THE SECOND INTERNATIONAL CONFERENCE HOSTED BY DEPARTMENT OF EDUCATIONAL MANAGEMENT, POLICY & CURRICULUM STUDIES

• Theme: **Re-Engineering Education for Sustainable Development**

• Presented by: Prof. Tolly.S.A. Mbwette
  President Pan African University Council & Immediate Past President African Council for Distance Education.
  e-mail: [tsambwette@yahoo.com](mailto:tsambwette@yahoo.com) & [tsambwette@gmail.com](mailto:tsambwette@gmail.com)
PRESENTATION OUTLINE

1. Introduction.
2. Background.
3. How OUT Exploited ICT to Improve Delivery and Transform its Organisational Culture.
4. Benefits Accrued from Effective Exploitation of ICT.
5. Some Associated Challenges.
6. How has OUT Contributed Towards Sustainable Development of Tanzania & The Rest of Africa.
7. Some Recommendations.
1. INTRODUCTION

• Open Learning is an approach which combines the principles of learner centred-ness, life-long learning, flexibility of the modes of delivery, the removal of barriers to accessing learning, the recognition for credit of prior learning qualifications, the provision of quality learner support, the construction of learning programmes in the expectation that learners can succeed guided by a requisite quality assurance framework.
1. INTRODUCTION Contd...

• Open Learning (OL) is used interchangeably with Open and Distance Learning (ODL). ODL and OL are modes that take education to the many learners who are separated, by time, space and pace, from those who are teaching. It is a method of teaching in which learners are geographically and physically separated from lecturers (Keegan, 1990).
1. INTRODUCTION Contd...

- According to UNESCO (2002), Open and Distance Learning refers to any educational process in which all or most of the teaching is conducted by someone removed in terms of space and/or time from the learner, with the effect that all or most of the communication between lecturers (best referred to as learning facilitators) and learners is through an artificial medium, either electronic, audio or print.
Empowerment refers to the practice of sharing information, rewards, and power with the society so that it can take initiative and make decisions to solve problems and improve service and performance.
1. INTRODUCTION Contd...

- Empowerment is based on the idea that giving the society skills, resources, authority, opportunity, motivation, as well holding it responsible and accountable for outcomes of its actions, will contribute to its competence and satisfaction.
1. INTRODUCTION Contd.....

• Development is the act or process of growing or causing something to grow or become larger or more advanced.

(http://www.Meriam-websites.co/dictionary/development)
INTRODUCTION Contd....

• **Sustainable Development** – Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

• **Transformation** - Refers to a complete or comprehensive change of operations and management of an organization

• **Reforms** – Minor or limited changes in an organization.
2. BACKGROUND

• OUT was the third public University to be establishment by the Government of the United Republic of Tanzania via the Act of Parliament No.17 of 1992. Its operations started in 1993.

• OUT operates through 29 Regional and Coordination centres in Tanzania and in Coordination centres in Kenya (3), Namibia, Rwanda and Malawi (3) and soon (1) in Uganda.

• By March 2015, the cumulative number of students admitted at OUT had reached 103,388, i.e:
  - 83,287 Non-Degree & UG students and
  - 20,101 PG students.
2. BACKGROUND Contd…

• During the October, 2013 graduation ceremony, the number of graduants in Non-Degree (ND) programmes, UG and PG programmes was 3,810, of whom:
  - 2,190 were males and
  - 1,620 were females.

• Cummulatively, by March, 2015, a total of 22,290 students had graduated from OUT in various programmes as indicated below:
  - 9,211 students in ND,
  - 10,234 students in UG and
  - 2,844 students in Masters and Doctorate Programmes.
This presentation reflects and discusses how effective the use of technologies for learning and in particular (ICT) can lead to improved delivery and management efficiency by taking the case of the Open University of Tanzania (OUT).

So, in this presentation, it will be demonstrated how process re-engineering, coupled with an effective exploitation of technologies (ICT) can lead to enhanced learning and management.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT

• Exploitation of ICT to enhance management and delivery of academic programmes at OUT involved the following stages:

  - Preparation of an OUT comprehensive and updated Strategic Plan, ICT Policy & ICT Masterplan.
  - Mainstreaming use of ICT amongst OUT Staff
  - Mainstreaming use of ICT amongst OUT Students
  - Implementation of the ICT Policy and the Masterplan
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT  Cont...

3.1. Preparation of Plans and ICT Policies and Masterplans

• In 2004, OUT prepared the first comprehensive institutional 5 Years Rolling Strategic Plan 2004/5 – 2008/9 that replaced an earlier plan that had existed since its establishment.

• The plan had 16 Strategic objectives and it resolved to use ICT to enhance its management efficiency and academic delivery.

• Alongside the plan, OUT also prepared its first ICT Policy and ICT Masterplan.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT  Cont...

3.1. Preparation of Plans and ICT Policies and Masterplans

• ICT Policy & Masterplan were meant to assist in concretizing the realization of the ideals contained in its modern 5 Years Rolling Strategic Plan using ICT as a crucial tool.

• In the year 2007/08, OUT prepared and started implementation of an ICT security Policy in order to guide further its exploitation.
3.1. Preparation of Plans and ICT Policies and Masterplans

• With funding assistance from SIDA, the process of implementation of the ICT Masterplan focused at improving educational delivery and management efficiency.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.2. Mainstreaming use of ICT amongst OUT Staff

- To ensure that use of ICT is mainstreamed in its workforce, OUT provided all categories of its staff opportunities to become ICT literate between the year 2006 and 2009.

- Effective the financial year 2009/10, OUT declared that all staff working at OUT had to be ICT literate and renewal of contracts was dependent upon one passing an ICT literacy test that was prepared and administered by the then IET of OUT now abbreviated at IEMT.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.2. Mainstreaming use of ICT amongst OUT Staff

• This also meant, all newly recruited staff had to pass an ICT literacy tests before any interview is carried out. As a result of this resolve, a number of academics had to leave OUT after learning that they had failed the ICT literacy test.

• These measures made staff to understand that the Management was very serious with ICT literacy.

• By June, 2010, OUT had stopped issuing printed circulars and to date the OUT community relies on intranet and internet based communication.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.3. Mainstreaming use of ICT amongst OUT Students

• In the academic year 2010/11, efforts to intensify use of ICT amongst students were enhanced to the extent of scaling down the issuing of printed study materials to individual students.

• With effect from the academic year 2011/12, hard copies of study materials were made available for use in regional and examination centres and registered study groups only.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.3. Mainstreaming use of ICT amongst OUT Students

• This has been supplemented by MOODLE-based courses on the OUT LMS and digitization of most of the study materials and making them available to the students as CDs.

• Students are encouraged to own laptops manufactured with specifications given by the IEMT to a local supplier of laptops from China at a price of US $ 300 co-ordinated by the student government abbreviated as OUTSO.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.3. Mainstreaming use of ICT amongst OUT Students

• By the academic year 2013/14, the University had provided students PC laboratories to 20 regional and coordination centres OUT of the 29 centres and it provided wireless internet to all regional and coordination centres without PC labs.

• Furthermore, OUT is investigating the use of a variety of mobile electronic accessories for learning and in particular affordable mimi-tablets (US $100 to 150) and mobile phones.

• Currently OUT is undertaking rigorous investigations on the best type of tablets of modest cost that can be loaded with e-resources that can be given to learners annually.
3.4. Implementation of the ICT Masterplan

• By June, 2013, OUT has been able to successfully develop in-house and implement a variety of Management Information Systems that were envisaged by the ICT Masterplan of 2004 as updated in 2010.

• The systems include the following:
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.4. Implementation of the ICT Masterplan

- **Student Academic Register Information System (SARIS)**, which is used for recording student’s demographic and academic records among other things.

- **OUT Learning Management System (OUTLeMS)**, which is based on MOODLE open sources software and is used mainly to support electronic blended learning.

- **Library Management Information System (LIBMIS)**, which contain over 154 e-resources including e-journals and e-books.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.4. Implementation of the ICT Masterplan

- *Customer Relations Management Information System*, which is used by the ICT helpdesk to handle issues from the more over 680 staff and approximately 40,000 active students. The system enhances customer care services, supports on-line reporting and feedback system.

- *Financial Management Information System (FINMIS)*, which is used for real time/online management of budget decisions, producing financial reports, controls asset management and payroll control system.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.4. Implementation of the ICT Masterplan

- Human Resource Management Information System (HRMIS), to date the data of OUT staff (over 630) have been gathered and uploaded in it. The system reduces administrative backlogs, increases staff throughput and supports performance review appraisal. Also the system supports the staff development and succession plans, recruitments, salaries, leave, promotions, loans and incentives.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.4. Implementation of the ICT Masterplan

- **File Management Information System / File Tracking System (FMIS)/(FTS),** The system handles electronically thousands of files movement in the University. There is no physical movement of files thus improving service delivery, efficiency, file security and general accountability. Designated offices can be able to follow up and act on all office matters even when they are away from office.
3. ICT FOR ENHANCED LEARNING AND MANAGEMENT Cont...

3.4. Implementation of the ICT Masterplan

- In addition to the above MISs, OUT has also developed, adapted, adopted or procured the following softwares for various internal use:
  - Student on-line registration (in-house developed)
  - Student on-line registration for exams (in-house)
  - Student on-line registration field work, practical and teaching practice (in-house)
  - Staff attendance application based on finger print reading devices. (proprietary)
On-going Developments:
- Integration of various related MIS and Learning systems.
- Further integration of tablets and mobile phones to the OUT learning management system.
- Integration of staff related IS.
- Delivery of salary slips vide staff e-mails.
4. BENEFITS OF EFFECTIVE EXPLOITATION OF ICT

• The following are the benefits that OUT experiences as a result of the effective exploitation of ICT to improve the learning and management efficiency:

  □ Improved Management of student academic records.
  □ Improved data on the number of students registering and actually doing examinations.
  □ Improved security as well as quality of the examination based on establishment of a comprehensive examination data base.
4. BENEFITS OF EFFECTIVE EXPLOITATION OF ICT Cont...

- Through the use of examinations on demand (ODEX), OUT will in future allow students to do exams anywhere and whenever they are ready through on-line application. Within two years, there will be no exam seasons and hence OUT will save many exam transport and security associated costs that it now meets when eventually, all courses adopt the ODEX mode of exams.

- Processing of student results including prospective graduands lists is much easier and more efficient.
Production of academic transcripts is guaranteed to be done more efficiently with the University guaranteeing delivery within the OUT Client Service Charter time limit of no more than three (3) days.

Control of fees collection has now been much better enhanced and it is more transparent.
4. BENEFITS OF EFFECTIVE EXPLOITATION OF ICT Cont...

- Through effective use of ICT services including installation of WAN and LAN as complemented by wireless internet access, the number of students using computers, tablets or mobile phones has now increased.

- Internal communication with staff of all categories including the lowest administrative cadre is via internet and intranet.
4. BENEFITS OF EFFECTIVE EXPLOITATION OF ICT  Cont...

- It is now possible to budget more confidently for field training in several fields, science practicals, teaching practice and in particular the necessary minimum deployment of staff which was at times very contentious due to lack of accurate data.

- Compilation of various facts and figures and all University statistic is much easier than before.

- It has been possible to close the accounts much earlier than prior to computerization of the financial records.
4. BENEFITS OF EFFECTIVE EXPLOITATION OF ICT Cont...

- Use of ICT has also improved the transparency of use of funds allocated to regional or coordination centres. All payments paid to regional and coordination centres are shared with all staff vide staff mails.

- It is much easier to establish which officers are not handling mails effectively because the EFTS enables one to get an instant report of delayed action by various officers.

- UG programmes increased from 10 in 2004/5 to 36 in 2014/15
The number of PG programmes increased from 10 in 2004/05 to 62 in 2014/15.

In 2014, OUT produced graduates from 27 different countries in the world.

By March 2015, OUT was able to produce the following journals in both hard and soft form, the following five Journals:

- HURIA Journal
BENEFITS OF EFFECTIVE EXPLOITATION OF ICT Contd....

- The Law Journal
- The African Journal of Economic Review
- The Journal of Issues in Education jipe

The FSTES is planning a new journal to be launched soon.
5. SOME ASSOCIATED CHALLENGES

• The following are some of the challenges that are faced:
  - Some internal stakeholders that are likely to lose from effective deployment of ICT do everything to ensure that management faces setbacks from time to time.
  - Some students take a long time to appreciate the benefits of exploitation of ICT.
  - The need to ensure as soon as possible, all the in-house developed MIS talk to each other has been realized.
5. SOME ASSOCIATED CHALLENGES
Contd.....

• Cost of bandwidth is still high despite the many efforts of the Government and other parties to assist in different ways.
• Difficult to guarantee 24/7 internet access due to poor reliability of the ISPs.
• Poor reliability of power supply
• Lack of willingness of the Govt. to provide permits to employ technicians in all regional centres.
5. SOME ASSOCIATED CHALLENGES

Contd...

Varying levels of services available to ODL students located in many different parts of Tanzania means no matter what effort is taken by the University to provide all students with equitable services, there will be some local differences that may not be easy to remove in the short-term.
6. HOW HAS OUT CONTRIBUTED TO SUSTAINABILITY OF TZ & AFRICA

- OUT has been able to produce a substantial number of UG and PG Tanzanian graduates who are serving a number of public and private offices and hence sustaining development of Tanzania.

- Due to offering a number of PG programmes to a number of students from various African and other countries who are doing well, it has contributed to the sustainable development of those African countries.
7. RECOMMENDATIONS

- It is often necessary to set aside some funds in order to facilitate periodic replacement of computers instead of waiting for donors or development partners to do that. Experience show that PCs must be replaced once in every 3-4 years.

- The University management has to consistently remind the students’ community the importance of being ICT literate until this culture is mainstreamed. This problem is more critical for the older students who never had the opportunity to use computers in their previous studies or at
6. RECOMMENDATIONS Cont...

- Universities should not spend too much time to train the older academicians who may have computer *phobia*. Instead, they should link them to younger staff in their areas who can assist to digitize their materials on their behalf including Masters and the Doctorate candidates supervised by such senior academics.

- Challenges of high costs of bandwidth as well as poor performance of some Internet Service Providers (ISP) remains an obstacle to effective use of multimedia.
6. RECOMMENDATIONS Contd...

• Recognition, retention and rewarding of all the internal ICT experts involved in sustaining ICT services and infrastructure that is performance-based is crucial and particularly for ODL institutions that are state owned like OUT.

• In any modern ODL university, local differences of levels of service to students cannot be entirely eliminated.
I THANK YOU ALL
FOR YOUR ATTENTION!