Report on a Three-day Workshop on Records Management, Digitisation, and Institutional Repository (IR)

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**Introduction**

A year ago a three-day training workshop on digitization was held. This was to introduce participants to the various aspects of digitization and also to create awareness about the various digitisation initiatives in the University. Participants were excited about the training and recommended that a hands-on workshop be held for them so that they could also contribute to the project. It was based on this recommendation that this second workshop was organized.

This second workshop was organized from 8th to 10th April, 2015 at the Ghana-Korea Information Access Centre (IAC) in the Balme Library, University of Ghana (UG), Legon.

**Opening**

The workshop was opened by Prof. E.E. Badu, the University Librarian at 9.00 am. In his welcome address he reminded the participants about the importance of information and how information technology (IT) is moving fast and medium of holding the information are also becoming obsolete. He mentioned how digital codings of the past cannot be read again because equipment to read them has become obsolete. He thus expressed importance of the workshop and urged the participants to take seriously the training.

The Deputy Librarian, on her part referred to the last year’s workshop and praised the efforts of ORID in sponsoring the workshop and doing the same this year. She exhorted participants to recall what they learnt last year and encouraged them to build on and apply this knowledge during the practical sessions. She took the opportunity to inform the participants about the availability of the University’s Institutional Repository (IR) – [http://ugspace.ug.edu.gh](http://ugspace.ug.edu.gh). The Deputy Chief Information Technology Officer (CITO) of the University of Ghana Computing Systems (UGCS) shared his work experiences at various organizations with the participants. He mentioned that he was aware of the Ghana government’s consultation with India on digitization of some state materials, the initiatives by the Births and Deaths Registry to digitize its documents, and other Ministries embarking on the same initiative. But he has not encountered any individual institution undertaking digitisation initiatives as being done
by the University. He thus praised this bold effort of the university and the organizers of the workshop for the digitization project.

Papers presented

The first day, 8th April 2015 saw the presentation of papers. It was generally an overview of presentations done at last year’s workshop to refresh the minds of the participants, since majority were at the last year’s workshop. Five papers were presented in all.

The first paper was on Introduction to digitization, by Mr. Barfi-Adomako, Head, Academic Computing Unit of University of Ghana Computing Systems (UGCS). He started by explaining to the participants the various terminologies that they will encounter in the field of digitization. He gave examples of collections that are waiting to be digitized such as College of Health Sciences, hospital records, among others. He took the participants through the processes such as planning for digitization projects and workflow. He also introduced participants to scanners that are suitable for digitization and the software. He taught participants that before any digitization project is started, there should be estimates based on the number of pages to be digitized. The estimates will help in effective planning for the project.

During question time, a participant would like to know if University of Ghana as an institution can have more than one IR. The response was that it is possible but as much as possible digitized materials of other units should be integrated into the one available. In other words they should be integrated into available communities in the IR.

The second question was about the best software to adopt in digitization projects. The answer was that almost all scanners come with their own software. So, the scanner which is suitable for the project will determine the software.

The second paper on Records and document management was presented by Mr. L.N. Woode from the University Archives. The presenter informed participants that before any collection
is digitized, there is a process to follow. These he mentioned as selection and documentation of the records; preparation of the files for digitization; moving the records to and from place of digitization; and staff training.

On selection the presenter informed the participants about the importance of selection especially when it is not everything that should be digitized. He took them through the guidelines to be followed during selection. Namely, the materials should be of research and information value, copyright issues should have been addressed, physical conditions of the original materials should be assessed, staff should watch out for duplications, and ensure these materials are described and documented. He mentioned to participants that preparing the materials for digitization entails cleaning of records, numbering them, and removing extraneous items such as metal pins, and dividers. In the preparation of the materials appropriate spacious place should be secured with all the necessary tools – tables, trolleys, etc. – to facilitate free movement and stretching out the materials. Staple pins and colour tags should be removed from every document and ensuring completeness of the materials. All search omissions should be explained to the technicians so that they will be sure of what they are digitizing. All these processes are to ensure that every activity and workflow is properly followed.

During question time a participant pointed out that the presentation focused on paper documents whilst photographs which form part of their collection were not mentioned.

The third presentation was on How to start an Institutional Repository (IR) project. The presenters began by telling participants what IRs are and their role in managing, preserving, and promoting intellectual output in a university or research institution. They relayed that IRs serve different purposes for different communities such as academics, librarians, research managers, IT professionals, and organizations and they enumerated the benefits these constituents will derive from IRs. They discussed issues that must be addressed when starting an IR. Issues like legal requirements, securing the appropriate licenses on software, IR policies regarding content and submission processes. In addition, workflows, copyright issues, standards affecting open access including interoperability, should be addressed. Further, sustainability and funding of the project must be thought of carefully before embarking on the project.

The fourth presentation for the day was on Institutional Repository (IR). The presenter explained the term IR to the participants as a system that provides tools for management of digital assets. He further explained that this system captures and stores, describes, distributes and preserves digital materials. He reminded participants of the software – Dspace - being used in building the IR. He stated the materials can be captured in any format, unique identifiers assigned them, preserved, and distributed provided it is not violating any copyright laws. Where the copyright status of the material is not known, this should be checked using the available tools – OPENDOAR and SHERPA RoMEO websites. He took participants through a repository model explaining how the communities and sub-communities are created and workflow steps in creating an IR. He took the opportunity to inform participants about the IR policy that has been drawn. He said the IR policy contains use policies, content and submission policies, preservation and metadata policies. He also talked about the special groups which play part in the management of the IR.
The fifth presentation was on *Metadata*. The presenter defined the term as structured, encoded data that describe characteristics of information-bearing entities to aid in the identification, discovery, assessment, and management of the described entities, (Kurtz, 2010, p.40). She explained to participants that metadata should be created for digital objects/materials in order to aid the organization of information resources in the digital environment; to aid discovery and identification; to enhance access; to help in preservation of information materials; and to aid in management of information resources. She further explained to participants the various types of metadata – descriptive, administrative, and structural - that exist and their importance. She told participants that Dublin Core (DC) metadata schema is the one used in UG’s IR. She then explained to them the 15 elements and how they are applied in the assignment to the digital objects/materials. She educated the participants on the likely errors that can occur in the creation of the metadata, how these errors can affect access to the materials, and how to prevent or correct these errors.

**Hands-on Session**

The second and third days of the workshop were used for hands-on practical. These days were labeled Track one and Track two. The participants were divided into two groups for the practical. One group focused on document preparation and digitization whilst the second group focused on creating an IR.

**Track I- Morning session**

**Group one**

During the morning session, *Group one* was taken through the processes of digitizing. Participants were educated on how to set the scanners before start of work. They were introduced to three types of scanners – *Scamax, Robotic/Automatic V-Shaped Scanner, and Atiz BookDrive scanners*. The *scamax scanner* they were told is for scanning single/loose sheet or unbound documents and uses an automatic feed function which scans documents very fast. There is a touch screen menu on the scanner which is used to control scanning operations. *Atiz BookDrive scanner* with high-speed cameras is used to scan older and more delicate materials/bound books such as theses. This scanner is semi-automatic in that there can be human intervention in the scanning process and it takes longer time to scan than the scamax scanner. The Robotic/Automatic V-Shaped Scanner Book scanner is used for archival imaging. It flips itself and scan but may need human intervention at times. How to operate these scanners was demonstrated to the participants by the technical staff responsible for digitizing materials. They were taught how to use document feeders either automatically or manually carefully so that the document does not get damaged. How to save the scanned materials into files was also demonstrated. In addition, how to capture or input available metadata was also demonstrated to participants. Some participants tried their hands on the process.

During questions/interaction time, participants expressed surprise at the scanning process of the Atiz scanner which was not as fast as the scamax scanner and the stress of human intervention in the scanning process.

**Group Two**

Group two went to the University Archives for training in preparation of documents for scanning. Participants were informed that in selecting documents for digitization the
following factors should be considered – the research and information value of the documents, the state of the documents, (for example whether the document is weak or brittle). The participants were led to prepare some documents by cleaning them, removing tags and pins and making them ready for scanning.

**Track I- Afternoon session**

**Group One**
Group one started their hands-on training on how to create an IR. The resource person took participants through creating a model repository. A diagram of model community and sub-communities was presented to the participants to follow. As the resource person demonstrated, participants were to follow. He educated them that wherever an HTML tag is found, they have to use computer programming language in completing the space provided. He took them through from how to log in and start the creation of IR up to the level of creating communities and submitting articles. He also taught them how to delete a submission. He told them whenever they are to upload a picture/photograph, they will have to crop the picture before uploading. The resource person also took them through dos and don’ts when creating a repository.

**Group Two**
After the preparation of the documents at the archival session, the group continued to the digitization room to be introduced to the scanners and how to scan them. Participants were introduced to three types of scanners. They were informed that the type of scanner to use depends on the state of the documents.
They will also have to seek copyright clearance before scanning some materials particularly the personal records. They were taught how to scan and create master file for the documents and how to generate other files from the master file. They were educated on the three types of files in use – pdf, tiff and ocr. They were told selecting the type of file format to use will depend on the use to which the scanned document is to be put. Individuals took time to try their hands on the scanning of the materials.

**Track II- Morning Session**

**Group One**
Track two was the third day of the training. Group one continued with the creation of the repository. As a start, they logged into what they started on day two. They went over creating communities and submitting more sample articles. They were taught how to edit and update their submissions – removing, changing, and correcting spelling mistakes. They were also taught how to change files and also how to upload a new bistream. They also learnt how to map items. Mapping was explained to them as how to make available an already existing submission in another community so that they do not submit the same article the second time. This mapping will inform the system to indicate the communities in which a same article appears. Participants were advised that they should practice what they have learnt when they go back to their offices that is the only way they can perfect creating repositories.

**Track II - Morning Session**

**Group Two**
Group two also continued with the scanning of the materials and how to save them in the various types of files.
Track –II Afternoon Session

The afternoon session was time for discussion. Participants were divided into three groups to discuss the three-day programme and to come up with issues and recommendations if any.

The following are the outcomes of the discussions:

The participants praised the merits of the workshop that by digitizing and creating IR students would be able to easily access materials for learning and research. The programme also will provide multiple copies of materials which will help in preserving the original ones. They commended presentations but indicated they need more time on the practicals since they were not familiar with the digitization equipments.

They advised that staff should be trained well enough to be able to digitize materials in their outfits from start to finish. They added that since some materials such as hospital records and staff administrative records deal with information about individuals some ethical and security controls should be put in place when digitizing these materials so that people’s privacy are not compromised.

They also advocated that the IR policy should be placed online (University website) as quickly as possible to guide all stakeholders. They asked that in future two people should be invited from each unit or organization so that each will master one aspect of the programme to enable them complement one another when implementing what they have learnt.
They recommended periodic training on digitization and IR until the stakeholders/staff are conversant with the practicality of the project especially becoming familiar with the equipment which greatly adds to the success of the project.

That timeline should be set for the digitization to go public. They (particularly participants from outside the university) appealed that University Archives staff come to train or assist them to organize their documents.

**Challenges envisaged.**
Participants expressed the fear that current state of staffing may be inadequate for any digitization project at their various units since the digitization will be an addition to their normal work schedules.

They mentioned that they will need institutional support for the project which they hope will materialise.

**Closing**
The closing ceremony was conducted by the Deputy CITO (Infrastructure), Mr. Francis K. Boachie. In his remarks he advised participants to advocate for institutional support when they go back to their workplaces to enable them start implementing what they have learnt. He added that they should prioritise whatever project they want to implement since lack of finances may not permit implementing everything at once. Further, they need not purchase digitization equipment by themselves since they can share the available ones with others. He presented certificates of participation to each participant.