

ST. AUGUSTINE UNIVERSITY OF TANZANIA



ICT POLICY

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ABBREVIATIONS AND ACYROMS

SAUT	St. Augustine University of Tanzania
ICT	Information and Communication Technology
TCU	Tanzania Commission for Universities
ODeL	Open and Distance e Learning
HEI	Higher Education Institutions
NSGRP	National Strategy for Growth and Reduction of Poverty
SDG	Sustainable Development Goals
MIS	Management Information Systems
ICTD	Information and communication Technology Directorate
LAN	Local Area Network
VPN	Virtual Private Network
WAN	Wide Area Network

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Information and Communication Technology (ICT) is one of the key requirements for a nation's economic development amidst the rapidly changing global environment. Tanzania recognizes that effective use of information, knowledge and skills is a critical factor for rapid socio-economic transformation and growth if the country is to actualize its effort to become a sustained middle-income economy by and beyond 2025. The National ICT Policy, 2016, recognizes the innovation a central need for competitive social and economic transformation of the nation. Hence ICT is the main driving force for the realization of the national long term vision whose realization must be contributed to by every sector in the national economy. Apart from the national policy, the Ministry of education, through its ICT policy, has initiated guidelines to transform Tanzania from a knowledge driven society to a digital driven society. Other efforts include Tanzania's Education and Training Policy of 2014 and the matching Education Sector Development Plan (2016/2017 –2020/2021). At another level, the Tanzania Commission for Universities (TCU), in its third edition on the Standards and Guidelines for education quality realization, recognizes the need for increased use of Open and Distance e Learning (ODEL) in both residential universities that also use open and distance learning in dual mode of course delivery.

At St. Augustine University College of Tanzania, ICT has not been central in facilitating teaching and learning, research and consultancy, administration and general management at the university. The university has not been active in the use of electronic communication in sharing information and knowledge all in support of the university mission and vision. The recent accelerated developments and application of ICT have created new opportunities for Higher Education Institutions (HEIs) in Tanzania to make optimal use of the new technologies. St. Augustine University of Tanzania (SAUT), like other HEIs in the country and the East African region is challenged to appropriately use ICT infrastructure, systems and services to achieve institutional core functions. For the SAUT to attain a goal of becoming a premier institution of international repute that prepares students for the world, it has to adopt, implement and extensively apply ICT enabling all the university's core functions of teaching, research and innovation, and outreach services.

SAUT while striving to attain such a goal of becoming a premier institution of international repute that prepares students for the world, it needs to make best ICT investment by acquiring the right facilities, improve its infrastructure, add trained personnel and to have ICT department which will be the enable of all the ICT necessities for the University.

1.2 Rationale

The rationale of formulating this policy is based on four main factors:

- a) Universities across the world are increasingly devising new and flexible ways that ensure effectiveness, efficiency and continuity of teaching and learning as well as assessment of academic and training activities. It is for this reason SAUT has no choice but to join the global efforts to start considering in ICT in facilitating teaching and learning process blended delivery and virtual teaching and access to learning modes.
- b) The current teaching and learning modalities and handling of administrative issues at SAUT does not sufficiently use ICT support particularly when it comes to offering academic programs using online services. In absence of adequate use of ICT the issues related with ethics, quality assurance and control, ICT social media services, have not been well captured in the teaching methodologies. Furthermore, the current situation at SAUT is that ICT is just a small unit and this limits it to perform its duties effectively in such a wide and high populated area like SAUT main campus. ICT is expected to become an independent department and the formulation of this policy is an effort to fill these gaps.
- c) SAUT needs to meet its objectives of improving the services offered and to increase efficiency by leveraging on new technologies. The university operations are increasingly becoming dependent on ICT it is for this reason the policy is timely to address the main concerns related challenges related to the timely response in good time to new changes.
- d) SAUT has no ICT policy to guide it in its operations. This is largely because ICT has not been central in facilitating teaching and learning, research and consultancy, administration and general management at the university in general. The university has not been active in the use of electronic communication in sharing information and knowledge all in support of the university mission and vision. The recent accelerated developments and application of ICT have created new opportunities for Higher Education Institutions (HEIs) in Tanzania to make optimal use of the new technologies. St. Augustine University of Tanzania (SAUT), like other HEIs in the country is challenged to appropriately use ICT infrastructure, systems and services to achieve institutional core functions. For the SAUT to attain a goal of becoming a premier institution of international repute that prepares students for the world, it has to adopt, implement and extensively apply ICT enabling all the university's core functions of teaching, research and innovation, and outreach services. t in its planning, development, deployment and use of ICT.

1.3 Relevant Government Policies and Legislations

This policy has been developed in line with the following national policy frameworks:

- e) The Tanzania's National ICT Policy of 2016, which emphasizes the use of ICT to enhance and improve the quality of delivery of education at all levels

- f) The Education and Training Policy of 2014, which emphasizes the importance of the application of ICT in the universities to improve teaching, learning and related functions
- g) Tanzania Development Vision, 2025
- h) The National Strategy for Growth and Reduction of Poverty (NSGRP)
- i) Sustainable Development Goals (SDGs)
- j) Circular No.3 of 2013 being Guidelines on the implementation of various ICT systems, and circular No. 5 of 2009 on ICT security

1.4 Objective of the policy

The general objective of the policy is to provide for the enablement and regulated management, deployment and use of ICT in ensuring that SAUT's investment, operations and maintenance processes are cost effective for the enhancement of quality research, teaching and learning, administration and management and other functions and activities. The specific objectives of the policy are to:

- i. Provide guidance in developing and instituting reliable and secure communication infrastructure in conformity with recognized International standards supporting all plans, functions, activities and services and other priorities of the University
- ii. Provide a framework for the development and management of ICT network and services that will ensure the availability, reliability, enhanced performance, security, and reduced cost of running the ICT infrastructure
- iii. Establish information requirements and implement due security provisions across the university and its ICT infrastructure
- iv. Provide a framework, including guidelines, principles and procedures for the development and implementation of the university's Management Information Systems (MIS)
- v. Guide the handling of organizational information within the Information and communication Technology Directorate (ICTD) and the University as a whole by ensuring compliance with applicable statutes, regulations, and mandates for the management of information resources and thereby establish prudent practices on Internet and the University Intranet use
- vi. Uphold the integrity and image of the University through defined standards and guidelines for ensuring that the content of the University's websites is accurate, consistent and up-to-date
- vii. Serve as the direction provider for the ICTD's mandate in empowering, specifying the necessary approaches and supporting the use of ICT services and resources
- viii. Provide a paradigm for the establishment of the University's database that supports groups working on systems development, production and related functions and activities
- ix. To provide guidance on ethical principles and guidelines on Online Teaching and Learning

1.5 Scope of the policy

The policy covers the following broad areas:

- a) ICT infrastructure and Internet Services
- b) ICT Support for Online Teaching and Learning
- c) Ethical issues and Concerns in Online Teaching and Learning
- d) ICT Research, Innovation and Consultancy
- e) Development and Management of Information Systems
- f) Staff and Students' Capacity Building and User Support
- g) ICT hardware and software acquisition, installation, maintenance and repair
- h) Staff and Students' Communication Services, Information Security and Business Continuity Plan
- i) Quality Assurance and Control of ICT Services
- j) Monitoring and Evaluation of ICT Services

CHAPTER TWO

2.0 ICT GOVERNANCE AND MANAGEMENT

2.1 Introduction

Today, the use of ICT is increasingly becoming part and parcel of higher learning social infrastructure development. SAUT is not exceptional in this respect. It is within this perspective, SAUT plans to use ICT infrastructure and services in supporting not only teaching and learning, but also using ICT to increase its efficiency in the operational and administrative activities in building the city of God. The introduction of the use of ICT is expected to cover broad areas as detailed in this chapter. These broad areas, policy objectives and statements has been formulated such as to match and reflect the provisions in the University's Rolling Strategic plan in tandem with the national ICT policy and development strategy. The ICT Policy will be the governing and guiding document for all ICT related issues in all the departments and support units of the university. The description of each identified areas, pertaining to objectives and policy statements is elaborated in details below.

2.1.1 Situational Analysis

A governance system refers to all the means and mechanisms that enable the University's Policy and Management Organs to have Structured and Organized processes. With regard to ICT Governance we can identify two levels of decision making, authority and accountability to satisfy expectations of University stakeholders.

Level one is the University Corporate Governance of ICT which ensures that ICT facilitates the achievements of the University strategic goals as such directing and controlling current and future use of ICT in the University. Level two is the Operational Governance of ICT which ensures the efficient and effective management of ICT service delivery throughout the University and the compliance of individual ICT processes and procedures to a pre- agreed set of principles.

So far SAUT has not yet institutionalized the corporate governance of ICT as an integral part of University Corporate Governance. ICT resources can be found at SAUT being utilized in various degrees for University functions such as in teaching and learning, finance and human resources management, research and public service and in communication. However, development of ICT resources and services is ad hock, not done in a coordinated manner, and not well aligned to University development plans. As the result the University has not been able to take full advantages of opportunities offered by ICT in achieving its vision and mission and risks to be left behind. The development, approval and implementation of the ICT Governance Policy will address this deficiency.

2.1.2 Policy Objectives

- (a) To provide for the centralized effective Governance of all ICT related matters within the University in a rationalized and harmonized manner.
- (b) To ensure that all ICT related resource needs are met in an optimal manner by providing the organizational structure, capacity and capability.

2.1.3 Policy Statements

The university shall:

- (a) Have an effective institutional arrangement for the establishment of a Council Steering Committee on ICT
- (b) Establish and operationalize a Directorate of ICT support (DICTS)
- (c) Institutionalize implementation of ICT policy provisions at the level of academic departments and administrative units
- (d) Ensure that staff and students are informed about what is expected of them in the use of ICT at the workplace and the consequences of abusing the technologies.

2.1.4 Policy Strategies

The University shall:

- (a) Propose to Council the establishment of the Steering Committee on ICT and its mandate
- (b) Seek the establishment and subsequent operationalization of the Directorate of ICT support (DICTS)
- (c) Create necessary guidelines to guide the implementation of ICT policy provisions at the level of academic departments and administrative units
- (d) Develop information bulletins to inform staff and students about what is expected of them in the use of ICT at the workplace and the consequences of abusing the technologies.

2.2 ICT Infrastructure and Internet

2.2.1 Situational Analysis

The ICT infrastructures of the University comprise of various communication links that support university activities of teaching research and consultancy. Currently SAUT Constituent colleges have Local Area Network (LAN) and connected with Virtual Private Network (VPN) while others do not. In order to create balance the university will strive to make sure that all constituency colleges acquires the needed hardware and software, 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, computer laboratory and video conference facilities to improve communications and collaborations among SAUT main campus, constituency colleges and beyond. Because of that there is a need to

acquire, install and provide induction training for the benefits of the user and effective planning, academic, administrative and support services of the university. Such a comprehensive plan needs a matching system for software maintenance and repair services for all gadgets alongside the installation of new facilities and ICT enablers, product updates, migrations for major releases of software and other two types of proactive or reactive on-site services.

2.2.2 Policy Objectives

- i. To acquire hardware and Software
- ii. To facilitate installation of adequate ICT communication infrastructures
- iii. To install and upgrade Local Area Networks in the entire SAUT main campus and its centers
- iv. To install students' computer laboratories in SAUT main campus, and all constituency colleges and centers with the ability to handle heavy graphical software's such as (AUTO CARD, BLENDER, ADOBE PHOTOSHOP)
- v. To install wireless access points in SAUT main campus, and all constituency colleges and centers.

2.2.3 Policy Statements

- i. The university shall acquire the needed hardware and Software
- ii. The university shall facilitate installation of adequate ICT communication infrastructures.
- iii. The university shall install and upgrade Local Area Networks in the entire SAUT main campus and its centers
- iv. The university shall install students' computer laboratories in SAUT main campus, and all constituency colleges and centers with the ability to handle heavy graphical software's such as (AUTO CARD, BLENDER, ADOBE PHOTOSHOP)
- v. The university shall install wireless access points in SAUT main campus, and all constituency colleges and centers.

2.2.4 Policy Strategy

- i. Acquire the needed hardware and Software to accommodate the need
- ii. Facilitate installation of adequate ICT communication infrastructures.
- iii. Install and upgrade Local Area Networks in the entire SAUT main campus and its centers
- iv. Install students' computer laboratories in SAUT main campus, and all constituency colleges and centers with the ability to handle all kind of work.
- v. Install wireless access points in SAUT main campus, and all constituency colleges and centers.

2.3 ICT hardware and Software Maintenance, Replacement and Disposal

2.3.1 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. After the lapse of a useful life span of any ICT equipment's, we consider them to be obsolete. Obsolete equipment's should be disposed of in an environmentally friendly manner. Disposal of obsolete ICT equipment (assets) will follow existing policy associated with the disposal of the equipment.

The main challenge that the University faces, is inadequacy of equipment's like a good computer with good server specifications, Wireless Accessing points, switches, routers etc. and maintenance facilities. However, there is no clear policy for disposing the hardware's. The absolute hardware materials in different offices have been done locally without the consultations of the ICT officials. In this case, the hardware's that can be repaired are disposed.

2.3.2 Policy Objectives

- i. To enforce use of open source software and ensure use of licensed software where necessary
- ii. 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
- iii. To establish procurement and usage guidelines of ICT hardware and software
- iv. To put in place ICT equipment replacement and disposal manual
- v. To institute a systematic preventive maintenance culture including updating virus protection software regularly
- vi. To put in place a maintenance program to ensure that the hardware are serviced and repaired regularly.

2.3.3 Policy Statements

The University shall develop procedures for procurement, upgrading, replacement, and disposal of absolute ICT equipment's

- i. The university shall enforce use of open source software and ensure use of licensed software
- ii. The university shall acquire 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

- iii. The university shall establish procurement and usage guidelines of ICT hardware and software
- iv. The university shall put in place ICT equipment replacement and disposal manual
- v. The University will institute a systematic preventive maintenance culture including updating virus protection software regularly
- vi. The university shall put in place a maintenance program to ensure that the hardware are serviced and repaired regularly.

2.3.4 Policy Strategy

- i. Search and make use of the available software trainings to train its ICT staff
- ii. Allocate a role of hardware and software custodianship to its ICT staff who will be checking and inspecting on daily basis the statuses of present hardware's and software's
- iii. Establish procurement and usage guidelines of ICT hardware and software
- iv. Put in place ICT equipment replacement and disposal manual
- v. Institute a systematic preventive maintenance culture including updating virus protection software regularly
- vi. Put in place a maintenance program to ensure that the hardware are serviced and repaired regularly.

2.4 Teaching and Learning

2.4.1 Situational Analysis

Information and Communication Technology has been used mainly in some academic activities and some non-academic activities at SAUT. The potentiality of ICT in teaching and learning has recently been discovered as the driving tool for teaching and learning. Some learning management systems and e-learning programs were initiated and implemented in recent years as pilot programs. Some lecturers were capacitated in this area and the students were trained on how to access their courses and interact with their respective lecturers online. Nevertheless, the use of multimedia technology has not been fully used here at the main campus and in all other constituent colleges and canter. Lack of internet peripherals and stable internet provision has made the whole process not in action to all beneficiaries. Furthermore, SAUT has not been much engaged on the usage of e-learning, blended learning approaches and integration of multimedia technology.

2.4.2 Policy Objectives

- i. To promote innovation in the use of e-Learning/ICT to benefit learning and teaching throughout the University
- ii. To benchmark the opportunities that can be bought by adopting e-learning
- iii. To capacitate Lecturers on how to fully use e-learning facilities

- iv. To equip and engage students with the skills and knowledge of how to use e-learning
- v. To develop more e-learning programs to cover all the strategic area for development

2.4.3 Policy Statements

- i. The University shall promote innovation in the use of e-Learning/ICT to benefit learning and teaching throughout the University
- ii. The University shall benchmark the opportunities that can be brought by adopting e-learning
- iii. The University shall capacitate Lecturers on how to fully use e-learning facilities
- iv. The University shall equip and engage students with the skills and knowledge of how to use e-learning
- v. The University shall develop more e-learning programs to cover all the strategic area for development

2.4.4 Policy Strategy

- i. Build and equip with best facilities innovation lab which will support e-learning and teaching
- ii. Benchmark the opportunities that can be brought by adopting e-learning
- iii. Capacitate Lecturers on how to fully use e-learning facilities
- iv. Equip and engage students with the skills and knowledge of how to use e-learning
- v. Develop more e-learning programs to cover all the strategic area for development

2.5 Research and Development

2.5.1 Situational Analysis

Research is among the core functions of the university. In higher learning institutions, Information and Communication Technology has contributed a lot in the research and development. In the research, application of ICT is mainly used by researcher for its ability of simplifying the knowledge – gathering process and to enhance research development. Saint Augustine University of Tanzania has deployed the use of ICT in research activities. However, the practice of ICT in developing research tools here in SAUT is generally not in much practice to enhance creativity in research development. Research development could have benefited more if it would have put much emphasis in ICT as desired to solve community problems. In research, the ICT helps a lot in data collection and can be collected via online tools, web-based programs or internet survey tools. This would have enhanced accuracy, time and the cost in managing and collecting data.

2.5.2 Policy Objectives

- i. To enhance the current repository database system.
- ii. To establish centralized research database system in SAUT.

- iii. To conduct the relevant ICT research and innovation in the university and its community at large.

2.5.3 Policy Statements

- i. The University shall enhance the current repository database system
- ii. The University shall establish centralized research database system in SAUT.
- iii. The University shall conduct the relevant ICT research and innovation in the university and its community at large.

2.5.4 Policy Strategy

- i. Enhance the current repository database system by updating with current information and data.
- ii. Develop centralized research database system in SAUT.
- iii. Conduct the relevant ICT research and innovation in the university and its community at large.

2.6 Consultancy and Outreach Services

2.6.1 Situational Analysis

Consultancy is one of the principal mechanisms by which universities and colleges transfer knowledge to public, private and third sector groups, and contribute to the growth of the economy and to the needs of society more generally. The provision of expert advice to external clients by university staff is a prominent example of this activity, through which higher education institutions promote and support productive interaction with individuals, business and industries. Consultancy services might include: offering short and Immediate ICT courses, ICT specialist opinion, advising on technical issues, or solving problems for individual's personnel, company or an institution.

ICT staff can use consultancy to generate additional income, and to engage with new or existing partners through SAUT Outreach programs. The University can derive valuable benefits by offering ICT consultancy services, including: generating external income, enriching the experience of staff and contributing to learning, teaching and research.

2.6.2 Policy Objectives

- i. To train ICT staff with the updated technological skills that are necessary for the market
- ii. To promote ICT skills that are available at SAUT though SAUT Outreach program.
- iii. To peg short courses as an important aspect of SAUT income generation activities.

2.6.3 Policy Statements

- i. The University shall train ICT staff with the updated technological skills that are necessary for the market

- ii. The University shall promote ICT skills that are available at SAUT through SAUT Outreach program.
- iii. The University shall peg short courses as an important aspect of SAUT income generation activities

2.6.4 Policy Strategy

- i. Equip by training its ICT staff with the updated technological skills that are necessary for the market
- ii. Promote ICT skills that are available at SAUT through SAUT media and other SAUT outreach programs.
- iii. Peg ICT short courses as an important aspect of SAUT income generation activities

2.7 Management of Information Systems

2.7.1 Situational Analysis

In Higher Learning Institutions, management of information systems is to deploy and use ICT tools for Academic and Non-Academic processes and operations. MIS tools move data and manage information. They are the core of the information management discipline and are often considered the first systems of the information age.

Management of Information Systems produce data-driven reports that help a University to make the right decisions at the right time also oversees the installation and maintenance of hardware and software that are parts of the MIS. SAUT has a number of Information Systems which needs effectively management and with that SAUT will enhance the organization's strategic advantage.

2.7.2 Policy Objectives

- i. To review and upgrade existing information systems to meet SAUT demand.
- ii. To integrate existing information systems so as to have a centralized systems for SAUT and its colleges.
- iii. To develop an accurate and timely Information System that cater all real data and Information from independent SAUT and its colleges Information System's
- iv. To appoint a personnel responsible for managing all data from SAUT with its campuses and centers and all information systems

2.7.3 Policy Statements

- i. The University shall review and upgrade existing information systems to meet SAUT demand.
- ii. The University shall integrate existing information systems so as to have centralized system for SAUT and its colleges.
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- iv. The University shall appoint a personnel responsible for managing all data from SAUT with its campuses and centers and all information systems

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- i. Review and upgrade existing information systems to meet SAUT demand.
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- iii. Develop an accurate and timely Information System that cater all real data and Information from independent SAUT and its colleges Information System's
- iv. Appoint a personnel responsible for managing all data from SAUT with its campuses and centers and all information systems

2.8 Email and Internet Services

2.8.1 Situational Analysis

Email is the quick and best way for official communication and its application is suitable for brief forms of writing. Institutional webmail, online email service providers, enable users to send, receive and review e-mail from their Web browsers. The Internet is the global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP) to communicate between networks and devices. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies

Currently, the situation of internet connectivity at SAUT campuses (Mwanza, Dar and Arusha campus) is poor. The main problem here is the poor network resources. There are very few access points working while the number of users is increasing day to day. This is also causing the internet to be very slow because the few access points working are overloaded. To overcome the connectivity problems the university should ensure the entire university is covered with enough access points to provide reliable internet to all key locations such as Library building, administration block, academic block, and all the class halls.

In this case, every staff at SAUT is assigned up with an office e-mail address which they are supposed to use it as an official communication. Electronic mail and communications facilities provided by SAUT 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.

2.8.2 Policy Objectives

- i. To improve efficiency, security of email services and to guide on best practices of using email.
- ii. To provide reliable, secure and high-speed access to staff and students at SAUT

- iii. To ensure a systematic and control of the internet use among the users in the university.
- iv. To facilitate connectivity to local and international educational and research databases.
- v. To collectively barge in with other higher learning and other institutions for a lower bandwidth cost.

2.8.3 Policy Statements

- i. The University shall improve efficiency, security of email services and to guide on best practices of using email.
- ii. The University shall provide reliable, secure and high-speed access to staff and students at SAUT
- iii. The University shall ensure a systematic and control of the internet use among the users in the university.
- iv. The University shall facilitate connectivity to local and international educational and research databases.
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- iv. Facilitate connectivity to local and international educational and research databases.
- v. Collectively bargain with other higher learning and other institutions, for a lower bandwidth cost.

2.9 ICT Security

2.9.1 Situational analysis

IT security is a set of cyber security strategies that prevents unauthorized access to organizational assets such as computers, networks, and data. It maintains the integrity and confidentiality of sensitive information, blocking the access of sophisticated hackers.

Business continuity and disaster recovery planning can and should be integrated with SAUT'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.

Issues

- i. Unsecure ICT systems and institutional data
- ii. Lack of reliable data backup and recovery mechanisms
- iii. Inadequate ICT security procedures
- iv. Inadequate ICT disaster recovery plans and mechanisms
- v. Inadequate terms and conditions for using University ICT facilities

2.9.2 Policy Objectives

- i. To increase protection and minimize security vulnerabilities.
- ii. 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.
- iii. To ensure prompt and easy recovery from data loss/corruption and create ability to restore services within a specified acceptable period of downtime.

2.9.3 Policy Statements

- i. The university shall increase protection and minimize security vulnerabilities.
- ii. The University shall 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.
- iii. The University shall ensure prompt and easy recovery from data loss/corruption and create ability to restore services within a specified acceptable period of downtime.

2.9.4 Policy Strategy

- i. Increase protection and minimize security vulnerabilities.
- ii. 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.
- iii. Ensure prompt and easy recovery from data loss/corruption and create ability to restore services within a specified acceptable period of downtime.

2.10 Capacity Building and User Support

2.10.1 Situational Analysis

Capacity building (or capacity development, capacity strengthening) refers to the improvement in an individual's or organization's facility (or capability) "to produce, perform or deploy" effectively.

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.

So far, there are no short courses, long course or seminars that have been provided to ICT staffs and students at SAUT and its all campuses that aimed at building their capacity on the ICT knowledge as one the body that grows daily due to advancement of science and technology. There is a need to build the ICT capacities of SAUT ICT staffs in order to increase the efficiency among them.

Thus, SAUT 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. SAUT 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.

2.10.2 Policy Objectives

- i. 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.
- ii. To protect university investments and to retain the corporate image through staff training.
- iii. To maintain high level of responsiveness and ensure the University meets customer expectations.

2.10.3 Policy Statements

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

2.10.4 Policy Strategy

- i. Provide staff members with opportunities to develop and sustain their ICT related knowledge and skills as appropriate to the purposes of their individual jobs.
- ii. Protect university investments and to retain the corporate image through staff training
- iii. Maintain high level of responsiveness and ensure the University meets customer expectations.

2.11 Quality Assurance and Control of ICT Services

2.11.1 Situational Analysis

SAUT wishes to enhance its production and delivery of products and services to its customer efficiently and effectively by using ICT as enabler for such an endeavor. This can be made possible through quality assurance and control of ICT services. Currently SAUT has a Quality Assurance office which uses ICT as its enable to evaluate the quality of services within SAUT teaching staff. More can be made if the Quality assurance office will be using the available ICT services to enable it to control the quality of ICT services and all the services in general.

2.11.2 Policy Objectives

- i. To put in place functional and effective quality assurance system.
- ii. To strengthen the existing quality assurance and control structure/system.
- iii. To implement erasure for effective monitoring and evaluation of ICT services.
- iv. To establish consistent and systematic ICT facilities acquisition, maintenance and disposal system.
- v. To improve ICT help desk support both online and physical.

2.11.3 Policy Statements

- i. The University shall put in place functional and effective quality assurance system.
- ii. The university shall strengthen the existing quality assurance and control structure/system.
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- i. Put in place functional and effective quality assurance system.
- ii. Strengthen the existing quality assurance and control structure/system.
- iii. Implement measure for effective monitoring and evaluation of ICT services.
- iv. Establish consistent and systematic ICT facilities acquisition, maintenance and disposal system
- v. Improve ICT help desk support both online and physical.

2.12 Management and Sustainability of ICT Services

2.12.1 Situational Analysis

Information technology (IT) management is the process by which the resources related to information technology are managed according to the priorities and needs of the organization.

ICT management includes both tangible resources such as people, computers and hardware, and intangible resources such as software and data.

Sustainability is a balancing act to fulfilling economic social political and technological demand of organizations. SAUT is responsible to ensure that the ICT investments are sustainable. At SAUT the sustainability of ICT services can be categorized into three levels- namely: organizational, technical and financial levels. In all centers (Dar Centre and Arusha Centre), the ICT management and Services is only categorized into organizational and technical. In this regards the University has established the technical, managerial as well as financial structure in order to manage this aspect. The SAUT has not yet managed to establish income which is generated through activities supported by management of the ICT services.

Despite all these efforts, SAUT still needs to strengthen this area in order to reduce some of the existing challenges such as to much dependence on neither do nor funds unsatisfactory management maintenance and sustainability of ICT services.

2.12.2 Policy Objectives

- i. To ensure proper management control maintenance and sustainability of ICT services.
- ii. To ensure that ICT is used for income generation activities to minimize dependency on donor
- iii. To ensure that funds generated from ICT related activities are used to Support and develop ICT services and research in SAUT and its centers.
- iv. To ensure availability of adequate skilled staff to support the ICT systems and innovations.

2.12.3 Policy Statements

- i. The University shall ensure proper management control, maintenance and sustainability of ICT services.
- ii. The University shall ensure that ICT is used for income generation activities to minimize dependency on donor
- iii. The University shall ensure that funds generated from ICT related activities are used to Support and develop ICT services and research in SAUT and its centers.
- iv. The University shall ensure availability of adequate skilled staff to support the ICT systems and innovations.

2.12.4 Policy Strategy

- i. Ensure proper management control, maintenance and sustainability of ICT services.
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- iii. Ensure that funds generated from ICT related activities are used to Support and develop ICT services and research in SAUT and its centers.
- iv. Ensure availability of adequate skilled staff to support the ICT systems and innovations.

2.13 Investment in Adoption of New Technologies

2.13.1 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 the technologies were successfully adopted while others were not successful due to various factors observed during the implementation process.

Here at SAUT main campus, different technologies have been adopted to support university core and support business such as students' system administration, staff system administration and accounts system administration.

SAUT main campus, centers and constituent colleges have several challenges that as the university it is facing: these are like the imposition of 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 for SAUT to establish guidelines for appropriate investment and technological adoption including identified stages and repeating patterns that shape the adoption process.

2.13.2 Policy Objectives

- i. To ensure that ICT investments are in line with SAUT vision, mission and strategic objectives.
- ii. To ensure University adopts new technologies that meet organizational needs in acceptable standards and cost-effective way.

2.13.3 Policy Statements

- i. The University shall ensure that ICT investments are in line with SAUT vision, mission and strategic
- ii. The University shall ensure University adopts new technologies that meet organizational needs in acceptable standards and cost-effective way

2.13.4 Policy Strategy

- i. Ensure that ICT investments are in line with SAUT vision, mission and strategic
- ii. Ensure University adopts new technologies that meet organizational needs in acceptable standards and cost-effective way

2.14 ICT Project Management

2.14.1 Situational analysis

Projects that focus on the effective use of information and communication technology needs to use the best project management techniques and practices so as to ensure the project never fails. There is growing optimism that technology, particularly the new information and communication technologies (ICTs), can help achieve development goals and spur progress in developing countries. ICT projects are often mistakenly thought of as a set of activities requiring hardware, networking systems, software and applications with the end goal of introducing technological changes. In fact, however, there is a substantial amount of human activity in these projects, and each project is or should be anchored on the larger goals of the organization. ICT projects are not standalone activities but part of an integrated whole.

In SAUT and its centers and constituents colleges generally, there is a need to capacitate the staff with project management skills so as to ensure the successfulness of ICT and other projects. Lack of well-equipped and skilled staff may lead to failure of any project no matter how well the project was planned and designed.

2.14.2 Policy Objectives

- i. To ensure that ICT and management staff are involved in in all stages so as to oversee the risk and challenges that may appear.
- ii. To ensure that ICT staff are well equipped and trained on the best management practices.

2.14.3 Policy Statements

- i. The SAUT shall ensure that ICT and management staffs are involved in in all stages so as to oversee the risk and challenges that may appear.
- ii. The SAUT shall ensure that ICT staffs are well equipped and trained on the best management practices.

2.14.4 Policy Strategy

- i. Ensure that ICT and management staffs are involved in in all stages so as to oversee the risk and challenges that may appear.
- ii. Make ensure that ICT staffs are well equipped and trained on the best management practices.

2.15 Links and Partnerships

2.15.1 Situational Analysis

When your ICT is holding your institutional back from achieving its potential, it's best to consider partnership. The key point to successful ICT project partnership is to have a strategy that insures that both ends benefit through it. The benefits of technological partnership are many since one institution cannot stand alone in the technological endeavor. SAUT has few ICT partners whom they share their ICT skills and knowledge with. SAUT wishes to have more partners who would work with them on ICT and share resources and skills and thus in return will decrease the cost of resources.

SAUT should increase capacity of its internal staff by facilitating them and engaging them to SAUT partners who have a lot of experience with ICT and systems and who have exposure to different technologies so as to see and experience and thus gain exposure.

2.15.2 Policy Objectives

- i. To maintain and look for well branded ICT partners to work
- ii. To increase capacity for internal staff through sharing experience and exchange programs
- iii. To expose staff to new business approach and technology
- iv. To reduce cost from service provider through partnership and sharing of resources

2.15.3 Policy Statements

- i. SAUT shall maintain and look for well branded ICT partners to work
- ii. The University shall increase capacity for internal staff through sharing experience and exchange programs
- iii. The University shall expose staff to new business approach and technology
- iv. SAUT shall reduce cost from service provider through partnership and sharing of resources

2.15.4 Policy Strategy

- i. Maintain and look for well branded ICT partners to work
- ii. Increase capacity for internal staff through sharing experience and exchange programs
- iii. Expose staff to new business approach and technology
- iv. Reduce cost from service provider through partnership and sharing of resources

CHAPTER THREE

3.0 ICT POLICY IMPLEMENTATION, MONITORING AND EVALUATION

3.1 Introduction

The implementation of SAUT ICT Policy shall be institutionalized and mainstreamed into the SAUT organizational structure. The department/unit of ICT shall lead the implementation of the policy and hold responsibility for initiating projects, implementation and monitoring. The primary task of this institute shall be to prepare the policy implementation plan. The plan will provide the University with a basis for oversight of all ICT related activities. The department /Unit shall act as the custodian of the policy and all the related ICT activities.

3.2. Implementation

The implementation of this policy will be under the following entities: Council Steering committee on ICT, Directorate of ICT Support, and Heads of Academic Departments & Administrative Units. The core duties and responsibilities of these entities will be as follows:

3.2.1. The Council Steering Committee on ICT

The membership of this committee shall be determined by the Council. Its duties and responsibilities shall include:

- (a) Guiding the development and review of University wide ICT Policy and strategy and Monitor the implementation of the University ICT Policy and advice the Council accordingly.
- (b) Monitoring the implementation of the University ICT Policy and advice the Council accordingly.
- (c) Ensuring availability of financial resources for the implementation of the ICT strategy. This to include funding of the Directorate of ICT and ICT components in Colleges and Centers.
- (d) Continuously monitoring innovations in ICT sector in order to advise on ICT solutions relevant to University's Strategic Goals.
- (e) Championing the integration of ICT in University Processes and the enforcement of the ICT Policy.

3.2.2. Directorate of ICT Support (DICTS)

The Directorate shall be established by Council as the overall in charge of University ICT Resources and Services Management. Specifically the Directorate shall:

- (a) Operationalise and guide the ICT Policy implementation.

- (b) Recruit and deploy all ICT Support staff to various University Departments/Units as need be.
- (c) Acquire and or develop necessary ICT Capacity to support the Academic, Research and Administrative functions of the University.
- (d) Develop ICT Projects to;
 - i) Support University expansion and business engagement
 - ii) Improve the student experience
 - iii) Improve the University efficiency and effectiveness
- (e) Promote effective and appropriate utilization of ICT resources.
- (f) Ensure continuous professional training of University ICT Technical Staff and provide training for End – Users (staff and students) of University ICT systems.
- (g) Specify, verify and vet ICT Standards, procedures and best practices for all University ICT deployments and operations.
- (h) Proactively undertake additional financial resources mobilization to ensure sustainability of DICTS operations.
- (i) Have the overall ownership of the professional and technical mandate of all ICT design and development management and maintenance.

3.2.3. Heads of Academic Departments & Administrative Units

The Heads of Academic Departments and Administration Units shall in consultation with DICTS

- (a) Integrate ICT into their processes
- (b) Supplement the unit specific components of the ICT Policy and strategy.
- (c) Ensure compliance to the ICT Policy.
- (d) Cause periodic evaluation and assessment of existing ICT services and infrastructure within departments and units.

3.3 Monitoring and Evaluation

The implementation of this policy will depend on the effectiveness of instituted monitoring and evaluation mechanism that will be put in place. The process entails key decisions, implementation of the decisions and monitoring of progress and performance through the Institute of Educational and Management Technologies and in compliance with the periodically given guidelines of the university statutory and ad-hoc committees. Relevant performance indicators shall be developed and made available to stakeholders and evaluators to enable them assess the implementation of the policy on a regular basis.

Most of the University decisions are made after thorough deliberations by members of different committees. More often decisions are reached through consensus. The Department/institute shall have a board which will report to the DVCAA about all ICT related policy matters and the Board shall discuss and provide recommendations to the ICT Steering 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 in technology. The decisions from the ICT steering committee will be forwarded to Senate and subsequently to the University Council for final decision and approval.

3.4 Enforcement

- a. The University's Directorate of Quality Assurance shall audit compliance with this policy from time to time. The outcome of the audit shall be a rating of the User Department's compliance,
- b. The Department/institute's governing organs Board and ICT Steering Committee shall monitor the implementation of the policy on a quarterly basis,
- c. The policy shall be effected through a phased plan and shall be reviewed once every three years or earlier as need arises and environmental demands,

4.0 References

1. SAUT Rolling Strategic Plan 2021/2025
2. Tanzanian Education and Training Policy of 2014
3. Tanzania Development Vision, 2025
4. The National Strategy for Growth and Reduction of Poverty (NSGRP)
5. Sustainable Development Goals (SDGs)

Approved by the SAUT Council in its 71st Meeting held on 29th September 2022



Rt. Rev. Flavian Kassala
Chairman of the SAUT Council