

The Open University of Tanzania



Information and Communication

Technology Policy

September, 2014

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Preface

This OUT ICT Policy is derived from OUT's vision and mission of being the leader in providing affordable quality open and distance education, research and public services. The document outlines the review of the areas mentioned in the previous ICT policy and the achievements attained in those areas. It also describes relatively the success of various projects implemented under the previous policy. The need for periodic review of the Policy is also described.

The Policy outlines the anticipated ICT services and infrastructure, which are considered of strategic relevance to the University, the issues involved as well as the policy objectives and statements.

It is expected that the Policy shall guide establishment of sustainable, efficient, user-friendly, secure operations and the deployment of anticipated ICT services and resources.

I take this opportunity to thank the University participatory organs and in particular the Management committee, ICT steering committee, Senate and Council for thoroughly discussing this document at different stages.

Prof. Tolly.S.A. Mbwette

Vice Chancellor

Dar es Salaam

September, 2014

Acknowledgements

On behalf of the OUT Management, I wish to thank all who played critical role and those who have -- in one way or another, played a role in the production of this Policy which is a necessary tool to support the University's drive to take advantage of the growing access to ICT for its learners, tutors, administrators, researchers that will allow the University to make maximum use of its resources through appropriate deployment of ICT in realizing its vision and mission.

We also wish to acknowledge the support provided by the Tanzanian government in providing the crucial budget support needed to run The Open University of Tanzania, one of its public universities, that offers education at affordable rates. The OUT is, for the majority of the disadvantaged Tanzania, the hope for realizing their dreams of getting access to higher education. The growing digital divide between developed and developing countries will only be bridged through such intervention of the governments, where access to ICT and provision of necessary infrastructure must be subsidized by public funds.

Finally, we acknowledge the efforts of all those who worked tirelessly, to revise the existing ICT policy, and produce this new policy.

It is the hope of the OUT management that staff and students of the OUT will read and be familiar with the revised ICT Policy, so as to make most of what exists in the institution, and therefore contribute to the socio economic development of Tanzania. ICT represents the future of open and distance education, bridging the gap between those who are at the centre, and those who are in the periphery of knowledge bubble.

Prof. Modest Varisanga

Deputy Vice Chancellor (LT & RS)

September, 2014

Abbreviations and Acronyms

DRPS	Directorate of Research and Postgraduate Studies
HQ	Head Quarter
ICT	Information and Communication Technology
IEMT	Institute of Educational and Management Technologies
IS	Information System
ISDN	Integrated Services Digital Network
LT & RS	Learning Technology and Regional Services
MIS	Management Information System
NACTE	National Accreditation Council for Technical Education
ODL	Open and Distance Learning
OUT	Open University of Tanzania
VPN	Virtual Private Network
VSAT	Very-Small-Aperture Terminal

CHAPTER 1

1. INTRODUCTION

1.1 BACKGROUND

Information and Communication Technology (ICT) is provided to support the teaching, learning, research and administrative activities of the Open University of Tanzania (OUT).

The University encourages the use of electronic communications to share information and knowledge in support of the University's mission and to conduct the University's business. To this end, the University support and provide interactive electronic communications services and facilities such as telephones, teleconferencing, electronic mail, social networking, publishing services and internet services.

The university requires the effective information and communication technologies (ICT) to enhance smooth functioning of the University. An integrated policy cannot anticipate all the new issues that might arise in the course of developing, using and managing ICT. One purpose of this policy is to provide a framework within which these new issues can be recognized and resolved institutional-wise.

This reviewed policy shall cover the period 2014/15 to 2018/19 and shall be taking due consideration of technological development, mission and vision of the university and the current University rolling strategic plan 2013/14 – 2017/18.

1.2 RATIONALE

The existing policy was formulated in 2008 which was also a review of the first ICT policy which was formulated in 2004. The policy covered the period between 2009/10 and 2013/14. With an ICT policy in place, the OUT has witnessed growth in the use of ICT in its operations including academic and general administration. Internal e-mail communications and the use of internet services have improved and opened up for better communication and better conduct of core functions – teaching, learning, research and consultancy.

As regards the improvement of internal communication and operations, OUT has twelve running information systems some of which been customized from the Open Source Information Systems and others have been developed from scratch by the Institute of Educational and Management Technologies (IEMT).

In enhancing data communication infrastructure, the five (5) buildings at temporary OUT HQ are connected through a fibre optic backbone. Regional centers are connected to HQ either through Virtual Private Network (VPN) or the Broadband. All information systems, website and mailing system are internally hosted and are being supported by internal staff.

Apart from the above mentioned developments, there has been an increase in the number of students at HQ and OUT regional centers that generates pressure on the education system in relation to meeting the University goals. The resulting increase in enrolment for primary means a corresponding increase in the

enrolment for secondary and tertiary education. In this case Open and Distance Learning (ODL) can play a significant role. Higher enrolments in the ODL system imply considerable development and expenditure in ODL infrastructure and human resources.

In order to manage such higher enrolment of more than 14,000 students per year for both undergraduate and postgraduate, ODL needs to use ICT as a powerful instrument of changes. The focus on using ICTs should be in identifying how ICTs might be used to facilitate and support education in such a way that access to affordable quality education might eventually become available for all.

In order to further enhance the promotion of distance education at ODL, there is a need for government commitment to and support for the potential of distance education through the establishment of an enabling policy framework; the need to maximize the use of limited resources through a variety of collaborative relationships and; the need to decentralize the management of learner support services and to maximize their effectiveness and responsiveness.

Since 2004, the University has designed several ICT policies and plans to support the adoption and use of ICT at the University. This policy review responds to the increasing need for ICT use and coping with various technological changes that are happening. The reviewed document indicates the considerable progress made so far and helps the University understand its strengths and the challenges ahead to guide the University in harnessing the benefits of ICT in a more comprehensive way. It proposes best practices that can help the University to identify its medium- to long-term strategic ICT objectives and options available to achieve them.

1.3 SCOPE OF THE POLICY

The ICT Policy will be governing document for all ICT related issues in all departments and support units of the university. The update policy covers the following broad areas:

- i. ICT infrastructure
- ii. ICT for teaching and learning
- iii. ICT research and development
- iv. Consultancy and training
- v. Information systems
- vi. Email services
- vii. Internet services
- viii. Information security and business continuity plan
- ix. Capacity building and user support
- x. ICT hardware and software maintenance, replacement and disposal
- xi. Quality assurance and control of ICT services
- xii. Management and sustainability of ICT services
- xiii. Content and publications in website
- xiv. Investment in adoption of new technologies
- xv. Social media innovation
- xvi. ICT project management
- xvii. Establishing links and partnerships

The scope of this policy is split into these seventeen (17) broad areas which are sufficient in the quest to implement the mission and vision of OUT. This categorization intends to highlight important milestones which need to be reached in the policy implementation. These shall be further developed into projects defined in detail in the ICT Master Plan which shall simplify monitoring the progress of the policy implementation.

CHAPTER 2

2. ICT POLICY ISSUES, OBJECTIVES AND STATEMENTS

For the period 2014/15 to 2018/19, The Open University shall be planning to enhance the use of ICT infrastructure and services. The implementation shall follow a set of broad areas as detailed in section 1.3. In this policy review, the broad areas, policy objectives and statements have been formulated to address the existing pertinent issues.

2.1 ICT INFRASTRUCTURE

2.1.1 Situational Analysis

The ICT infrastructures of the University comprise of various communication links that support university activities of teaching, research and consultancy. Currently some Regional Centres (RCs) have Local Area Network (LAN) and connected with Virtual Private Network (VPN) while others do not. In order to create a balance the university will strive to make sure that all Regional/Coordinating Centres have LAN, Computer labs, and wireless access points. There is also a need of improving the Wide Area Network (WAN) infrastructure and bandwidth. Reliable WAN will facilitate installation of VoIP and video conference facilities to improve communications and collaborations among HQ, RCs and beyond.

2.1.2 Policy Objectives

- a. To facilitate installation of adequate communication infrastructure between OUT HQ and the Regional/Coordination centres
- b. To install and upgrade Local Area Networks in all Regional/Coordination centres
- c. To install students' computer laboratories in all Regional/Coordination centres
- d. To install wireless access points in all Regional/Coordination centres

2.1.3 Policy Statements

- a. The University shall operate and maintain a networking infrastructure to provide access to electronic resources
- b. The University shall continue to invest in wired and wireless networks in response to anticipating growth in voice, video, data and other network services

2.2 ICT FOR TEACHING AND LEARNING

2.2.1 Situational Analysis

ICT has been used as a major medium of delivery to support teaching and learning at the Open University of Tanzania. An e-learning platform is already in place. Lecturers have been capacitated with skills to develop and upload their courses unto the e-learning platform. Moreover, students have also been trained on how to access their courses and interact with lecturers. However the number of courses uploaded is not substantial and few have integrated multimedia, so is the number of lecturers and students with multimedia skills. OUT shall continue to emphasize on the usage of e-learning, other blended learning approaches and integration of multimedia. In this policy document, teaching and learning include instructional design and delivery, assessment and online examinations. ICT is core to the realization of innovative teaching and learning that is supported by these three aspects.

2.2.2 Policy Objectives

- a. To promote innovation in the use of e-Learning/ICT to benefit learning and teaching throughout the University
- b. To enable and support all staff in the cultural and curriculum changes needed to utilize new technologies and learning materials
- c. To use ICT based system as a vital interaction platform among students and between students and lectures
- d. To build capacity and motivate lectures in designing and developing e-learning contents including integration of multimedia
- e. To capacitate students on the use of ICT in their learning process
- f. To improve the learning environment for student with special needs
- g. To evaluate the impact of eLearning and ICT in teaching and learning
- h. To establish student evaluation and conduction of examination in an online environment

2.2.3 Policy Statements

- a. The University shall put up various infrastructures to support networked learning and other e-learning approaches
- b. The university shall facilitate transformation from being exclusively face to face/paper-based to blended learning i.e. both on-line and face to face/paper-based learning as a teaching media
- c. The university shall enhance the use of ICT as a main interaction platform between students and lectures
- d. The University shall exploit video conferencing capabilities of the web and other technologies so that lectures can take place between OUT HQ and Regional centers hence video conferencing be seen as part of the e-learning infrastructure
- e. The university shall enhance capacity building and motivation of lectures in designing and development of e-learning courses which are enriched with multimedia features
- f. The university shall enhance ICT related facilities for students with special needs
- g. The University shall form an e-learning management committee with the responsibility of formulating, reviewing and mainstreaming University e-learning strategies
- h. The University shall ensure periodic evaluation of eLearning usage in teaching and learning
- i. The university shall ensure the implementation of activities that will foster students to use ICT in their learning process
- j. The University shall facilitate the availability of infrastructure that supports online examination in a massive, simple, cost effective and fastest way
- k. The University shall develop guidelines on creating and adoption of Educational Resources e.g. Open Educational Resources, MOOCs and other innovative ICT related educational resources.
- l. The University shall facilitate learning management system to provide plagiarism check, multimedia integration, learning analytics and other advanced e-learning functionality.

2.3. ICT RESEARCH AND DEVELOPMENT

2.3.1 Situational Analysis

Apart from teaching, research is one of the core activities of the university. The university has established a Directorate of Research and Postgraduate Studies (DRPS) to coordinate various researches undertaken

by staff and students. Since ICTs are paramount in any organization's development, there is a need to study and determine the viability or impact of application of ICT in academic and administrative activities. Findings will assist in improving university services as well as the community around.

2.3.2 Policy Objectives

- a. To establish ICT related research areas/groups
- b. To establish database of all ICT research carried out at the university
- c. To conduct/facilitate relevant ICT research and innovation in the university and community
- d. To use or apply effectively the findings of ICT related research in improving university services
- e. To collaborate with ICT related research partner organizations for joint research initiatives

2.3.3 Policy Statements

- a. The University shall put in place procedures and standards required to undertake the quality ICT related research essential for cost-effective and innovative ICT services
- b. The University shall collaborate with other Universities in Tanzania and rest of the world to facilitate access to ICT research resources
- c. The University shall facilitate collaboration with development partners to seek research ideas and support in ICT areas
- d. The University shall set aside funds to support ICT related research
- e. The University shall develop and maintain a database with carried out researches and their findings application at the university and beyond

2.4 ICT TRAINING AND CONSULTANCY

2.4.1 Situational Analysis

The university has established and undertaken a varied of ICT training (End user computer applications, Professional and Academic/NACTE courses) to the community in several RCs. It has also engaged in ICT related consultancies to the community. The University intends to reinforce ICT training and consultancy efforts in a bid to provide better services to the community and higher revenue generation to sustain ICT services at the University.

2.4.2 Policy Objectives

- a. To enhance and establish more end users computer applications, professional and academic courses and enable the sustainability of ICT through income generated from training
- b. To coordinate, strengthen and promote ICT related consultancy services at OUT
- c. To link OUT ICT related training and consultancy services internationally

2.4.3 Policy Statements

- a. The University shall put in place procedures and standards required to provide more flexible and quality training and consultancy
- b. The university shall foster collaborations and relations between OUT and international community on ICT related training and consultancy

2.5 INFORMATION SYSTEMS

2.5.1 *Situational Analysis*

Information Systems (IS) is a co-ordinated and well-established information data bank composed of accurate and updated management information available to end-users. The university has developed a number of IS to support its administrative and academic operations. Hence, Information Systems are critical in the development of the university as such they need to be audited and updated regularly in order to make sure that they meet all users' requirements.

2.5.2 *Policy Objectives*

- a. To review and upgrade existing information systems.
- b. To integrate existing information systems both internally and externally.
- c. To develop other information systems as per university requirements.

2.5.3 *Policy Statements*

- a. The University shall systematically implement information systems that are seamlessly integrated to ensure effective service delivery, sharing of information, decision-making and reporting.
- b. The University shall regularly review and audit its ISs to ensure that they are secure, easy to use, available, and meet requirements with appropriate levels of interoperability and data exchange mechanisms.
- c. The University shall use modern and appropriate technologies for user access to core applications where this is feasible. To this end, the University shall seek to adapt or replace core applications so that users will be able to access, enter or change information as appropriate using an appropriate technology. All future investments in new applications will be supported by a full business case.
- d. The University shall ensure both ICT and user departments resource project teams fully when implementing new applications, modules or functionality. Project managers shall be supported by top management to ensure that implementation of the projects are completed successfully.
- e. The University shall invest in its existing academic and administrative systems to ensure that they realize their potential and continue to add value to academic and administrative processes. Particular attention shall be paid to improving the quality of University academic and administrative data and data management, adding clarity to who owns it, who maintains it and who may use it.

2.6 EMAIL SERVICES

2.6.1 *Situational Analysis*

Nowadays, e-mail is a widely used service provided by the internet. The e-mail application is used extensively and allows different types of communication to take place at a very fast rate. Its application is suitable for brief forms of writing. Every student and staff at the university is allocated an e-mail address which he/she is supposed to use actively.

Electronic mail and communications facilities provided by OUT are intended for teaching, learning, research, outreach and administrative purposes. Their use is governed by the University rules and policies, applicable laws, and Acceptable Use Policy of the provider. However, the performance of this service is being affected by increase of spams and hacking activities. The size and quality of attachment also needs to be controlled.

2.6.2 Policy Objectives

- a. To improve efficiency of email services.
- b. To guide on best practices of using email.
- c. To improve security of email services.

2.6.3 Policy Statements

- a. The University shall guarantee the security of electronic mail services.
- b. The University shall limit the size of mailboxes on the Email server by quotas on the server.
- c. University shall allow creation of staff and students relevant mailing groups to facilitate communications and dissemination of information in the University.
- d. University shall provide guidelines on using official email.
- e. The university shall improve productivity features.

2.7 INTERNET SERVICES

2.7.1 Situational Analysis

The Internet facility is primarily provided to enhance learning, teaching, research and administrative functions of the University. The Internet complements the University's library for searching materials and ideas from a variety of sources - both locally and internationally. Increase in administrative and academic functions is prompting for increase in bandwidth capacity regularly. However Internet Service Providers do not provide subsidized rates to educational institutions. The university needs to collaborate with other institutions in order to address this issue collectively. Other important issues which need to be addressed are accessibility, availability, security, monitoring, and management.

2.7.2 Policy Objectives

- a. To provide reliable, secure and high-speed access to staff and students at HQ and Regional/Coordinating Centres
- b. To ensure a systematic and control of the internet use amongst the users in the university.
- c. To facilitate connectivity to local and international educational and research databases.
- d. To collectively bargain with other higher learning and other institutions, for a lower bandwidth cost.

2.7.3 Policy Statement

- a. The university shall ensure reliable, secure, and accessible internet to staff and students at HQ and Regional/Coordinating Centres
- b. The University shall revoke the privilege of internet use if there is any abuse of the rules and policy prescribed by the university.
- c. University shall ensure appropriate use of bandwidth for every user in the university.

- d. The University shall regularly inspect Internet files held on computers connected to the University's network, to ensure users have not accessed inappropriate sites or sites that have been expressly forbidden.
- e. The University shall not be reliable for material viewed or downloaded by users from the Internet.
- f. The university shall facilitate its connectivity to local and international Internet Exchange (*IX*).

2.8 INFORMATION SECURITY AND BUSINESS CONTINUITY PLAN

2.8.1 *Situational analysis*

Business continuity and disaster recovery planning can and should be integrated with OUT's day-to-day operations. Proper plans should be implemented to ensure that University critical business functions will either continue to operate despite serious incidents or disasters that might otherwise have interrupted them, or will be recovered to an operational state within a reasonably short period.

2.8.2 *Policy Objectives*

- a. To increase protection and minimize security vulnerabilities.
- b. To create capacity to restore services within an acceptable period of time after a disaster such as major hardware or system failures or failures resulting from natural disasters.
- c. To ensure prompt and easy recovery from data loss/corruption and create ability to restore services within a specified acceptable period of downtime.

2.8.3 *Policy Statements*

- a. The university shall develop and operationalize business continuity plans.
- b. The university shall ensure availability of offsite backups.
- c. The university shall enhance physical and logical security.

2.9 CAPACITY BUILDING AND USER SUPPORT

2.9.1 *Situational Analysis*

In the implementation and Operations of an ICT system, the most important component is availability of well trained and competent ICT staff to support the services. Having skilled staff will ensure that staff and students get first line and backend technical support immediately after reporting their problems related to ICT.

Also OUT intends to develop the capacity of all users in the University to operate comfortably and efficiently in an environment where most pedagogic, administrative and managerial processes are ICT based. This will enable users to fully utilize the services and systems, and also to develop, implement and maintain them effectively. They will be able to exploit the full potential of the technologies. OUT will require that all students, academic staff, administrative and technical staff are trained on a continuing basis to equip them with the requisite skills to exploit the functional potential of ICT.

It is expected that as a minimum standard, all staff and students will be able to use standard application packages (word processors, spreadsheets, presentation software and databases), e-mail, intranet and the Internet. Routine administrative tasks like calling meetings, notices and distribution of various documents will be done electronically. It is also expected that students and staff will interact more using e-mail and online discussion forums. Finally, teaching staff will be able to develop content for the Learning Management System and use the system to deliver their courses.

2.9.2 Policy Objectives

- a. To provide staff members with opportunities to develop and sustain their ICT related knowledge and skills as appropriate to the purposes of their individual jobs.
- b. To protect university investments and to retain the corporate image through staff training.
- c. To maintain high level of responsiveness and ensure the University meets customer expectations.

2.9.3 Policy Statements

- a. The University shall ensure that staff members are provided with opportunities to develop and sustain their ICT related knowledge and skills as appropriate to the purposes of their individual jobs.
- b. The University shall ensure that ICT staff work in partnership and collaborations with user departments and regional centres to support the research, training and innovations activities including the Academics, Administration, Planning and Development.
- c. The University shall ensure that staff and students are trained to be able to use systems that are implemented and deployed in line with the university strategic objectives.
- d. The University shall also seek ways of cascading knowledge gained from training and know-how, built up from experienced practitioners throughout academic and administration departments.
- e. The University shall continue to provide user support services to students and member of staff.
- f. University shall ensure ICT related customer's expectations are met in terms of responsiveness, quality, effectiveness and efficiency. University shall define and agree to the services and service levels provided to each of its customer groups in line with Client Service Charter.
- g. The University shall invite and expose students and staff to exchange programs or short term courses to acquire new skills in line with University strategic objectives requirements.

2.10 ICT HARDWARE AND SOFTWARE MAINTENANCE, REPLACEMENT AND DISPOSAL

2.10.1 Situational Analysis

Hardware maintenance and support services are preventive and remedial services that physically repair or optimize hardware, including contract maintenance and per-incident repair. Software maintenance services may include new product installation services, installation of product updates, migrations for major releases of software and other types of proactive or reactive on-site services. Software products and technologies covered under this category include systems and application software.

Information and Communication Technology equipments have relatively short life span. After the lapse of its useful life these equipments are considered to be obsolete. Obsolete equipments should be disposed of in an environmentally friendly manner. The University as one of the highest consumer of ICT equipments is obliged by law to implement sustainable environmentally friendly electronic waste disposal policy. Disposal of obsolete ICT equipment (assets) will follow existing policy associated with the disposal of the equipment and all paperwork must be completed by the requestor.

Several problems exist at the university in this aspect including:

- a. Lack of approved policy and procedures for disposal of obsolete ICT equipment.
- b. Existing of pirated software and lack of inability to get patches and updates.
- c. Inability of user to use protection software.
- d. Acquisition of used equipments.

2.10.2 Policy Objectives

- a. To enforce use of open source software and ensure use of licensed software where necessary.
- b. To ensure that all hardware and software acquired by the university are inspected, recorded against the technical specification, user requirement, compatibility to the existing systems and disposal thereof.
- c. To establish procurement and usage guidelines of ICT hardware and software.
- d. To put in place ICT equipment replacement and disposal policy.
- e. To institute a systematic preventive maintenance culture including updating virus protection software regularly.

2.10.3 Policy Statements

- a. The University shall develop procedures for procurement, upgrading, replacement, and disposal of absolute ICT equipment.
- b. The University shall develop and operationalize procedures and conditions for acceptance of donated ICT equipment.
- c. OUT shall not accept used ICT equipments.
- d. The university shall put in place a maintenance program to ensure that the hardware are serviced and repaired regularly, once quarterly.
- e. The university shall put in place a maintenance program to ensure that the hardware is replaced on three years' time.
- f. The university shall establish a revolving fund contributed by user departments to offset maintenance and replacement costs.
- g. The university shall make use of Open Source software and encourage the use of licensed software where necessary.

2.11 QUALITY ASSURANCE AND CONTROL OF ICT SERVICES

2.11.1 Situational Analysis

Currently The Open University of Tanzania has a directorate responsible for monitoring the quality of the University services. Under the Institute of Educational and Management Technologies, the University has formed a department which is also responsible for coordinating quality control and assurance as well as observing how the set targets and standards of ICT service delivery are met.

The goal is to maintain ICT service standards, quality and control in order to sustain and optimize the investment made in the ICT infrastructure. By applying these quality standards, the University shall be able to resolve some issues including lack of monitoring and evaluation system, lack of standards in hardware and software, and inadequate ICT helpdesk support.

2.11.2 Policy Objectives

- a. To put in place functional and effective quality assurance system.
- b. To strengthen the existing quality assurance and control structure/system.
- c. To implement measure for effective monitoring and evaluation of ICT services.
- d. To establish consistent and systematic ICT facilities acquisition, maintenance and disposal system.
- e. To strengthen ICT helpdesk support.

2.11.3 Policy Statements

- a. The University shall put in place a functional and effective quality Assurance system.
- b. The University shall strengthen the existing quality assurance and control system.
- c. The University shall put in place monitoring and evaluation system.
- d. The University shall establish standards for hardware and software.
- e. The University shall ensure that consistence and systematic ICT facilities acquisition, maintenance and disposal systems are established.
- f. The University shall strengthen helpdesk support.

2.12 MANAGEMENT AND SUSTAINABILITY OF ICT SERVICES

2.12.1 Situational Analysis

Sustainability is a balancing act to fulfilling economic, social, political and technological demand of organizations. The University is responsible to ensure that the ICT investments are sustainable. At OUT the sustainability of ICT services can be categorized into three levels - namely: organizational, technical and financial levels. In this regards the university has established the technical, managerial as well as financial structure in order to manage this aspect. The University has also established income generating activities to support the management of the ICT services.

Despite all these efforts, there is still a need to strengthen this area in order to reduce some of the existing challenges such as too much dependence on donor funds, unsatisfactory management, maintenance, and sustainability of ICT services. This project is aimed at building the University's own capacity in terms of staff, finance and infrastructure.

2.12.2 Policy Objectives

- a. To ensure proper management control, maintenance and sustainability of ICT services.
- b. To ensure that ICT is used for income generation activities to minimize dependency on donor.
- c. To ensure that funds generated from ICT related activities are used to Support and develop ICT services and research.
- d. To ensure availability of adequate skilled staff to support the ICT systems and innovations.

2.12.3 Policy Statements

- a. The University shall strengthen the ICT steering Committee so that it can monitor the IEMT in the delivery of ICT services.
- b. The University shall develop ICT Skills Training and Consultancy Services which can innovatively be used for income generation activities to reduce donor dependency.
- c. The University shall ensure that adequate skilled staff is employed and developed to manage and support available ICT infrastructure and services.
- d. The University shall provide opportunities for staff training based on business and technological changes.

2.13 CONTENT AND PUBLICATION IN WEBSITE

2.13.1 Situational Analysis

The contents of the university website are very important when it comes to present and disseminate the latest information and activities to the society in campus as well as other users. The contents and layout of

the website are the responsibility of the appointed university content providers/owners and website administrators respectively.

The main challenge that the University is facing is content ownership and timely updating. The separation or boundaries for all publications are not well established, and as a result, some information is not properly handled.

Correct organization of the content in the website will ensure that the information is effectively presented, useful, and timely updated. This will reduce the possibility of publicizing the incorrect/erroneous information to the website and simplify management of content.

2.13.2 Policy Objectives

- a. To ensure website content are designed to provide relevant and updated information to website users.
- b. To define the levels of website content ownership and management to various users departments.
- c. To ensure that the information and materials in the website are in line with university vision and mission.

2.13.3 Policy Statements

- a. The university shall ensure that the information and materials in the website are standardized, controlled, and secured according to the requirements of the university management.
- b. The University shall appoint website administrators to manage university website and Faculty/Institute/Directorate/Unit webpages.
- c. The university shall provide procedures, guidelines and specifications for preparing information to be uploaded
- d. The University shall provide procedures, guidelines and specifications on the type of publications allowed to be uploaded in the website.
- d. Contents of OUT website shall be determined by respective user departments/units but will be governed by the regulations and instructions given by university from time to time.

2.14. INVESTMENT IN ADOPTION OF NEW TECHNOLOGIES

2.14.1 Situational Analysis

The University is flexible in adopting new technologies based on technological advancements and demand raised during the business operations. Different technologies have been adopted to support university core and support business. Some of these technologies were successful adopted while others were not successful due to various factors observed during the implementation process.

There are several challenges that the University is facing such as imposed barriers to adoption of new technologies at the university and also lack of institutional management support, lack of financial support, and, most importantly, lack of time to learn new technologies.

The decision to adopt new technologies can be guided by number of factors including the technology's design and usability; the fit with local culture and practices; the associated costs; and the expected benefits of adoption. Some factors are about the technology, others about the prospective user, and still others about the local context of use.

However, due to fast changing technological changes and increased technological innovations, there is a need to establish guidelines for appropriate investment and technological adoption including identified stages and repeating patterns that shape the adoption process.

2.14.2 Policy Objectives

- a. To ensure that ICT investments are inline with University vision, mission and strategic objectives.
- b. To ensure University adopt new technologies that meet organizational needs in acceptable standards and cost-effective way.

2.14.3 Policy Statements

- a. The University shall create guidelines to approve investment in adoption of new technologies.

2.15 SOCIAL MEDIA SERVICES

2.15.1 Situational Analysis

Social media includes - but is not limited to blogs, podcasts, discussion forums, on-line collaborative information and publishing systems that are accessible to internal and external audiences i.e. Wikis, RSS feeds, photo and video sharing, and social networks (*facebook, twitter etc*).

The emergency of various web tools has prompted the University to guide on the effective use of these freely available tools that facilitates to reach audiences important to the institution, such as students, staff and the community. Currently the university is using various social media including Facebook and blogs in supporting teaching and learning process.

However the contribution of the social media is still very low compared to its importance. There is no proper management of the existing OUT social media sites. Currently there is no full time permanent staff dedicated to support and respond to queries in these social sites. The existing social media sites are outdated in most cases and as a result, its contribution to the University business process is very minimal.

This area will establish the criteria and procedure for creating and managing University presence or participation on social media sites. The use of social media will be given maximum attention to capture the social media users who are currently OUT clients and those who are prospective clients. These will contribute towards the quality of services and increase business performance.

2.15.2 Policy Objectives

- a. To reach masses of potential customers
- b. To engage customers on day to day University business operations.
- c. To increase marketing or outreach channel and reduce costs and time for advertisements

2.15.3 Policy Statements

- a. The University shall identify potential social media to be used.
- b. The University shall create officially recognized pages that represent the University and Faculty, Department, Program or Unit of the University.
- c. The University shall provide procedures, guidelines and specifications on the staff responsibility and type of information to be posted on the University Social Media.
- d. The University shall authorize Faculty/Department/Units/Staff to post and respond to issues in the University Social Media page based on the University guidelines.

2.16 ICT PROJECT MANAGEMENT

2.16.1 *Situational analysis*

ICT Projects are generally risky and shall therefore be managed using best Project Management practices. Experience, best practice and review of past projects, have shown that ICT projects deliver best results when project management standards and practices are employed.

Various project management skills have been provided to the University staff to ensure that they are able to manage the existing projects. Despite these short trainings on project management there is still a need to strengthen this area to accommodate more staff and skills. Due to technological innovations, the ICT projects are becoming more and more complex so adequate number of staff with skills and experience in project management is required. Smooth management of ICT projects will be realized when the project is successful completed.

2.16.2 *Policy Objectives*

- a. To ensure that all ICT projects both internal and external are being implemented according to best practices in project management.
- b. To ensure that all projects are well documented to ensure maximum quality of our services.

2.16.3 *Policy Statements*

- a. The University shall ensure the development of project management guidelines which will be used to manage all ICT projects.
- b. The University shall ensure that every ICT project is approved as a complete set that delivers the result expected by the end-user in logical based approach.
- c. Every service supplied by an external entity shall during and upon completion of implementation be managed through a well-documented and enforced level agreement.

2.17 ESTABLISHING LINKS AND PARTNERSHIPS

2.17.1 *Situational Analysis*

Partnership between universities is important since it facilitates the maximum use of the available expertise and resources. This is in recognition of the fact that no institution can be self sufficient in all aspects of its needs such as financial, programs, physical facilities, materials and human resources.

OUT has established a number of partnerships with several institutions. Most of these partnerships define ICT related areas for collaborations. These collaborations are normally signed by OUT Vice chancellor but the executions of these activities are done under IEMT. IEMT has also established strong networking arrangements with government and non government organizations in the country and outside Tanzania. These networking are basically for sharing ICT related issues.

Partnership between universities and other organizations adds value, time and resources to the cooperating partners. OUT can ensure sustainable ICT services by creating partnership with well known, service-oriented ICT organization which can assist the University in creating and maintaining self-supportive units for specific ICT functions. These links and partnership will take the form of contacts developed after staff exchanges and visits. Such mutually beneficial linkages are formalized through signing Memorandum of Understanding (MoUs).

2.17.2 Policy Objectives

- a. To maintain and look-out for potential ICT partners, locally and internationally
- b. To increase capacity for internal staff through sharing experience and exchange programs
- c. To expose staff to new business approach and technology
- d. To reduce cost from service provider through partnership and sharing of resources

2.17.3 Policy Statements

- a. The University shall establish and maintain partnership with service-oriented ICT organizations to ensure sustainable operation of all ICT infrastructure and services.
- b. Establish and maintain strong links between the University and stakeholders.

CHAPTER 3

3.0 ICT POLICY IMPLEMENTATION

3.1 INTRODUCTION

ICT Policy Implementation Plan shall be prepared to address the prioritization and implementation logistics. While ICT is a strategic tool affecting all aspects in the operation of the OUT, IEMT shall be the focal point in the implementation of the policy and responsible for initiating projects, implementation and monitoring. The primary tasks of this institute shall be to provide University wide oversight of all ICT related activities and act as a central custodian for all ICT related activities.

3.2 MONITORING AND EVALUATION

The University conducts its business in line with set policies and operational procedures. The processes entail decisions, implementation of the decisions and monitoring of performance and progress through the Institute of Educational and Management Technologies and University statutory and ad-hoc committees. Most of the University decisions are made after thorough deliberations by members of concerned committees. More often decisions are reached through consensus. The highest committee at university level is council followed by senate then university management committee.

The ICT steering committee is responsible for the management of ICT development and mainstreaming at the University. The Committee will oversee the implementation of this ICT Policy and undertake its regular reviews to accommodate the rapid changes of the technology. The decision from the ICT steering committee will be forwarded to senate and later on council for final approval. The IEMT board will be also responsible for planning and enforcement of directives of the University Council, Senate, and ICT steering committee.

3.3 ENFORCEMENT

- a. The Directorate of Quality Assurance and control of the University shall audit compliance with this Policy from time to time. The outcome of the audit shall be a rating of the User Department compliance which will be published.
- b. The compliance of the policy shall be audited by an internal and external ICT related auditor once in a year.
- c. The Institutions governing bodies such as ICT steering committee shall monitor the implementation of the policy on quarterly basis.
- d. The ICT policy shall be implemented using phase-wise implementation plan and shall be reviewed once every five years.

REFERENCES

1. OUT Rolling Strategic Plan 2014/15 to 2018/19
2. OUT ICT Policy Plan 2009/10 – 2013/14
3. OUT ICT Master Plan 2009/10 – 2013/14
4. OUT ICT Policy 2004/5 – 2008/09
5. OUT ICT Master Plan 2004/5 – 2008/09
6. URT, National ICT Policy 2003
7. URT, E-government Strategic Plan