed that 37.9% respondents had never visited the library to access the e-resources, 10.3% visited the library on daily basis, 18.3% weekly and 7% monthly. Majority of faculty accessed the library e-resources from other places within the University but outside the library.



**Figure 1: Frequency of the respondents visit to the library to access the e-resources**

*Effects of library e-resources on academic delivery*

24.1% respondents indicated that the e-resources the university library has subscribed to were relevant and had served their academic delivery needs. 48.3% were satisfied with the e-resources and indicated that their academic delivery had improved with utilization of the e-resources, 6.9% less satisfied while 10 (9.6%) were dissatisfied with what the library had subscribed to. These findings are consistent with reports of Ansari and Zuberi (2010) that majority of the faculty were satisfied with adoption and utilization of the library e-resources in their daily teaching and learning practices.



**Figure 2: Satisfaction rating of the MMU library e-resources**

Relevance of the e-resources MMU library is subscribed to and their impact on faculty academic delivery was investigated. It was noted that the relevance impacts on use and access. 48.3% respondents indicated that the e-resources the library had subscribed to were relevant while 22.4% stated that the e-resources were slightly relevant. One respondent indicated that the e-resources were not relevant for academic delivery. 25.9% were not aware of the e-resources relevance since they did not know of the existence of the services at the library hence were unable to attach any relevance of the e-resources.

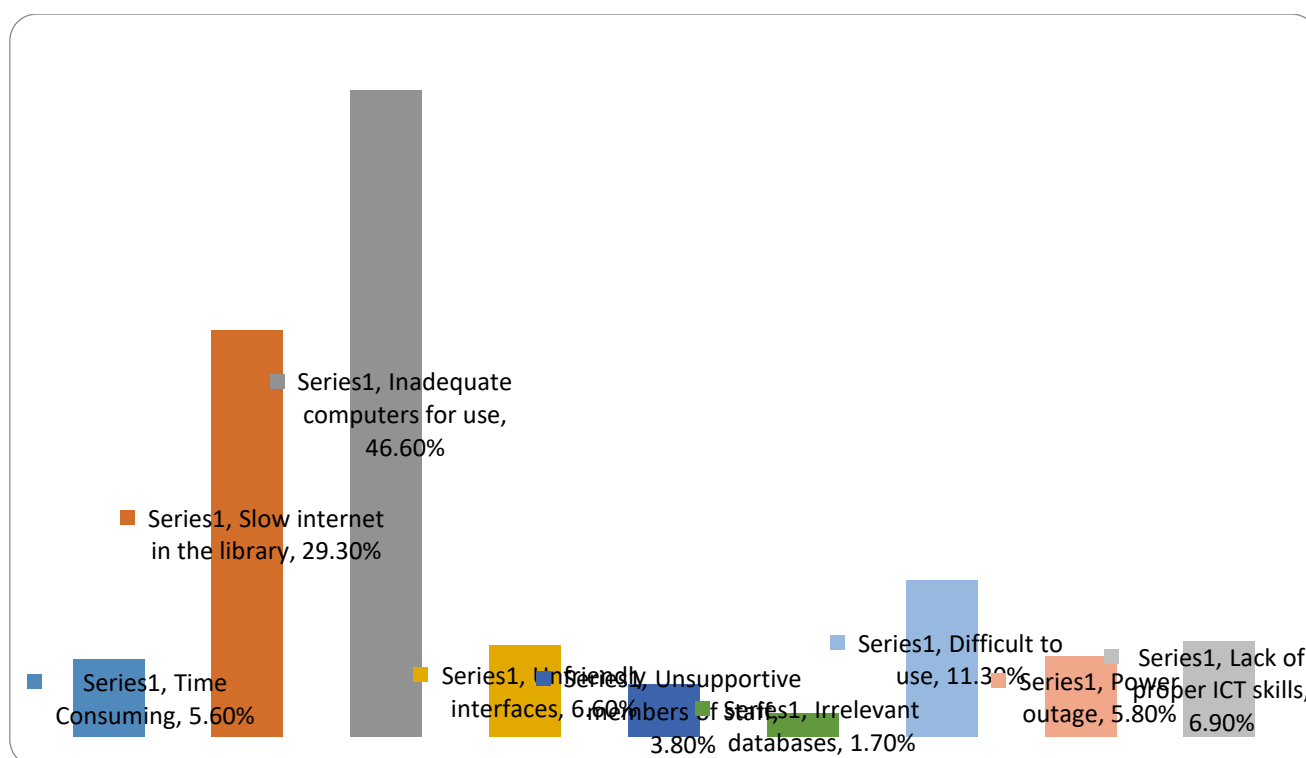
**Table 4: Relevance of library e-resources on academic delivery**

<b>Respondents Comments</b>	<b>Frequency</b>	<b>%</b>
Very relevant	28	48.3
Slightly relevant	13	22.4
Not relevant	1	1.7
Don't know	15	25.9
Didn't indicate	1	1.7
<b>Total</b>	<b>58</b>	<b>100</b>

#### Factors that hinder utilization of library e-resources

46.6% respondents indicated that the major challenge to utilization of library e-resources was inadequate computers, slow internet at the University (29.3%), lack of proper ICT skills (6.9%). Unfriendly e-resources interface which are difficult to use while 1.7% respondents felt that the e-resources the library subscribed to were irrelevant to academic delivery.





*Figure 3: E-resources utilization challenges*

### Discussion and Conclusions

Results of this study suggested that user education is a very important undertaking in the library, because through it, faculty were made aware of what e-resources the library has, and given skills on how to access and utilize them in their research and academic delivery. Although some faculty had never visited the library to use the e-resources indicating that they accessed the e-resources from anywhere within the University, a majority of faculty trained were well equipped with the necessary skills to navigate through the online content. The major one being inadequate computers for use with only fifteen computers allocated for use by both faculty and students. Slow internet was cited as a major impediment to utilization of the e-resources theoretically prompting the need for increased bandwidth. Other challenges that hindered the faculty from utilizing the library e-resources for research and academic delivery were frequent power outages at the university, unfriendly interfaces and lack of ICT skills.

## Recommendations

It is recommended that faculty members be made aware of and trained on how to access, retrieve and utilize the library e- resources to support research and academic delivery. While the University should consider improving budgetary allocation to secure library resources, Library management should strategize on how best to mobilize funds to support acquisition of additional infrastructure including computers, increased bandwidth, emergency power supplies, expansion of existing resources and further formulate policies to guide utilization of the resources

## References

- Ali, N. (2007). The Use of Electronic Resources at IIT Delhi Library: A Study of Search Behaviors. *The Electronic Library* 23(6), 691-700. Retrieved from: <http://www.emeraldinsight.com/doi/full/10.1108/02640470510635773>
- Alison A. K. (2010). *The effect of information literacy on the utilization of electronic information resources in selected academic and research institutions in Uganda*. Kampala: Makerere University. doi: 10.1108/02640470710754832
- Ansari and Zuberi (2010) *Use of Electronic Resources among Academics at the University of Karachi*
- Armstrong, A. (2011). *Electronic Resources Access: Issues and Resolutions in Two Academic Libraries*. *Virginia Polytechnic Journal*, 45(11) 16-18. Retrieved from <http://hdl.handle.net/2376/2025>
- Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly* 27(3), 425-478. Retrieved from : <https://www.jstor.org/stable/30036540>
- Deng, H. (2010). Emerging Patterns and Trends in Utilizing Electronic Resources in a Higher Education Environment: An Empirical Analysis. *New Library World* 111(3/4), 87-103. Retrieved from: [www.emeraldinsight.com/doi/pdf/10.1108/03074801011027600](http://www.emeraldinsight.com/doi/pdf/10.1108/03074801011027600)
- Israel G.D (2009). Determining sample size: Program evaluation and organizational Development, IFAS, University of Florida. Retrieved from [www.sut.ac.th/im/data/read6.pdf](http://www.sut.ac.th/im/data/read6.pdf)

Kisiedu, C. O. (2009). *Barriers in using new technology in document delivery in the third world: prospects for the IFLA project in Ghana*. New Jersey: InterVarsity. Retrieved from [www.emeraldinsight.com/doi/abs/10.1108/02641619910285367](http://www.emeraldinsight.com/doi/abs/10.1108/02641619910285367)

Madhusudhan, M. (2010). Use of Electronic Resource by Research Scholars of Kurukshetra University. *The Electronic Library* 28 (4), 492-506. Retrieved from [www.emeraldinsight.com/doi/full/10.1108/02640471011033684?fullSc=1&mbSc](http://www.emeraldinsight.com/doi/full/10.1108/02640471011033684?fullSc=1&mbSc)

Manda, P. A (2014). *Electronic Resource Usage in Academic and Research Institutions in Tanzania*. *Information Development*. 21 (4), 1-110

Oye, N. D., A. Iahad, N., & NorZairahAb.Rahim (2012) *The Impact of UTAUT Model and ICT Theoretical Framework on University Academic Staff: Focus on Adamawa State University, Nigeria*. *International Journal of Computers & Technology* 2(2) 102. Retrieved from <https://pdfs.semanticscholar.org/2189/faea35ae658523ae557b56ce869840dd6d1d.pdf>

Rehman, U. S & Ramzy, V (2004). *Awareness and Use of Electronic Information Resources at the Health Sciences Center of Kuwait University*, *Library Review* 53(3), 150- 156. Retrieved from <https://www.ncbi.nlm.nih.gov> > NCBI > Literature > PubMed Central (PMC)