

# VALLEY UNIVERSITY OF SCIENCE AND TECHNOLOGY

# INFORMATION & COMMUNICATION TECHNOLOGY POLICY

# **MARCH 2021**

This Research Policy was approved and adopted by the University Council at its 4<sup>th</sup> meeting held on 8<sup>th</sup>.March 2021

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# ABBREVIATIONS AND ACRONYMS

African Network Information Center
Bring Your Own Device
Closed Circuit Television
Department for ICT Support
Domain Name Services
Internet Corporation for Assigned Names and Numbers
Information and Communications Technology
Internet Protocol
Local Area Network
Plan, Do, Check, Act
Procurement and Disposal of Public Assets Act
Wide Area Network

#### FOREWORD

The adoption and utilization of Information and Communications Technology (ICT) within Valley University of Science and Technology (VUST) is aligned to the University Strategic Plan. The implementation of ICT requires an overall guiding framework to ensure that it's well-managed, complies with legal and regulatory requirements, creates value, and supports the realization of the University's objectives based on globally accepted best practice, guidelines and principles.

In line with the above, the VUST ICT Policy provides a structure for all the relevant ICT policies to support the achievement of the ICT Vision. Broadly, the policies here within spell out best practice, define roles and responsibilities of all user groups as well as provide guidance in the delivery, implementation and usage of ICT.

Lastly, I wish to acknowledge the efforts of the Department for ICT Support in the coordination of the development of the ICT policy. We all have an obligation to the University to comply with this Policy.

#### DR. ENOS K. RWASHEEMA

Vice Chancellor, Valley University of Science and Technology

# 1. BACKGROUND TO ICT POLICY

In the last two decades, a number of events have greatly changed the way people all over the world work and live. World over, ICT has revolutionized the way production, market access and distribution of goods and services are organized. This has led to new business models emerging on the horizon leading to fundamental changes in the way enterprises relate to consumers. The Internet and the use of webbased technologies have led to new communication modalities that have forced traditional media – TV, radio and newspapers – to devise new strategies and alternative scenarios in the struggle to remain relevant. In education sector, technology developments have made it possible for people to acquire and exchange information in an increasing variety of formats and collaborate with one another across national boundaries. Even in Uganda, more and more people use the Internet daily to communicate and transact business. It is against this backdrop that Valley University of Science and Technology recognizes that ICT is a key enabler for transacting and doing business in the University, and therefore the need for an ICT Policy.

This policy is geared towards increasing effectiveness and efficiency in all University functions. As such, the development of this policy took into consideration alignment to other existing University functional policies as well as globally recognized ICT practices. The University will accordingly ensure the university-wide dissemination of this Policy to user group categories.

## 2. RATIONALE

The purpose of this Policy is to describe and document the ICT policies and procedures that will support Valley University of Science and Technology (VUST) goals and objectives within all the teaching, learning, research and administrative units.

## **3. BROAD POLICY OBJECTIVES**

The broad policy objectives of the ICT policy are to;

- i) Build a knowledge based human capital;
- ii) Promote innovation in economic and social systems;
- iii) Expand ICT infrastructure and its integration throughout the country;
- iv) Deepen utilization of ICT services by students, staff and other stakeholders of the University.
- v) Enhance research and innovation in ICT products, applications, and services; and
- vi) Improve ICT governance and environment in the University.

## 4. SCOPE OF THE ICT POLICY

The ICT policy applies to the Valley University of Science and Technology Information Technology Departments and covers these areas:

- 1) ICT Governance
- 2) University Data Communication
- 3) Software Development and Acquisition
- 4) ICT Service Management
- 5) ICT Skills Capacity Building

- 6) ICT Services Support
- 7) Telecommunications and Unified Communications
- 8) ICT Procurement
- 9) Social Media
- 10) Software Licensing and Ownership
- 11) Information Systems and Data Warehousing

### 5. POLICY GUIDING PRINCIPLES

The guiding principles for the ICT policy will include but not limited to the following:

- 1. Enhancing private public partnership in delivery of ICT infrastructure and services;
- 2. Ensuring universal access to basic ICT infrastructure;
- 3. Technology neutrality of ICT services;
- 4. Integrated ICT facilities and services consistent with technological convergence;
- 5. Globalization: The policy implementation shall take into consideration developments at the global level so as to capitalize on latest trends in ICT;
- 6. Addressing cross cutting issues in ICT such as sustainability, gender, and people with disabilities;
- 7. Providing enterprise-oriented and consumer-centric services.

#### 6. POLICY PROVISIONS

## 6.1 ICT GOVERNANCE POLICY

#### 6.1.1 Introduction

Effective ICT Governance provides a conducive environment for the alignment of all ICT investments in a rationalized manner that is aligned towards enabling an organization meet its goals and objectives. This also contributes to the attainment of value for money, management of risks and effective ICT utilization.

#### 6.1.2 Policy Objective

To provide for the centralized effective Governance of all ICT related matters within the University in a rationalized and harmonized manner.

#### 6.1.3 Policy Scope

This policy applies to all ICT related matters within the University.

#### **6.1.4 Policy Statements**

- 1. Advise and monitor the implementation of the ICT Strategy and Policy;
- 2. Ensure provision of resources within the University Budgeting process for implementation of the ICT Strategy through:

- 3. Monitor development and innovations in ICT sector, in order to advise on implementation of innovative and sustainable ICT solutions aligned to the University's strategic goals;
- 4. Undertake advocacy for the adoption and utilization of ICT within the University; and
- 5. Act as Champion Agents in the enforcement of the ICT Policy.

## 6.1.5 Strategies

- 1. Ring fencing a certain percent (1-3%) of the University total budget towards ICT spending. This budget includes the budget for DICT plus the ICT budget components in all Faculties and Units of the University.
- 2. Inclusion of one percent (1%) ICT support within all University Grants
- 3. Provide effective ICT support that is responsible to the academic, research and administrative functions of the university
- 4. Promote effective and appropriate utilization of ICT resources
- 5. Contribute towards the sustainability of the unit in order to enable effective execution of DICT mandate
- 6. Promote and environmentally friendly approach to the acquisition, use and disposal of ICT resources
- 7. Coordinate and lead resource mobilization for counterpart funding for the implementation of the ICT Strategy.
- 8. Specify, verify and vet ICT standards, procedures and best practices for all university ICT deployments and operations.
- 9. Have the overall ownership of the professional and technical mandate of all ICT design and developments, management and maintenance.
- 10. Operationalise and guide the ICT policy implementation.

## 6.2 UNIVERSITY DATA COMMUNICATIONS NETWORK POLICY

## 6.2.1 Introduction

Valley University of Science and Technology has integrated the use of ICT in all its major operational areas: teaching, learning, administration and research. The fast rate of innovation has led to newer and more effective technological developments that have greater value. At the core of this infrastructure is the Data Communications Network that has evolved into the backbone for the provision and usage of daily utilized ICT services. This Policy sets out to achieve a rationalized infrastructure approach that will lead to the emergence of centralized network management through the Network Operations Center. This does require an appropriate policy to guide the development, maintenance and usage of the University 'backbone.

- a) The university data communications network shall be broken down into the following areas:
- i. ICT Infrastructure Rollout
- ii. Digital network

- iii. University Wide Area Network
- iv. Campus Local Area Networks (LANs)
- v. Wireless Access provision
- vi. Remote Access
- vii. Access to Computing infrastructure and ICT services

## 6.2.2 Objectives

The objective of this Policy is to guide the development, rollout, maintenance and usage of the University Backbone to ensure resiliency, stability and higher uptime rates. This is all geared towards ensuring the usage of the backbone is aligned to the goals of the University as laid out in the University Strategic Plan.

## 6.2.3 Scope

This policy applies to user categories within the teaching, learning, administration and research units of the University as well as any contractors and authorized third party relations.

#### **6.2.4 Policy Statements**

- 1. Provide a resilient, secured and stable fast data communications network as an enabler to the processing, storage, dissemination and accessing of information or ICT enabled services as relates to the various needs of the teaching, learning, administration and research domains.
- 2. Support the provision of remote access for approved University resources.
- 3. Support the provision of access to network resources to authorized users across public internet infrastructure with consideration for information security.

#### 6.2.5 Strategies

- 1. The management of the entire digital network infrastructure shall be vested with the Unit responsible for ICT;
- 2. The Unit responsible for ICT shall periodically define the methodology for access to external data destinations and data routes;
- 3. The University shall establish central monitoring and control the University-wide digital network
- 4. All Domain Name Services (DNS) activities hosted within the University shall be centrally managed;
- 5. All core network components shall be designed to support redundancy for continuing service provision;
- 6. The Network Backbone shall connect to all authorized access points and areas within the University;
- 7. All forms of access and usage of the backbone shall be managed by the Unit responsible for ICT.

- 8. The University shall provide secured and resilient University Local Area Network (LANs)
- 9. All Campus LANs will ensure compliance with approved University ICT structured cabling standards and network configurations
- 10. All Campus LAN extensions or modifications shall require approval from the Unit responsible for ICT
- 11. The Network health monitoring and technical support shall be the responsibility of the Unit responsible for ICT.
- 12. The University will support the provision of reliable and secured near-ubiquitous Wireless Access Points across the University Campuses;
- 13. Only approved Wireless Access Points shall be allowed to transmit wireless signals;
- 14. The configuration of such Wireless Access Points shall comply with approved network and security configurations to achieve consistency and performance standards;
- 15. The Wireless Access health monitoring and technical support shall be the responsibility of the unit responsible for ICT.
- 16. The Unit responsible for ICT shall define and implement the remote access methodology, technology and standard as the requirements to ensure privacy and security
- 17. Remote Access shall only be provided to:
  - i. Users approved by the Unit responsible for ICT as per the business need requirement
  - ii. Students or lectures within the open and distance learning programmes
- 18. All approved users for the remote access functionality shall consent to the Cyber Security Policy requirements for remote connections; and
- 19. The remote access usage monitoring shall be the responsibility of the Unit responsible for ICT.
- 20. The provision of secured University E-mail services and related storage quotas will be centrally defined, managed and periodically reviewed by the Unit responsible for ICT;
- 21. All University websites and portals will be centrally hosted;
- 22. The University will establish and maintain an effective dedicated web cache management service to optimize bandwidth provision;
- 23. The Unit responsible for ICT shall centrally manage the provision of computing resources to all user groups within the research, teaching, learning and administration units of the University;
- 24. The University shall ensure the provision of a secure and efficient university intranet and web portal and its universal access
- 25. The Provision of ICT services will take into consideration the needs of:
  - i. special user groups

- ii. guest access
- 26. Access to ICT services such as e-mail will be provided to authorized users
- 27. The University reserves the right to audit, without prior notice, any ICT equipment connected to its networks for the purposes protection against exploitable security vulnerabilities

#### **6.3. CYBER SECURITY**

#### 6.3.1 Introduction

Cyber security in this context refers to the protection of university digital infrastructure and information assets against any compromise or attack that may affect its confidentiality, integrity and/ or availability.

#### 6.3.2 Policy Object

To ensure the protection, resiliency and stability of all University ICT infrastructure, the information held there within and services against any cyber threats.

#### 6.3.3 Policy Scope

This Policy applies to all University owned ICT infrastructure, digital information and services.

#### **6.3.4 Policy Statements**

- 1. Undertake ownership of all cyber security risks
- 2. Provide leadership for the Governance of Cyber security within the University
- 3. Articulate the University's information risk appetite

#### **6.3.5 Strategies**

The Department for ICT Support (DICT) shall:

- 1. Ensure that the appropriate security controls and mechanisms have been put in place based on a formal periodic risk assessment;
- 2. Maintain an updated ICT risk register in line with the following from the National Information Security Framework
- 3. Maintain an updated and tested Business Continuity and Disaster Recovery Plan for all critical University digital infrastructure and information assets
- 4. Implement periodic systems and infrastructure audit based on the Plan, Do, Check, Act (PDCA) cycle
- 5. Maintain updated and documented secure configurations baselines for all hardware and software
- 6. Develop and implement a patch management plan
- 7. Implement network filtering to protect the network against malware related threats
- 8. Ensure the controlled and audited usage of ICT administrative privileges

- 9. Implement monitoring and real time analysis of all ICT network device event security logs with a centralized mechanism
- 10. Ensure the limited and controlled use of network ports and controls
- 11. Ensure the implementation of appropriate Wireless Access Provision protection mechanisms
- 12. Coordinate and lead the rollout of periodic cross-cutting security awareness and training
- 13. Ensure all ICT equipment is installed with the appropriate active malware protection that is continuously updated
- 14. Develop and maintain a handover mechanism for ICT equipment and information during end of staff employment contracts aligned to the University Human Resource Policy
- 15. Secure access to all the university ICT resources and enforce acceptable usage of the same by the deployment of security standards, technologies and best practices.
- 16. Users shall:
  - i. Ensure compliance to the cyber security policy
  - ii. Report any cyber security incident to DICT

#### **6.3.6 Conditions of Usage**

The following activities shall be strictly prohibited, with no exceptions:

- a) Sharing of individual access passphrases
- b) Usage of any pirated software on University computing devices
- c) Usage of any unauthorized peer to peer software
- d) Any user action that contravenes the Computer Misuse Act (2011) or the Anti-pornography Act (2014)
- e) Any user action that violates the rights of any person or entity's legally registered Copyright and/ or Intellectual Property
- f) Introduction of any malicious software onto any University computing device or network
- g) Any user action that disrupts the normal functioning of any university computing device or network
- h) Violations of the rights of any person or company protected by Uganda's copyright, trade mark, patent, or other intellectual property (IP) law and the University's Intellectual Property Policy, other relevant policies, or the University's code of conduct.
- i) Any password cracking, software spying, privilege escalation, unauthorized network
- j) port scanning and network reconnaissance, network and/or software penetration
- k) Usage of university computing devices and/ or network to disrupt an external system or network
- 1) Usage of university computing devices and/ or network to send out any spam

- m) Usage of university computing devices and/ or network for any gambling activity
- n) Usage of university computing devices and/ or network for any personal commercial purposes

### 6.3.7 Suspension and/or Termination of Access

The following constitute rationale for user access termination to university computing resources:

- a) End of student or staff employment tenure
- b) Request from University Council, University Management, Heads of Department and/ or University Human Resource Department
- c) Occurrence of any of the unacceptable usage restrictions

#### 6.3.8 Bring Your Own Device (BYOD)

The University shall allow the usage of personal devices on the university network as long as such complies with the University policies and offers a similar level of protection as specified by the Unit responsible for ICT. Such usage will be subject to the following:

- a) No sensitive or confidential university information shall be stored on such devices
- b) The University will provide an acceptable level of protection for such personal devices as defined by the Unit responsible for ICT from time to time;
- a) The University shall have the right to investigate/audit such devices in case of any malicious activity, cybercrime or fraud that affects the University.
- c) Registered with DICT.

## **6.3.9 Password Policy**

- a) The Unit responsible for ICT-DICT, shall define the password strength and lifecycle specification for all user categories from time to time
- b) All default system or hardware passwords shall be changed
- c) All users shall ensure the privacy of their passwords
- d) The Unit responsible for ICT shall implement and maintain centralized authentication, authorization, and accounting service mechanism for all network core equipment to all ICT resources

All locally development applications shall support password encryption and user role segregation.

## 6.3.10 Computer Lab Facility Security

Heads of Departments shall ensure that all Computer Lab Facilities are:

- a) Compliant to ICT approved baseline setup and configurations
- b) Routinely checked for unauthorized connections
- c) Accessed only by authorized students and/ or researchers
- d) Locked down to prevent physical theft of any component
- e) Protected against exposure to water leakages, fire and or dust

- f) Located in strongly burglar proofed rooms
- g) Labeled according to approved ICT nomenclature
- h) Professionally serviced and maintained

## 6.3.11 Data Center/ Server Room Security

The Unit responsible for ICT shall ensure that Data Center/ Server Room facilities are:

- a) Located in secure strong locations away from human or vehicle traffic
- b) Fitted with both manual and electronic access control with CCTV monitoring
- c) Protected against physical intrusion and exposure to water, dust and fire
- d) Protected against power fluctuations
- e) Supported by alternate power supply

## 6.3.12 Access Control

The University shall:

- a) Define and periodically review the technology for SMART Access control for different categories to take advantage of new ICT innovations
- b) Maintain a smart access control to govern access to all university buildings by both staff, students, visitors and contractors
- c) Implement CCTV for access monitoring of all university buildings and entry points

#### 6.4 SOFTWARE DEVELOPMENT AND ACQUISITION POLICY

#### 6.4.1 Introduction

The University has over the years been acquiring, developing and making software to support various University functions in an uncoordinated manner. There is therefore need to achieve a defined common methodology for both development and off the shelf software towards achieving improve usage and rationalization of University resources.

This policy assists you in standardizing software development, resulting in better resource utilization, a more consistent outcome and a higher-quality software product delivered to end users.

#### **6.4.2** Policy Objective

The objective of the policy is to define and implement software development and acquisition methodology to increase efficiency, information assurance, value for university resources and enhance rationalization of ICT.

#### 6.4.3 Policy Scope

The policy refers to all software used to support university functions with either developed internally (in house or outsourced) or off the shelf software.

#### **6.4.4 Policy Statements**

The following statements govern the implementation of this policy

- 1. periodically define the Systems Life Cycle methodology
- 2. All software shall undergo testing and quality assurance before installation in any production environment
- 3. All software under this policy shall comply to the Software Licensing and Ownership and Cyber Security Policies

## 6.4.5 Strategies

- 1. Systems and software engineering for both in-house and outsourced development
- 2. Acquisition of off the shelf software
- 3. Maintenance of software
- 4. Information classification
- 5. Usage of the least privilege principal
- 6. Segregation of roles
- 7. Audit trails.
- 8. All acquired software shall where necessary contain provision for technical support and upgrades.
- 9. Where necessary make use of open source software based on a risk based assessment as referenced in the cyber security policy.
- 10. Undertaking the development or acquisition of any software shall ensure compliance to this policy and plan for end user training.

# 6.5 ICT SERVICE MANAGEMENT POLICY

# 6.5.1 Introduction

The University shall ensure the provision of the ICT Service within the University as well as define a Unit responsible for ICT as the central coordination point of contact for all ICT support. The ICT support shall cater for all areas under the University network, computing devices, hardware, software and implementation of ICT initiatives, projects and programs at all campuses and their related technical support.

## **6.5.2** Policy Objective

The objective is to define and implement an effective ICT Service Management and Support approach that is aligned to the Vision of the University Strategic Plan where ICT is identified amongst the key components in the support of the University's goals and objectives.

## 6.5.3 Policy Scope

This Policy provides for the centralized management, responsibility and support of all ICT related matters within the University. It's cognizant that the ownership of all University ICT assets is vested with the University Council.

## 6.5.4 Policy Statements

- a) The University shall define and implement an appropriate ICT Service Management process and procedure aligned to the goals and objectives of the University
- b) Define and implement a Business Model for the provision of ICT services to external clientele.
- c) The unit responsible for ICT shall additionally device a business unit that shall generate resources to improve the welfare of its personnel.

## 6.5.5 Strategies

- 1. All ICT Services Personnel (system administrators, ICT Lab attendants, ICT technicians, Web administrators) employed by the University within all Departments and Colleges shall functionally report to the Unit responsible for ICT.
- 2. The University shall provide the necessary work tools, safety gear and training for all ICT services support personnel. Accordingly, such personnel shall:
- 3. Ensure protection mechanisms exist against ICT devices tampering, alteration or theft;
- 4. Ensure ICT protection controls exist to safeguard security of systems and information;
- 5. Provide assistance and guidance towards compliance of ICT policies;
- 6. Provide technical support in line with approved ICT procedures for any system, service, device downtime or breach;
- 7. Ensure installation and configuration of all hardware and software is aligned to approved ICT standards;
- 8. Ensure safe custody and authorized usage of all University software licenses, copyright and usage keys.

## 6.6 ICT SKILLS CAPACITY BUILDING POLICY

## 6.6.1 Introduction

The adoption of Information and Communications Technology (ICT) products and tools will require the attendant training to enable effective usage. This requires a dedicated approach within the University to be able to plan for such gaps and develop as well as implement the training as per and when the need arises. This will target all users within the University amongst the staff and student community.

## 6.6.2 Policy Objectives

The purpose of the policy is to:

- a) Empower the Unit responsible for ICT to:
  - i. plan and implement capacity building for ICT skills to achieve coherency and efficient utilization of resources
  - ii. undertake capacity building towards improvement of technical capacities of its staff as per and when need arises;

b) Provide for the University Council Committee on Quality Assurance, ICT and Gender to periodically review DICT staff remuneration to ensure retention and recruitment of qualified staff as aligned to the University Human Resource Policy.

#### 6.6.3 Policy Scope

This policy applies to all ICT related capacity building that supports the various functions of the University.

### 6.6.4 Policy Statements

- 1. Coordinate the periodic assessment of existing ICT skills capacity amongst all user groups to be able to identify gaps in partnership with Heads of Departments
- 2. Undertake a periodic capacity skills assessment to identify knowledge gaps within its technical staff to be able to seek appropriate capacity building programs

#### 6.6.5 Strategies

- 1. Develop Capacity Building modules and courseware for identified ICT skills gaps
- 2. Implement such capacity building with either internal resource personnel or with subject matter experts as per the nature of the required ICT capacity building
- 3. Coordinate the identification of any external expertise for specialized training needs.
- 4. The University shall ensure the presence of well-equipped ICT training computer labs.
- 5. Trainees for such capacity building programs to be identified by the user departments in partnership with Heads of Departments.

## 6.7 TELECOMMUNICATIONS AND UNIFIED COMMUNICATIONS POLICY

#### 6.7.1 Introduction

Telecommunications and Unified Communications services will provided to support the communication needs required for the smooth operations of the University amongst all Departments and Faculties. In this context, this will include unified communications services based on the existing University digital network as well as the traditional telephone services.

#### **6.7.2 Policy Objective**

To provide for the use of Unified Communications service alongside the traditional telephony services towards implementation of an ICT enabled communications service aligned towards supporting the University objectives. As such, the policy shall apply to all University Departments and Faculties.

#### 6.7.3 Policy Scope

This Policy applies to all telecommunications and unified communications service provision that meets that supports the various functions of the University.

## 6.7.4 Policy Statements

Support and promote the usage of Unified Communications service within the university.

#### 6.7.5 Strategies

- 1. Design and implement the university wide telephony service and numbering plan to support both intercom services and external calls.
- 2. Design and implement university wide unified communications service to support new communications channels integrated with e-mail, online meetings, video conferencing, workplace collaboration and seamless file sharing
- 3. Ensure proper license usage for all unified communications components
- 4. Ensure manage and take up responsibility for all infrastructure required to provide a smooth user experience as relates to communications services
- 5. Provide the required timely technical support through the IT services help desk for all communications related downtime.
- 6. Approve and provide technical assistance for any expansion of the communications services within the university
- 7. Set and periodically review communications services technical specifications (hardware, consumable, software) as well as configuration and installation guidelines to ensure uniformity for the service provision and compatibility with existing infrastructure
- 8. Undertake routine maintenance, upgrade and daily monitoring of the communications service usage
- 9. Manage and maintain service level agreements will all suppliers of the required communications service, equipment and software
- 10. Provide technical guidance and authorization in the design and provision of any radio communications service within the University.
- 11. All Departments will ensure the appropriate protection of desk sets.
- 12. DICT will not be responsible for any damaged or stolen desk sets.
- 13. Departments shall acquire any telecommunications or communications service centrally through guidance from the Unit responsible for ICT.
- 14. Any configuration change, software upgrade or cabling change to be undertaken by authorized personnel by the Unit responsible for ICT.

## 6.8. ICT PROCUREMENT POLICY

#### 6.8.1 Introduction

Procurement of all ICT equipment and services shall be in conformity with the overall University procurement of goods and services standard as aligned to the Public Procurement and Disposal of Public Assets Act (PPDA).

## 6.8.2 Policy Objective

To guide the procurement of all University ICT equipment and services towards ensuring standardization of all ICT related assets, transparency, timely delivery, quality assurance, value for money as well as compatibility with existing infrastructure and services.

### 6.8.3 Policy Scope

This policy will apply to all University Departments and Colleges at all campuses.

#### **6.8.4 Policy Statements**

- 1. The University shall define the life cycle for each category of procured ICT equipment to determine the replacement cycle
- 2. Disposal of retired ICT equipment shall comply with the Disposal policy.
- 3. Software disposal shall rely on the system support cycle of the software developer company.

## 6.9 SOCIAL MEDIA POLICY

#### 6.9.1 Introduction

Social media is referred to as any web software that provides electronic social interaction amongst its subscribers and communities.

#### 6.9.2 Policy Objective

To guide the appropriate usage of social media by Valley University staff as well as enhance personal and professional reputations online.

#### 6.9.3 Policy Scope

This policy applies to all University staff and official social media sites.

#### **6.9.4 Policy Statements**

The following statements shall govern both the usage of official university social media sites as well as staff social media activity:

a) University Official Social Media Sites:

- 1. Only the university official social media sites will be allowed to make use of University trademarks and symbols
- 2. Only authorized personnel by the University shall be allowed to make postings on the university official social media sites
- 3. Any information shared across the university social media sites shall comply to fair use and comply to University policies in the domains of Conflict of interest and University trademark and symbol protection
- 4. All information shared across the university social media sites should not make reference to any biased statements on matters such as politics, religion, race,

gender, sexual orientation, inter alia; statements that contain obscenities or vulgarities

- b) All staff social media activity shall:
  - 1. Respect the Laws relating to copyright and other intellectual property rights, defamation, privacy, and other applicable laws
  - 2. Not portray colleagues in an unfavorable light in respect of matters including, but not restricted to, religion, gender, sexual preference, race, nationality or disability
  - 3. Maintain adherence to the overall University Confidentiality agreements and information disclosure
  - 4. Not make reference to any sensitive staff or student information

c) This policy does not apply to the use of social media for educational purposes as referenced in the University E-learning policy

# 6.9.5 Statement of Liability

The University shall not be liable for any errors, omissions, loss or damage, including indirect and/or consequential loss and/or damage claimed or incurred due to any use of any social media site that does not comply with this Policy or the policies cited herein.

# 6.10 SOFTWARE LICENSING AND OWNERSHIP POLICY

# 6.10.1 Introduction

All software and its related licenses', copyright, intellectual property and source code used by the University shall be owned as assets of the University.

# 6.10.2 Policy Objective

To ensure that all software in use throughout the university is correctly licensed and owned by the University

# 6.10.3 Policy Scope

This policy covers all software used within all teaching, learning, research and administration units of the university.

# 6.10.4 Policy Statements

- 1. Any computing equipment that is written off, sold or given to a third party shall have all non-transferable licensed software permanently removed
- 2. Staff and students shall not be given the ability to download and install software on university equipment
- 3. Software shall only be used in accordance with its license and duration
- 4. Software shall only be distributed in accordance with its license agreement
- 5. Software licensed for official purposes must not be used on personal computing devices

- 6. All software source code developed with either internal or external resources for University purposes shall be owned by the University and shall be handled over to DICT for good custody, backup and patenting.
- 7. All University Units outsourcing software development that has source code restrictions shall ensure usage of appropriate third party source code escrow agents to ensure continuity.
- 8. The University reserves the right to audit, without prior notice, any ICT equipment connected to its networks for the purposes of software license validation.

#### 6.10.5 Strategies

- 1. Ensure an inventory of all software is maintained
- 2. Ensure all software is licensed to the responsible University unit as aligned to purchase agreements
- 3. Ensure all software in usage is properly managed, administered and maintained
- 4. Ensure all software in usage is approved and aligned to the university information security policies

#### 6.11 INFORMATION SYSTEMS AND DATA WAREHOUSING POLICY

#### 6.11.1 Introduction

The University has been acquiring, developing and making operational different information systems to support the different unit processes and needs. Such systems work in isolation which leads to duplication of data and resources. Data Warehousing will support the harmonization of resources, increase ICT investment value, allow for accurate reporting and enable information/ data consistency.

#### **6.11.2 Policy Objective**

The objective of the policy is to define and implement:

- a) Data Warehousing for Valley University to achieve centralized management of information systems within a central data repository
- b) Interoperability between University information systems

#### 6.11.3 Policy Scope

The policy refers to all existing and future information systems as well as related databases used for University business improved business intelligence and decision making.

#### **6.11.4 Policy Statements**

- 1. The University shall ensure the provision of the appropriate ICT infrastructure and capacity for the data warehouse.
- 2. All University Departments undertaking the development of any information system shall ensure compliance to this policy.

# 6.11.5 Strategies

- 1. University appropriate Data Warehousing framework aligned to the Cyber Security Policy
- 2. University to develop data management standards
- 3. Interoperability framework for the secure and reliable communication between all University Information Systems

## 6.12 SPECIAL NEEDS ICT USAGE POLICY

#### 6.12.1 Introduction

The provision of ICT services should take into consideration the needs of special user groups to enhance teaching and learning. This takes into consideration the visually, motor and auditory impaired user groups. Globally, the development in ICT supports the extension of access to all users.

## 6.12.2 Policy Objective

The objective of the policy is to define and implement provisions for ICT usage for special user groups within the teaching, learning and research units of the University towards enabling equal access to information and knowledge.

#### 6.12.3 Policy Scope

The policy refers to ICT facilities, equipment and services within all the teaching, learning and research units of the University.

#### **6.12.4 Policy Statements**

- 1. All University Departments and Units shall ensure compliance to this policy
- 2. The University shall ensure the provision of the appropriate access for special user groups for all University web based systems

## 6.12.5 Strategies

- 1. The University from time to time define the appropriate technology aligned to needs of special user groups
- 2. The University to provide the provision of staff & end user training
- 3. The University to ensure the provision of the appropriate access for special user groups for all University web based systems
- 4. The University to ensure the provision of appropriate digital mechanisms within the Library for special user groups

## 6.13 ICT MAINTENANCE POLICY

#### 6.13.1 Introduction

The usage of ICT devices within the University will require a well-planned maintenance plan so as to ensure its safe and proper usage. This relies on the cooperation of all units to ensure proper asset and inventory management on which such maintenance can be achieved through a central coordination role.

# 6.13.2 Policy Objectives

The purpose of the policy is to ensure that all ICT equipment is regularly maintained to ensure all systems run smoothly with less downtime.

## 6.13.3 Policy Scope

This policy applies to all ICT equipment owned by the University within the various units and colleges.

## **6.13.4 Policy Statements**

- 1. From time to time define and disseminate updated ICT equipment maintenance guidelines to all Departments
- 2. Provide technical support in the development and implementation of service and maintenance schedules for all University ICT equipment

# 6.13.5 Strategies

- 1. Act as the central point of contact for all University ICT equipment maintenance
- 2. Undertake a periodic assessment in all Units to ensure compliance with the set maintenance guidelines
- 3. All Units to maintain records of all ICT equipment they acquire including records of manufacturer equipment warranty
- 4. All Units to liaise with the unit responsible for ICT in developing service and maintenance schedules on an annual basis for all ICT equipment
- 5. All Units to maintain good documentation describing the service and maintenance history for all ICT equipment
- 6. All Units to ensure all ICT equipment is placed within adequate operating environments
- 7. All Units to ensure all replacements or upgrades of any ICT equipment is undertaken with clearance from the unit responsible for ICT

# 7. IMPLEMENTATION OF ICT POLICY

# 7.1 IMPLEMENTATION FRAMEWORK

The social and economic challenges facing the university and the opportunities that ICTs offer pose complex policy choices for the institution. The university has to address the implementation of this policy and mainstreaming of ICTs amid strong competition for limited financial resources. Therefore, the successful achievement of the ICT Policy goals and objectives depend on an integrated and wholesome approach during implementation underpinned by developing strategic synergies and partnerships between the public and private sector as well as civil society. Developing this mutual understanding requires a deliberate and open process of broad-based consultations and participation among all major stakeholders to define the role of ICTs in various departments. Apart from the University having the responsibility to create the right policy environment for ICTs, departments, faculties, students also have key roles to play in order to facilitate the successful implementation of the provisions of this ICT policy.

#### 7.2 Institutional framework

The following institutions are important in creating a favorable institutional framework that will improve policy formulation, coordination and implementation.

## 7.2.1 University Council

The role of University Council in the effective implementation of this policy shall include among others:

- a) Approve an appropriate and effective policy that will create a flexible, dynamic and responsive environment to support the development of an information society;
- b) Facilitate the allocation and approval of financial resources for implementation of the ICT Policy;
- c) Ensure that good governance principles are applied and adhered to in the implementation of the ICT Policy by the University.

#### 7.2.2 University Administration

- a) Oversee the implementation of IT department priorities and regulate the IT department in relation to the broad responsibilities of the Faculty of Science, Technology and Innovations.
- b) Monitor the effective utilization of financial resources allocated for the implementation of the ICT Policy;

## 7.2.3 User Forum

The University shall establish the User Forum (UF) that will be a representation of responsible Head of Department from all the teaching, learning, administration and research domain units as a platform for end user satisfaction. With DICT as the secretariat, the UF shall:

- a) Integrate ICTs into their activities;
- b) Implement the Unit specific components of the ICT Policy and Strategy;
- c) Ensure compliance to the ICT Policy Framework; and
- d) Act as active participants during the periodic stakeholder consultations towards supporting and facilitating the effective implementation of the ICT Policy and Strategy.
- e) Provide a forum for the continuous evaluation and assessment of existing ICT services and infrastructure;
- f) Identify and communicate to DICT any emerging needs across the University domain areas;

- g) Act as Change Agents during the introduction of new innovation or new ICT services;
- h) d) Act as the link for the university-wide user community engagement with DICT as regards the ICT Service Provision.

#### 7.2.4 Department of ICT

The department shall;

- a. Ensure the achievement of the ICT policy on ICT matters relating to overall sector performance;
- b. Coordinate ICT activities at all levels;
- c. Coordinate and support the development / deployment of ICTs as part of the development agenda;
- d. Promote research, development, use and expansion of the ICT in the university in conjunction with relevant bodies and human resource development, etc;
- e. Undertake advocacy activities including ICT awareness at all levels through expos, forums, conferences and other forms of stakeholder consultations/ networking etc;
- f. Adequately and effectively represent the University on all matters relating to ICTs; and
- g. Mobilize and encourage Development Partners to mainstream ICTs in all programmes and projects of the University as part of the crusade to accelerate the development and creation of an information society.

#### 7.2.5 Staff and Student Community

The Staff and Student Community shall ensure compliance to the ICT Policies.

#### 7.2.6 Policy Approach

The Unit responsible for ICT has direct responsibility for maintaining and guiding implementation of this policy in line with the University Human Resource Policy.

## 8. INTELLECTUAL PROPERTY STATEMENT

Valley University of Science and Technology has adopted a policy (approved by the Council on 8th March 2021). The statement takes as its guiding assumption that the faculty member (or members) who create the intellectual property, own the intellectual property. It has been the prevailing academic practice to treat the faculty member as the copyright owner of works that are created independently and at the faculty member's own initiative for traditional academic purposes. Although that assumption applies to the patent area as well, there is in the academic context a practice of arranging for agreements between university administrations and faculty inventors that provide in some detail a means of sharing income from commercial application of patented inventions.

Intellectual property created, made, or originated by a faculty member shall be the sole and exclusive property of the faculty, author, or inventor, except as he or she may voluntarily choose to transfer such property, in full, or in part.

The university shall own copyright only in the following 3 circumstances:

- The university expressly directs a faculty member to create a specified work, or the work is created as a specific requirement of employment or as an assigned institutional duty that may, for example, be included in a written job description or an employment agreement.
- The faculty author has voluntarily transferred the copyright, in whole or in part to the institution. Such transfer shall be in the form of a written document signed by the faculty author.
- The university has contributed to a "joint work". The institution can exercise joint ownership when it has contributed services and facilities to the production of the work that goes beyond what is traditionally provided to faculty members generally in the preparation of their course materials. Such arrangement is to be agreed to in writing, in advance, and in full conformance with other provisions of this intellectual property agreement.

#### **Use the Intellectual Property**

A collective bargaining agreement or institutional policy may also allow for institutions to use works created by faculty members without charge for educational and administrative purposes within the institution. These uses are to enable the institution to operate more efficiently for such purposes as complying with accreditation agency requests, not to infringe on legitimate faculty rights.

Material created for ordinary teaching use in the classroom and in department programs, such as syllabi, assignments, and tests, shall remain the property of the faculty author, but institutions shall be permitted to use such material for internal instructional, educational, and administrative purposes, including satisfying requests of accreditation agencies for faculty-authored syllabi and course descriptions.

## 9. FINANCIAL IMPLICATIONS

Implementation of the policy will require some actions that may involve changing existing procedures, while others will require financial support that would come from reallocating existing budgets or increasing them.

In light of the above, the University Council pronounced itself, not to approve any policy that exerts extra financial burden to the university, until a time when it will be deemed necessary. By implication, all policies are to utilize the existing services, facilities and human resources.

## 10. ENFORCEMENT, MONITORING AND EVALUATION OF POLICY

Monitoring will be cardinal to the effective and efficient implementation of this ICT Policy. This entails the collection, analysis and use of the data and information to determine the progress of implementation. Additionally, periodic evaluation of programme processes with a view to using the findings for improvement and planning will be an integral part of the design, development and implementation of the Policy.

- a. DICT shall in partnership with the Committee on Quality Assurance be responsible for monitoring the implementation and compliance of these policies and where necessary shall take appropriate remedial measures
- b) DICT will ensure the policies' enforcement and university wide dissemination as well as awareness sensitization of this policy
- c) Violations of any the policy areas listed here within shall be addressed by the appropriate University mechanism as guided by the Council Committee on Quality Assurance and ICT.

#### 11. REVIEW OF POLICY

This Policy will be reviewed periodically to ensure it remains relevant and aligned to the goals of the University. This ICT Policy will be reviewed every (3) three years to take into account emerging issues and trends.

**NOTE:** Any part or whole of this policy that violates the National laws is null and void. National Laws take precedence.