MZUMBE UNIVERSITY

INFORMATION AND COMMUNICATION TECHNOLOGY

POLICY

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LIST OF ABBREVIATIONS AND ACRONYMS

ARIS	-	Academic Records Information System
AUC	-	Agder University College
DICT	-	Directorate of Information and Communication Technology
DVC	-	Deputy Vice Chancellor
FINIS	-	Financial Information System
HURIS	-	Human Resources Information System
ICT	-	Information and Communication Technology
IDM	-	Institute of Development Management
IUCEA	-	Inter University Council of East Africa
LAN	-	Local Area Network
LIBIS	-	Library Information System
MIS	-	Management Information System
MSTHE	-	Ministry of Science, Technology and Higher Education
MU	-	Mzumbe University
TCP/IP	-	Transfer Control Protocol/ Internet Protocol
WWW	-	World Wide Web
URT	-	United Republic of Tanzania

CHAPTER ONE

1.0 INTRODUCTION

Mzumbe University was established by an Act of Parliament, the Mzumbe University Act No. 21 of 2001.The University, as a training institution boasts of over 50 years experience of training in management, administration of justice and good governance. The training has over the last 30 years been complemented by research and consultancy activities in the public and private sectors.

Starting as the first Local Government School in the country in October 1953, training Chiefs and Native Authority Staff and Councilors, the level of training activities were elevated after independence to include training of central government officials, rural development officers and local court magistrates.

The huge demand for high and middle level human resources following the decentralization process of 1971 and the nationalization of private businesses following the Arusha Declaration of 1967, saw Local Government School being amalgamated with the then Institute of Public Administration of the University of Dar es salaam to form the Institute of Development Management (IDM) as a higher learning institution for training professional managers in the public and private sectors. The natural growth of the Institute over its 29 years of successful operation and the changing national and international human resources needs led the Government of the United Republic of Tanzania, in December 2001, to transform IDM Mzumbe to the fifth public university in the Tanzania.

1.1 Vision of the University

"Mzumbe University strives to be a center of excellence for knowledge acquisition and adaptation through training, research, consultancy, public service and outreach activities in Africa and beyond within 10-15 years."

1.2 Mission of the University

As provided in the Act establishing it, the mission of the University is "To provide opportunities for acquisition, development and preservation of knowledge and skills through training, research and technological services in the areas of business management, public administration, economics, accountancy, local government administration, finance, administration of justice and any other areas as determined by University in accordance with the Act".

1.3 Objectives and Functions of the University

Pursuant to the mission of the University the key objectives and functions of the University include:

a) To provide facilities and opportunities for university education, research, training, and consultancy services for the development of human race generally, and of the people of Tanzania in particular;

b) To assist in the preservation, transmission, dissemination and enhancement of knowledge generally and in particular in the fields of administration of justice, business management, public administration, accountancy and finance, economics and allied or complementary fields of learning;

c) To encourage academic staff and students to learn and seek knowledge and truth;

d) To produce highly educated and adequately trained experts well prepared and equipped with requisite skills for self employment and manning of key positions in both the public and private sectors;

e) To preserve, transmit and advance professional knowledge, skills and attitudes;

f) To promote, facilitate and sponsor research in technological, social, economical, political and cultural spheres for the welfare and development of mankind within or outside the United Republic of Tanzania;

g) To arrange for publication and dissemination of material produced in connection with the work and activities of the University;

h) To develop, promote and undertake the provision on adult, continuing and distance education for the enhancement of good governance and efficacious solutions to social-economic and political problems;

i) To establish links and to cooperate with other national and international institutions in the initiation and conduct of cooperative research and training programmes for the mutual benefit of the cooperating institutions and the United Republic of Tanzania and generally for the pursuit of the mission of the University.

1.4 Directorate of Information and Communication   Technology (DICT)

The DICT handles all matters related to information and communication technology activities. Its major objective is to ensure that the University is having the right technology at the appropriate time and with a right quantity and quality of the same. It also ensures that the ICT services are readily available to users in the University and downtime is minimal. The vision of the Directorate of Information and Communication Technology is to facilitate the University with wide access to and utilization of Information and Communication Technologies and to enhance the position of Mzumbe University as center of academic excellence, and its contribution to the sustainable development of society by using ICTs. Whereas the mission of the Directorate of Information and Communication Technology is to provide technical support related to ICT services to all stakeholders of Mzumbe University and its partners.

The following tasks constitute the central core of DICT responsibilities:

i. Maintain an inventory of all installed or planned-to-be-installed ICT facilities/services
ii. Develop a set of standards that establish:
   a. Mandatory communication standards
   b. Documentation procedures
   c. Data dictionary
   d. Operating systems
iii. Develop procedures which ensure that, for potential ICT projects, a comparison is made on internal development versus purchase
iv. Identify and maintain relationships with suppliers

v. Establish education programs for potential users that communicate both the potential and pitfalls of modern ICT and that define the users' roles in ensuring its successful introduction

vi. Establish an ongoing assessment/review of ICT services and systems for determining which ones are obsolete and should be replaced or redesigned

1.5   The Importance of ICT

Any institution of higher learning is critically dependent on the smooth functioning of Information and Communication Technology services. Smooth functioning and running can be assured only if establishment, operation and extension of ICT and ICT services enabled functions are effected within a clear management and utilization policy which takes care of the institution's overall strategic goals. Mzumbe University recognizes this critical need and therefore establishes ICT Policy. The policy comprises the University's general vision, mission and objectives as well as policy issues regarding ICT infrastructure, information systems, users' skill development, and sustainability. This aspect is equally underscored in the National ICT Policy [pages 5 – 13].

CHAPTER TWO

2.0   THE ICT POLICY CONTEXT AND RATIONALE

2.1   Historical Development and Status of ICT at the   University

The year 1984 made a milestone for computer applications at the then Institute of Development Management (IDM), when one Desktop Computer arrived. Three years later (1987), NORAD donated ten (10) Olivetti computers to IDM under IDM- NORAD project (TAN 058). Following this event, computer center was established. By then the center was mainly used by academic staff as a typing pool. In 1990 NORAD donated additional ten (10) Amstrad Desktop Computers. Since then the number of computers increased and users of computers also increased. The computer uses changed from just mere typing tool to simple data analysis and database application. Following above development, the first training on computer application for internal and external users began in December 1987.

In 1994 the Institute made deliberate efforts to establish computer laboratory for training students by buying 13 computers. In 1995 the first dial-up e-mail service was connected at the Institute. From 1995 to-date, ICT services expanded from dial-up Internet service to VSAT- Connection. The users of ICT services have also increased tremendously. Now at least every University member has interest on ICT or has become potential user of ICT service.

Incremental changes have taken place including transformation of IDM to Mzumbe University. The increase in the number of ICT facilities and users made the management and administration of the same to be difficult. Notwithstanding all these evolutionary changes, there had been no written policy or clear guidelines to effect the management and coordination of ICT at the University. The number of PCs increased from ten (10) in 1987 to more than one hundred (100) todate. Computer rooms for specific uses also has increased from one computer centre in 1987 to six (6) rooms – four students computer laboratories, computer centre and the University library. Another significant development on the number of PCs is providing computers to all top officers of the University, all heads of administrative departments, all deans and directors. This calls for a well-coordinated effort to manage the resources. Apart from individual PCs, the first local area

network was constructed in 1987 when the University received the first ten (10) computers. This LAN was followed by another one in one of the computer rooms. In 1996, the University had an almost campus-wide local area network (LAN) connecting major buildings of blocks A, B, C, D, Graduate School and the library. All these buildings were connected to the Internet via a dial-up system to raha.com ISP. In 2000, IDM decided to switch from dial-up Internet connectivity to satellite Internet connectivity for two main reasons: one is to reduce monthly connection fees and two was to get reliable connection. In 2003, the University decided to re-design its LAN by adopting structured cabling whereby fibre optic cables were used for backbone and UTP and switches replaced coaxial and hubs respectively in the LAN. All products were cat 6 and most of the accessories were Cisco products. With the hardware in place, the University introduced very few information systems. These include Micromarc Library Information System and a Payroll system. All these changes and investments in ICTs necessitated establishment of a directorate to manage and monitor them.

2.2   Rationale for   the University ICT Policy

Justification for the University ICT Policy arises out of the response to growing demand on the uses and expansion of ICT facilities and services at the University. With global interest in modern ICT worldwide, the University needs to scale up the best practice and experience of ICT service management.

2.3 The purpose of ICT Policy

The policy will spearhead the University on the following:

   i. Ensure availability of all anticipated ICT services/systems at every workplace in the University
  ii. Promote office computing in all offices i.e. Support general office tasks
 iii. Improve both the efficiency and effectiveness of library operations and services through the implementation of an integrated on-line LIBIS
  iv. Enhance and streamline student education-related to administrative and managerial processes and to improve academic reporting facilities at both central and faculty level through the implementation of ARIS

v. Enhance and streamline financial management processes and reporting facilities at both central and faculty levels through the implementation of an integrated FINIS

vi. Enhance and streamline the Human resource management and administrative processes through the implementation of HURIS;

vii. Provide for the growth and financial sustainability of University ICT resources through appropriate funding, internal revenue generation and operational mechanisms.

2.4 University ICT stakeholders

2.4.1 Directorate of Information and Communication Technology (DICT) Board

DICT Board is established under section 21(2) of Act No. 21 of 2001 and members of the board are selected as per section 21(2)(a-d) of Act No. 21 of 2001.

2.4.2 Directorate of Information and Communication Technology (DICT)

The DICT was established as per act No. 21, section 20. Its overall objective is to advise Mzumbe University Management on ICTs required for the university vision and mission.

2.4.3   Users

Users of ICT facilities and services at the University comprise all students, Academic staff, Administrative staff and any other person defined in this policy as eligible user.

2.4.4 Partner Institutions

These are individuals, public and non-public who collaborate and network with Mzumbe University on ICT matters. This comprises of domestic and non-domestic partners.

CHAPTER THREE

3.0   INFORMATION AND COMMUNICATION TECHNOLOGY POLICY

3.1   Overall Goal

The overall goal of the Mzumbe University ICT Policy is to provide a framework for leadership and coordination of the ICT management and utilization at the University in order to accomplish the vision and mission of University. To accomplish this goal the ICT policy focuses on ICT infrastructure, Information systems, User skill development and ICT sustainability.

3.2 ICT Infrastructure

ICT infrastructure embraces availability of computer rooms, equipment, supplies and services of ICT equipment, networks, connectivity and broadcasting. This raises the issues of technology standardization of equipment, procurements, services, maintenance and disposal.

Objective

To ensure the availability of appropriate network infrastructure, appropriate equipment and relevant network access services such as e-mail, common data service or user-level data communications, Internet and intranet, website, e-learning, webmail and office computing systems.

Strategies

In order to achieve the stated objective the University envisages undertaking the following strategies: -

    a) To maintain and expand LAN to cover the entire campus
    b) To acquire and install new or additional relevant software and equipment
    c) To maintain and improve internet connectivity
    d) To maintain and improve website, intranet and webmail services
    e) To standardize the procurement of ICT hardware and software

3.3 Information Systems

In its ambitions to fulfill the mission and vision of the University, the DICT is entrusted with many functions that require an efficient mechanism of coordination and implementation of ICT. These require an establishment and maintenance of various information systems such as LIBIS, ARIS, FINIS and HURIS.

3.3.1 Library Information System (LIBIS)

Objective

The objective of this system is to improve the efficiency and effectiveness of library operations and services through the implementation of an integrated on-line LIBIS.

Strategies

In order to achieve the above objective, the University envisages establishing the following:

   a) Circulation control system
   b) Catalogue maintenance system
   c) On-line catalogue access
   d) Ability to share resources among libraries at different locations
   a) Acquisitions control
   b) On-line access (through Internet) from any workplace to Reference and Information services

3.3.2 Academic Records Information System (ARIS)

Objective

To enhance and streamline students' education-related administrative and managerial processes and to improve academic reporting facilities at both central and faculty level through the implementation of an integrated Academic Records Information System.

Strategies

It is envisaged that the University establish ARIS that will include but not limited to the following modules:

a) Management of students personal records

b) Admission of students

c) Management of student academic performance records and students academic performance analysis

d) Curricula and course records management

e) Class scheduling (time tabling)

f) Space and teaching staff requirements analysis

g) Students' financial transaction management

h) Students' health records management

i) On-line database query and reporting facilities

j) Alumni records and activities

3.3.3 Financial Information System (FINIS)

Objective

The objective of this system is to enhance and streamline financial management processes and reporting facilities through the implementation of an integrated Financial Information System.

Strategies

It is envisaged that FINIS Software with the following functionalities essential to the University Financial Management will be developed or purchased

a. Income Management

b. Expenditure Management

c. Budgeting

d. Procurement Management

e. Fixed assets management

3.3.4 Human Resource Information System (HURIS)

Objective

The objective of this system is to enhance and streamline the human resource management and administrative processes through the implementation of Human Resource Information System. HURIS and Payroll system encompass a number of closely related processes supportive to human resource management. In particular they include maintenance of employee records, the quantitative and qualitative forecasting of capacity, allocation of human capacity, the calculation of salaries and, in accordance with established policies and procedures, the provision of management information.

Strategies

It is envisaged that the University will develop HURIS software with the following functionalities

   a) Plan short- and long-term staff requirements
   b) Recruitment of staff
   c) Job evaluation
   d) Training of staff
   e) Salary administration
   f) Pension fund administration

3.4 Sustainability of ICTs

Transformation and evolution of Information technology taking place worldwide has increased the demand for deployment of electronic communication resources in the transferring and sharing of information. It is the desire of the University to make available to its community, this important resource for this century of science, technology and information age. Apparently this demand has increased the cost of acquiring and maintaining ICT facilities and services. At the meantime all costs for provision of ICT services, facilities and administration is wholly borne by the University main budget. It is unlikely that such trend can sustain for a long time.

Objective

To provide for the means and mechanisms for cost recovery and cost sharing for the maintenance and administration of ICT services at the University.

Strategies

a) Devise income generating activities

b) Establish mechanism for cost sharing and cost recovering for ICT users

c) Establish mechanism and order of replacement cost and charges in the event of malicious handling and vandalism of ICT equipment/services

CHAPTER FOUR

4.0   GUIDELINES GOVERNING ADMINISTRATION OF ICT RESOURCES

4.1   Introduction

Mzumbe University encourages and promotes the use of ICT resources by different stakeholders. However, guidelines governing procurement, ownership and use and cost sharing of ICT resources are necessary in order to ensure effective and smooth management. It is the University policy that users must respect the University's exclusive right of administration of ICT resources. Users are required to adhere to international, national and university regulations regarding software licensing agreements and copyright laws. Also the users must respect the rights of other users and exercise care to ensure that the interest of other stakeholders is not jeopardized.

4.2   Ownership of ICT Resources

The University ICT resources - systems and services - are the property of the University. These include all components of the electronic communication, physical infrastructure and electronic communication address, number, account, other identifiers associated with the University or any faculty, institute, directorate, department or centre of the University or assigned by the University to individuals.

4.3   Partnership

Development and sustainability of ICT will depend on collaboration and partnership with other Institutions from within and outside the country. These include individuals, public and private organizations that collaborate and network with Mzumbe University on ICT matters. Mzumbe University will continue to forge and harness state-of-the-art ICT in line with global ICT development. Partner Institutions will play important roles and responsibilities in the following areas:
  i. To share and exchange information on new developments in ICTs.
  ii. To provide updated technical support.

iii. To develop technical and expert exchange programme for the purpose of learning.

iv. To provide financial and operational support.

4.4 Users Of ICT Resources

The University would like to scale up the use of electronic communication resources to the whole University community and its stakeholders. Nonetheless, the use of University ICT facilities is limited by restrictions that apply to all other University properties and by conditions necessary for the effective and efficient operation of ICT services. Users of ICT facilities and services at the University comprise all students, academic staff, administrative staff and any other person defined in this policy and guidelines as eligible user. The following therefore, constitute eligible users:

a) University students (full time or part time)

b) Academic members of staff

c) Administrative members of staff

d) Participants attending short courses at the University

e) Members of partner institutions who visit the University for official assignments

f) Others under certain restrictions to be prescribed by the University

Notwithstanding the provision above, the University reserves the right to limit the use and access to its ICT resources by any person or body corporate.

4.5   Conditions Pertaining to the Use of the University's ICT Resources

The following are the conditions pertaining to the use of the University's ICT resources:

a) The University ICT resources should be used for the purpose of teaching, research and publication, consultancy services, and public service mission of the University and administrative functions that supports this mission. However, the University may allow the uses of ICT resources for other missions provided that they don't violate international, national and University regulations and are not repugnant to the public interest including pornography, propagation of materials

that are defamatory or libelous in nature or otherwise its gravity tantamount to breach of existing laws or University regulations.

b)   Notwithstanding the provision above, the University's ICT resources and services may be used for other purposes, including personal, provided that the uses will not press liability to the University in terms of financial cost, time and extra resources and any loss incurred in connection with such uses.

4.6   Outsourcing

The University may hire certain support services and ICT infrastructure from external professional providers if it appears to be cost-effective and the expertise involved is not yet available in the University and cannot be developed internally. In all circumstances, any outsourcing decision should be made after prior consultation with DICT for the purpose of ascertaining compatibility and maintainability of the infrastructure and service.

Key factors that favour the outsourcing decision are:
- Insufficient need to have the services and/or infrastructure continuously
- Inability and high cost of developing the software/application internally
- Effective staff utilization at the University.

4.7   ICT Planning, Procurement and Maintenance

The DICT is mandated to formulate ICT strategic plans, implement and review the ICTs applicable at the University from time to time. The objective is to standardize the ICT infrastructure, service and use. The plans and continuous review will generate an up to date priority list of technologies to be considered for procurement and maintenance. However, faculties, institutes, directorates, departments and centres of the University should consult DICT in implementing their ICT related operational plans and applications.

Maintenance of all ICT infrastructure, networks and services at the University will be coordinated by DICT.

4.8 System Administrations and Security Service

System administration and security concerns access to service, applications and electronic data stores located in network nodes throughout the University. Security management is required to ensure that access to these services and data is controlled and authorized. Further, data integrity and data privacy must be ensured. The main purpose of a security system is to inform and guide users, staff and system managers of the requirements and their obligations in protecting technology and information assets. The DICT will be responsible to take necessary measures that will ensure effective database administration and security including but not limited to the following:

- Ensuring that only authorized individuals have access to infrastructure and electronic information resources
- Preventing unauthorized creation, alteration or destruction of data
- Ensuring that legitimate users get access to the relevant information
- Ensuring that resources are used in legitimate ways

Access to and use of University ICT resources and services, when provided, is a privilege accorded at the discretion of the University. This privilege is subject to the normal condition of use including procedures for initiation and termination of access, established by the manager of the individual electronic system resource. In addition, access to and use of University ICT resources may be wholly or partially restricted, modified or reversed by the DICT through University-wide established mechanism without prior consent of the resource user when there is substantial reason to believe that the user is violating the law or University policies.

4.9   Cost Sharing and Recovery

Cost sharing and cost recovery system according to users shall be as follows:

(i)   University students, Academic staff and Administrative staff.
The uses of ICT resources and facilities are free, provided that they are used for the purpose of academics and administrative function of the University. The uses for other purposes other than academic and administrative functions of the University may attract payment of some nominal charges. The fee structure shall be prescribed from time to time by the DICT in collaboration with department of finance of the University and approved by the Management.

(ii) Other users
The use of University ICT resources by other users apart from University students, academic staff and administrative staff shall attract some cost sharing for which charges shall be paid to the University. Mode of payment and reimbursement shall follow the University financial regulations currently in force.

(iii) Replacement cost
Any user who deliberately or maliciously vandalizes ICT equipment or information systems shall be liable to compensate the cost of making it good or replace it. The actual cost shall be determined depending on the prevailing market cost.

4.10   Short Course Programmes for Income Generation
The DICT may design computer-training programmes containing various computer applications for the purpose of running short course training for both internal and external clients. The participants shall be charged fee for such training. Fee structure for different courses shall be determined by DICT after consultation with other relevant University organs.

4.11   Lending Procedures for ICT Equipment

The University may lend at cost ICT equipment to different individuals or institutions external to Mzumbe University on condition that the facilities are used in the proximity of Mzumbe University. In the event that the equipment is to be used outside the University proximity, a written application indicating clearly the destination and purpose for which the equipment is intended to be used should be sought. Before the equipment is transferred, the Director of DICT will give a written approval after being satisfied that the equipment will be used within the specified time period and place and for the purpose for which the applicant indicated. The Director of DICT will provide conditions for lending and use of the ICT facilities.