

***REPORT ON A THREE-DAY WORKSHOP ON
DIGITISATION AND INSTITUTIONAL REPOSITORY
AT GHANA KOREA INFORMATION ACCESS CENTER
(IAC), UNIVERSITY OF GHANA, LEGON
18 – 20TH FEBRUARY 2014***

**A Collaborative Workshop between University of Ghana Computer Systems (UGCS),
Balme Library and University Archives**

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Summary

A three-day workshop on the theme “*Providing practical guidance for effective digital collection programmes at the University of Ghana*”, was held from 18-20 February, 2014 at Ghana Korea Information Access Center (IAC), University of Ghana, Legon. It was a collaborative workshop between University of Ghana Computer Systems (UGCS), Balme Library and University Archives. It targeted staff members who are likely to be working with records or archives and library management or have some responsibilities for digitisation in their offices. Nine papers were presented. Four papers were presented on the first day, four more papers on the second day and one on the third day. A tour of digitisation facilities – the archives, digitization rooms where the various scanners are installed, and microfilm digitization room – was part of activities on the fourth day.

The titles of the papers delivered were as follows:

- *An overview of digitization and institutional repository at the University of Ghana;*
- *Digitization workflow, guidelines and policy;*
- *Preparing documents for digitization;*
- *Copyright and digital collection;*
- *Introduction to Institutional Repository (IR);*
- *An Introduction to Metadata;*
- *Marketing and Publicity;*
- *Alfresco Enterprise Content Management System; and*
- *Hardware and Software Techniques*

The main recommendation was that a framework for digitization should be established to harmonise efforts to ensure success and sustainability of the project. Copyright and policy issues concerning the digitization and IR should also be addressed.

Overall, the workshop was successful. It has created awareness among the participants of the need to digitize documents in their units and the processes that must be followed. This workshop was a good beginning and further training should be organized purposely for practical hands-on.

Introduction

The University of Ghana was established in 1948 and one can imagine the scale of documents and records generated since. The records of students, senior members, principal officers, policies, acts, and minutes of various kinds can be difficult to grasp without proper management. The University of Ghana Library Systems (UGLS), Archives and other Departments and Units are repositories for heritage materials as well as rich local, national and international resources. Without proper organisation and planned preservation, information in these documents cannot be easily accessed and they can be lost due to deterioration. The workshop was sponsored by Office of Research Innovation and Development (ORID), University of Ghana, covering the period February 18-20, 2014. The purpose was to sensitise the university community on the digitization and IR projects going on in the university so that all constituents in the university will become aware and buy into it and also participate. Thirty-eight (38) participants from the various departments and units of the university, made up of administrators, IT personnel, hospital staff, archivists, and librarians who have something to do with records and document management were invited to the workshop.

Objectives of the Workshop

The objectives of the workshop were as follows:

- i. *To introduce participants to how to preserve University of Ghana records and repositories in perpetuity. This means being able to provide access to the records for all time;*
- ii. *Building production lines for the digitisation of University of Ghana documents through projects and collaboration;*
- iii. *Integrating digitisation into University of Ghana's ordinary functions;*
- iv. *Providing continuous widening access to University of Ghana documents;*
- v. *Establishing agreed-upon method for long-term digitisation; and wide access to University of Ghana documents*
- vi. *Introduce participants to techniques in Digitization, Institutional Repository and Electronic Records management*

FIRST DAY

Opening

The workshop was opened on February 18, 2014 by the Registrar of the University, Mrs. Mercy Haizel-Ashia. In her open remarks, she stated how happy she was that the project has finally taken off. She continued that since 2008, the University has been trying to organize its documents and, towards that end, appointed a Principal Archivist to work on rare documents which were fast deterioration. She reiterated her happiness that records from 1948, since the University was established, have now been worked on. She added that those records can now be digitized, thus making it possible for old and important records in the administration of the University accessed. On his part the Deputy Director of the University of Ghana Computing Systems (UGCS), Mr. Francis Boachie re-emphasised the importance of the project and was grateful of the turn-out of participants.



Figure 1 - The Registrar delivering her Opening Address

The Deputy University Librarian, Ms. Gifty Boakye said after all the background work to get the heritage materials in the Balme Library digitized, she was happy the time has come for the whole university to work together.

Papers presented

Four papers were presented on the first day of the workshop. They Include:

- 1) *Introduction to Digitisation: An overview of Digitisation and Institutional Repository (IR) at University of Ghana.*
- 2) *Planning a Digitisation Project: Digitisation Workflow, Guidelines and Policy.*
- 3) *Preparing Documents for Digitisation.*
- 4) *Copyright and Digital Collection.*

Overview of Digitization and Institutional Repository at the University of Ghana by

Mr. Barfi-Adomako Owusu, UGCS

The presenter (*Mr. Barfi-Adomako Owusu, UGCS*) of the paper on *Overview of the Digitization and Institutional Repository* gave background information on the numerous records available in the various units of the university that need to be digitized. He mentioned a number of units in the university that have taken initiatives to digitize some of their records and also those that are on-going. Some of those initiatives mentioned were the Database on African Theses and Dissertations (DATAD) project (established in 2000); and heritage materials project (KIT project), all in the Balme Library, the central library of the university; the Institutional Repository which are all on the web. There are others such as digitization of old newspapers on micro-film, and some of the recent newspapers and digitization of theses, again, all in the Balme Library which has not yet been placed on the internet. There are many other records, for example, in the University of Ghana Medical School (UGMS) archives; patients' records in the University Hospital; staff records in Human Resource and Organisational Development Directorate (HRODD); student and faculty records in Academic Affairs; theses and dissertations in Graduate School; research results and journal articles published by faculty in the university; and photographs and other records in Public Affairs Directorate of the university, and many other records and documents in the university which need to be digitized.

The presenter talked about some challenges being encountered in the implementation of these projects and hoped the workshop would come up with some suggestions to address them.

In giving reasons why we should digitize our records, the presenter made reference to *University of Ghana Act, 2010 (Act 806)* that obliges the university to provide information to the public. The Public Records and Archives Administration Act 1997 (Act 537)”, also obliged the University to create, use, maintain and dispose of records. In all, the essence is to provide access to information and preserve records in the University.

He gave an example how recent fires in some Ministries in the country which burnt valuable information in those offices. For the projects that are ongoing, for example, the IR he pointed out the major challenge of lack of high standard in the environment.

The second paper of the day introduced participants to *How to Plan for a Digitization Project*. Ms. Ama Dadson, UGCS, who did the presentation, outlined the steps to follow when planning for a digitisation project in order to ensure a success. The steps are: i) Setting goals for the project; ii) Planning; iii) Achievements; and iv) Measurements. She shared her experience in participating in the organization of exhibition on Women at the 60th anniversary of the University of Ghana. A project where they had to digitize some of the materials they displayed at the exhibition. She emphasized adherence to guidelines, standards and benchmarks. She concluded that as best practice, any step of digitization should be guided by budget, standards, personnel and also ensuring that schedules are drawn and followed.

Preparing Documents for Digitization by Mr. Thomas Aning, University Archives

The third paper was presented on *Preparing Documents for Digitization*. The presenter (Mr. Thomas Aning, University Archives) in his introduction pointed out the basic and necessary procedures to be followed when undertaking digitization. Factors such as selection of the records, the content, physical characteristics of the materials, conditions of the materials, demand for the records and state of the records. Secondly, there should be guidelines to inform selection of the materials. He mentioned six guidelines. They are research value of the record; information value; copyright issues; physical condition of the original materials; duplication; principles of provenance and original order of the record; and availability of

metadata. After the guidelines have been drawn, preparing the records for digitisation can start. He mentioned that it is important to have a spacious area to aid working - selection, sorting, purging and noting of missing pages - on the materials. In addition, items such as trolleys for moving the records should be available. In all this it is important to document all records before digitization and also training of staff for the job.



Figure 2- Group Photography of Participants with the Registrar

Copyright and Digital Content by Ms. Akyaa Afreh Arhin, UG Legal Office

The fourth paper was on Copyright and Digital Content was presented by *Ms. Akyaa Afreh Arhin, Legal Office, University of Ghana*. The paper was basically to enlighten participants on the basic issues concerning making available digitized materials on the internet. She stated that attention should be given to the ownership of the records to be digitized and fair use of the materials.



Figure 3- Presentation by UG Legal Officer on Copyright Issues

SECOND DAY

Four papers were presented on the following topics. i) Institutional Repository (IR);
ii) Metadata; iii) Marketing and Publicity, and iv) Alfresco Enterprise Content Management.

Institutional Repository (IR) by Mr. Vincent Acheampong, UGCS and Mr. Henry Agbodza, UGCS

On IR, the resource persons (*Mr. Vincent Acheampong, UGCS & Mr. Henry Agbodza, UGCS*) gave a general overview of IRs. The presenters educated participants on four things that an IR does: to capture and store; to describe in detail the items in the IR; to provide interface where materials submitted can be displayed; and a place where we should be able to preserve the information. They then addressed the issue of software to adopt in IR projects. They indicated that there are commercial and open source softwares. They pointed out that the open source software needs to be supported. They advised participants that they should be circumspect when choosing software to use in IRs. They quickly added that the DSpace that University of

Ghana is using in its IR is also adopted by KNUST and therefore they can support one another.

They intimated that it is important to have policies – strategic institutional policy, operational policy, submission policy and OpenDOAR policy tool when implementing an IR. OpenDOAR policy tool can be accessed from: <http://www.opendoar.org/tools/en/policies.php> The presenters advised that documents should be captured on formats that are reliable, for example, pdf formats are more reliable than word documents which change frequently. They also gave a website on SHERPA ROMEO - <http://www.sherpa.ac.uk/romeo> to participants from where they can cross-check copyright policy and self- archiving issues. The presenter also led participants to websites of some African IRs including the top ranking IRs in the world and in Africa.

In response to a question whether there is any policy on digitization and submission of theses into the IR, the presenter responded that the IR policy is yet to be finalized, but on digitization policy, he had no idea.

Metadata by Mrs. Gladys Kwadzo, Balme Library

The second paper for the second day was on metadata. The presenter (*Mrs. Gladys Kwadzo, Balme Library*) began with definition of metadata and why it is a critical component of any digitization project. The definition of metadata was drawn from a number of definitions by various authorities which were summarized as structured information that describes, authenticates, identifies, manages which help in preserving, accessing and use of the information. Types of metadata were mentioned and issues of following standards, and formats to ensure quality and interoperability were emphasised. Participants were also taken through steps in implementing metadata. Steps that should to be followed were mentioned as: analyzing metadata requirements, adopting metadata scheme, creating metadata content, delivery and access, evaluation, and sustaining metadata maintenance. Participants were taken through Dublin Core (DC) scheme, expounding on the 15 elements constituting the outline of the DC and the meaning of each element. Sample IRs were accessed from the internet to view the DC elements used.



Figure 4 - A cross section of participants at one of the sessions

Marketing and Publicity by Mrs. Emelia A. O. Agyei and Mr. David Odjeawo

Third paper for the day was on Marketing and Publicity and was presented by (*Mrs. Emelia Agyei & Mr. David Odjeawo, Balme Library*). The presenters exhorted the participants that the best way to market and publicise the IR is adopting best practices. First there should be marketing research to determine the needs of the community so that the IR should be a response to a need. The marketing should be done by all stakeholders and partners. Each of these should be the mouth-piece of the project. They added that the IR should be promoted in all the units of the university emphasizing the benefits to be derived. They further explained that building a good collection in the IR and ensuring its integrity are very much related to marketing (who, what, why and how). Further, attractive websites, good downloading speed, and keeping up with trends are factors that can also promote the popularity and use of any IR.

Alfresco Enterprise Content Management System by Mr. Patrick Kuti, UGCS

The fourth paper was presented on Alfresco Enterprise Content Management System. The presenter (*Mr. Patrick Kuti, UGCS*) began by informing participants that the university has put so much information about itself on the internet but failed to provide a local system that would help the university community to access its own transactions. It is in light of this that

the University acquiring Alfresco Enterprise Content Management System to address the situation. He said the system is a document repository one with open source facility. He added that hitherto, the university uses the manual archival system and manually tracks its documents and transactions. Further, workflow is not harmonized and therefore some vital documents could not be traced. He then explained what the system does in tracking documents, by doing workflow control, publishes, provides record management, collaborates, and searches. In addition to the Enterprise Content Management System (ECM), the university also acquired a software (Liferay), which will serve as a delivery tool for delivering stored information into the public domain.



Figure 5- A cross section of participants at one of the sessions

On a question as to how to integrate the content management system and the ITS software which is being currently used by the university, the presenter explained discussions are still going on to address the issue.

THIRD DAY

Introduction to Hardware and Software by Mr. Barfi-Adomako Owusu, UGCS

The last paper for the third and last day of the workshop was on Hardware and Software Techniques. The presenter (Mr. Barfi-Adomako Owusu, UGCS) introduced participants to hardware (*scanners*) and softwares available to be deployed in digitization projects. He mentioned that, one should bear in mind that the type of document to be digitized will inform the type of hardware to acquire. Pictures of this equipment were projected for the view of participants and their functions, capacities, and shortcomings were spelt out. Their availability and where they can be found in the University of Ghana were also discussed.

When a participant wanted to know which software can be used in scanning, the presenter explained that most often softwares are components of the scanners. The general comment was that these resources can be shared. Individual units can collaborate with those who have the facility to enable efficient use of resources in the university.



Figure 6 - Demonstration of an Automatic Book Scanner to Participants



Figure 7 - Demonstration on Document Preparation at the University Archives

The participants were taken on a tour to some of the facilities in the Balme Library and the University Archives where there were demonstrations on how to prepare documents for digitization and equipment used in digitizing and other processes.

Discussions and Follow-Up

Participants were divided into three groups to discuss the workshop and to come up with possible projects for the future. The groups were i) Librarians and IR staff; ii) Archivists, Administrators and Record Managers; and iii) IT Personnel.

At the end of the discussions participants made the following recommendations:

IT Team

- Various communities who would like to have their own IRs should be permitted
- A pop up message on the university's website on marketing the IR should be explored
- Stakeholders must ensure that the digitization project succeeds
- Access to Wi-Fi facility on campus should be expanded to enable easy access to the IR materials.

- IT and Administrators should have access to the Alfresco Enterprise Content Management system.
- Active e-mail addresses of students should be maintained for easy communication resulting in effective teaching, learning and research as long as IR is concerned.

Archivists and Records Managers' Team

- Frequently sought-for records should receive priority in digitization project
- Are the Alfresco and the digitization going to create a paperless environment? They suggested the two systems (manual and electronic) systems should run alongside one another.
- They suggested that documents (especially correspondences) should be digitized at the end of its cycle.
- They also suggested the old transcripts of students' at the academic section should be scanned and kept by the Archival Unit of the university to save them from deterioration.
- Photographs and University publications at the Public Affairs Directorate and documents at the Procurement Unit need to be digitized and preserved.

Librarians and IR Team

- The communities to be created by Archives should be done according to each unit of constituents in the university. That is Students, Senior Members, Senior Staff, and junior staff instead of combining the Senior and junior staff.
- Local journal articles in the Medical School library should be digitized and made available in the system for medical students so that they draw on local researches to build on.
- The Policy on the IR should be completed as soon as possible.
- There should be a policy on the digitization of Theses and Dissertations to help speed up their processing and delivery
- The digitisation and delivery of the newspapers should be speed up and could be a source of income for both University of Ghana and Newspaper publishing houses.

General Overview

Participants expressed excitement about the workshop and that it had been a good forum for the university community to discuss and know about digitization, what is available and what is not. In addition, the tour was helpful because it revealed to participants facilities that are available that other units can use. It is an indication that the university is committed to digitization and Institutional Repository.

On the other hand, participants expressed disappointment that the workshop did not factor in enough “hands-on” as they had hoped. They also thought time allocated to the presentations was not enough for some presenters to go into detail. Further, Legal issues were not explicit on the digitisation project. It was therefore recommended that authorities should formulate a policy on digitization in general and digitization of theses and dissertation in particular as soon as practicable. Looking at the volume of work on the project, motivation of staff is needed to speed up work. Targets should be set and those who meet them should be rewarded.

Conclusion

Overall, the workshop has been successful. It has created awareness among the participants of the need to digitize documents in their units and the processes that must be followed. This workshop has been a good beginning and further trainings should be organized purposely for practical hands-on. To a greater extent the workshop has established the need for digitization framework in the university, policies to guide the digitization, the Institutional Repository (IR) and copyright.