PARTICIPANTS' PERCEPTION OF DIGITISATION AND INSTITUTIONAL REPOSITORY TRAINING (IR) WORKSHOP HELD IN THE UNIVERSITY OF GHANA, LEGON

Barfi-Adomako Owusu
Head, Academic Computing Unit
University of Ghana Computing System
University of Ghana, Legon
barfiado@ug.edu.gh

Gladys Kwadzo
Assistant Librarian
Balme Library
University of Ghana, Legon

Abstract

This paper examines the perception of participants at a three-day workshop on the theme providing practical guidance for effective digital collection programmes at the University of Ghana, Legon. At the workshop, participants were given questionnaire to complete after every session of presentation. The paper analyses the data gathered from the participants on issues relating to relevance of the topic, relevance of material presented, presentation, adequacy of time allotted among others. Participants found the workshop relevant and appropriate as shown by high percentages of participants and high ratings of between three and five. Participants' responses will provide some guidance to follow up workshops and also guide future organizers about things to look out for when organizing such workshops. To a greater extent the workshop established the need for digitization framework in the university, and policies to guide digitization, institutional repository and copyright.

Keywords: Digitisation, Institutional Repository, Training Workshops, Universities, Ghana.

Introduction

Digitisation, a process of converting analogue materials into a digital form to aid access and preservation has become an important activity in academic institutions. Institutions or organizations involved with digitization projects engaged in it to create access to their collections by scanning those materials. When the materials are digitised and placed on the internet it makes them available to a wider community and many more people will be able to access the materials.

Digitising the materials create surrogate copies which free the originals from frequent handling and therefore prolonging their life span. Barton et al. (2013) added that digitising materials contribute to documentation which adds to discoverability especially when metadata is assigned.

In effect digitisation has many benefits in terms of access, support for preservation, collection development, and educational purposes at large.

Digitisation has a number of components. It is more than just scanning. Beneath it lies legal issues, workflow, staffing, image delivery, data storage, preservation, creating metadata, among others. All these components must be understood and tackled during any digitisation project. Unfortunately, it has been found that some digitisation projects do not include some important aspects or processes. Jones and Sandore (2002) cited by Maraso (2005) reported that even though 80% of Cultural Heritage Institutions in Illinois had digitisation equipment only 15% trained their staff in digitising. Some projects lack expertise. Such shortcomings in projects warrant that training workshops are organized where aspects of digitization are introduced. This warranty is supported by Perry (2005 p.125) that by far the most commonly available approach to learning about issues and skills relating to digitization is the workshop format.

Apart from the above issues it is important that all stakeholders are made aware of what digitisation is, what it entails and what part each person can play also call for training. It is through sensitisation and creation of awareness that this can become known and people can buy into the idea.

Initiatives

In the University of Ghana, the knowledge of digitization is limited to few units in the university community. The Balme Library in collaboration with Academic Computing Unit for example, is the only major unit that has taken the lead in digitisation. The Library System has automated most of its library processes and has embarked on digitising some of its old materials, such as heritage materials of 17th century in the Africana section of the library, (which is on the Internet) (http://ugspace.ug.edu.gh/handle/123456789/1). It has also digitized some past issues of newspapers both on microfilm (dated from 1950s) and some print ones and has started digitizing theses submitted to the University. In addition, the University's Institutional Repository (UGspace) which is being hosted by the Balme Library provides open access to the outputs of academic staff and research students which is also on the internet and available at http://ugspace.ug.edu.gh. These outputs include research reports, papers, conference papers, theses/dissertations, journal articles, among others.

Another unit joining this trend is the University Archives, located in the Balme Library which is preparing the University's records (lot of historic documents including that of students and staff since its inception in 1948 for digitization). The International Centre for African Music and Dance (ICAMD) has also digitized some of its collections which will soon be opened to the public. In all these, the Academic Computing Unit (ACU) greatly supports all these activities with their expertise by running and managing the computer and communication networking systems. These three units

(the Balme Library, the Archives, and the ACU) thus somehow are linked and work together. It is believed that many more units in the university having all sorts of records will be glad to know about this initiative and join. For the university community to know about all these initiatives was the reason for organizing the workshop.

The workshop

The workshop was sponsored by Office of Research Innovation and Development (ORID), held from 18-20 February, 2014 at Ghana Korea Information Access Center (IAC), University of Ghana, Legon on the theme "Providing practical guidance for effective digital collection programmes at the University of Ghana". This was a collaborative workshop organized by the University of Ghana Computing Systems (UGCS), the Balme Library, and University Archives. In all, 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/documents were invited to the workshop.

The main purpose of the workshop was to sensitise the university community on the digitisation and institutional repositories (IR) projects going on in the university so that all constituents in the university will become aware and buy into the idea and also participate. Specifically the workshop sought the following:

- 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;
- Building production lines for the digitisation of University of Ghana documents through projects and collaboration;
- Integrating digitisation into University of Ghana's ordinary functions;
- Providing continuous widening access to University of Ghana documents;
- Establishing agreed-upon method for long-term digitisation; and wide access to University of Ghana documents
- Introduce participants to techniques in Digitization, Institutional Repository and Electronic Records management.

In all, nine papers were presented under the topics: An overview of digitization and institutional repository at the University of Ghana; Digitization workflow, guidelines and policy; Preparing documents for digitization; and Copyright and digital collection; introduction to Institutional

Repository (IR); Introduction to Metadata; marketing and Publicity; Alfresco Enterprise Content Management System; and Hardware and Software Techniques.

At the end of each presentation participants completed forms evaluating the paper in terms of relevance of the topic; relevance of material presented; adequacy of allotted time; presenter's delivery; and overall assessment. In addition, at the end of the presentations, participants were divided into three groups to discuss all the papers and come up with suggestions.

The main purpose of this paper is to assess what participants have learnt, share their views and suggestions which may be of value to organization of future workshops; and also to share developments undertaken so far after the workshop.

Literature

Training workshops are considered important component of any digitization project. This is because this is where stakeholders/staff learn the new skills and any other concepts which will make the project successful. Writers such as Kriesgman (2002); Bowen-Chang and Hosein (2009); Russell (2007) and Jones (2005) commented on training in digitization projects.

Literature is replete in the LIS system on various aspects of training on digitization. But there is negligent literature on evaluating participants' perception on a workshop. The most close/relevant study was by Bowen-Chang and Hosein (2009) on cataloguing training in the University of West Indies for 25 cataloguers. Their assessment was based on review of the contents of the training, the effectiveness of the presentations, the appropriateness of training materials and general comments relating to the training. On application of a Likert scale of 1-5 (5 being highly satisfactory, 4 being satisfactory, 3 being indecisive, 2 being unsatisfactory and 1 being highly unsatisfactory), respondents were required to indicate their levels of satisfaction or dissatisfaction of the training sessions.

In terms of the contents of the training being easy to follow the survey revealed that 64 per cent of the respondents were pleased, while 24 per cent expressed uncertainty and 12 per cent were dissatisfied. With regards to the specificity of the training contents, 68 per cent of the respondents were in favour of adequate and comprehensiveness of the topics covered. As to the training contents meeting the needs of the trainees at their level of understanding, 56 per cent gave favourable responses and 44 per cent were indeterminate on their views. In relation to the importance attached to the training contents, there was an overall positive rating of 60 per cent, which included 32 per cent with a rating of 5 and 28 per cent with a rating of 4. In all, the presenters were generally equipped with the knowledge for the training and were able to successfully convey the required information to the trainees.

Other studies though talked about training on digitization but not necessarily on the perception of the participants but can contribute positively to future training workshops on digitization are as follows. Jones (2005) for example, in commenting on empowerment for digitization for projects in Michigan stated that orientation to the project and training on essential skills should be carried out at several levels. As such the management team provided training in copyright, technical standards, metadata creation, and project management to the staff of the regional digitization centres. Perry (2005) posited that these workshops can take any format including a lecture, hands-on practice and/or demonstrations or visits to nearby institutions with digitization programs. It can also be as long as it is determined by the management team and on specific topics, and online instruction can also be employed. He however added that it is important to note that changing needs and developments in the field can influence the format of workshops.

Russell (2007) in reporting on training professionals to preserve digital heritage at the school for scanning indicated that participants consistently rated highly the speakers at the workshop with an overall score of 4.5 or higher on a scale of 1–5, with 5 being the highest rating.

In view of the above, this present study will throw light on the subject in Ghana and add to the literature in Africa and the world at large.

Methodology

Nine papers were presented at the workshop in three sessions. After each session, participants were issued with evaluation forms to complete on each topic delivered. The participants were to evaluate the papers based on: relevance of the topic; relevance of material presented; adequacy of allotted time; presenter's delivery; and overall assessment. In addition, participants were to give general comment(s) on each topic if there were any. In all participants returned evaluated forms on six papers.

Through the application of a Likert scale of 1-5 (where, 1 = Lower; 2 = Low; 3 =Average; 4 = High; and 5 = Highest) participants were to evaluate the papers. For the analysis of the data the scale 1-5 was categorized into "below average" (1 and 2), "average" (3), and "above average" (4 and 5). For anonymity of presenters and topics presented, the papers are labelled **A to E.**

Analysis and Findings

Relevance of topic presented

The purpose of any workshop is to impart some knowledge and skill to the participants. The topic of the information to be imparted must therefore be relevant to theme of the workshop. It is the relevance of the topic that will attract participants. So for the relevance of the topics of papers presented at the workshop, the assessment varied. The overall assessment of the topics presented at the workshop was very good. As shown in Table 1 on the average 86% of the participants rated the topics as above average whilst 5% rated as average and 8.9% rated it as below average. On the individual topics, 96.2 % of the participants rated the relevance of Topic E as above average, followed by Topic C rated by 91.3%. The rest of the topics were rated by between 75 and 84 percent of participants as above average.

	Topic A	Topic B	Topic C	Topic D	Topic E	Topic F	Average
Below Average	9.1	9.1	4.3	13.8	3.8	13.3	8.9
Average	6.1	6.1	4.3	10.3	0.0	3.3	5.0
Above Average	84.8	84.8	91.3	75.9	96.2	83.3	86.0

Table 1: Relevance of Topic

Relevance of material presented

The assessment of the relevance of the contents of the topics presented was also good. As shown in Table 2, the percentage of participants rating the relevance of information contained in these papers ranged between 65 and 96 percent. The average of 81% of participants rated the relevance of content of the topics as above average. Here again Topic E was rated by majority of 96.3% of the participants as most relevant, followed by Topic A rated by 87.9% of the participants. The lowest percentage (65.5%) of participants rated Topic D as above average. Unlike the relevance of Topics the percentage of participants rating the relevance of material as average was greater than those rating it as below average.

	Topic A	Topic B	Topic C	Topic D	Topic E	Topic F	Average
Below Average	9.1	12.1	4.3	10.3	3.7	6.9	7.7
Average	3.0	18.2	10.9	24.1	0.0	6.9	10.5
Above Average	87.9	69.7	84.8	65.5	96.3	86.2	81.7

Table 2: Relevance of material

Adequacy of allotted time

Table 3 shows that between 55 and 86 percent of participants rated the adequacy of time allocated for the presentation of the papers as above average. Average of 76.4% of participants indicated the time allocated for the presentation of the papers was above average whilst 17.8 and 5.8 percent indicated average and below average respectively. Topic C, between 80 and 91percentage of the respondents rated all the variables as above average. Topic F was rated by majority (86.2%) of the participants as having most adequate time and Topic B was rated by only 55% of the participants as having adequate time allocated for the presentation.

	Topic A	Topic B	Topic C	Topic D	Topic E	Topic F	Average
Below Average	9.1	11.8	0.0	6.9	0.0	6.9	5.8
Average	15.1	32.4	15.2	17.2	20.0	6.9	17.8
Above Average	75.8	55.9	84.8	75.9	80.0	86.2	76.4

Table 3: Adequacy of Allotted Time

Presenter's Delivery

On the presentation or delivery of the paper, Table 4 shows that on the average 80.8% of participants rated it as above average, 8% rating it as below average and 11.3% rating it as average. The highest percentage of 96.2 and lowest of 55.9% rated the delivery as above average. 96.2% participants rated Topic E's delivery as above average and the lowest percentage of participants rated Topic B's delivery as above average.

	Topic A	Topic B	Topic C	Topic D	Topic E	Topic F	Average
Below Average	12.1	11.8	2.2	10.3	3.8	7.7	8.0
Average	0.0	32.4	10.9	20.7	0.0	3.8	11.3
Above Average	87.9	55.9	87.0	69.0	96.2	88.5	80.8

Table 4: Presenter's delivery

Overall assessment

The overall assessment of the topics is shown in Table 5. In all, the evaluation of overall assessment of the workshop was good. Average of 82.3% participants rated it as above average. Topic E's overall assessment was rated by 96.0% of participants as being above average followed by Topic A with 90.6% participants. Topic B's overall assessment was rated by only 60% of participants as above average and the highest percentage among others to scoring it as average.

	Topic A	Topic B	Topic C	Topic D	Topic E	Topic F	Average
Below Average	9.4	9.1	2.2	10.3	4.0	10.7	7.6
Average	0.0	30.3	13.0	13.8	0.0	3.6	10.1
Above Average	90.6	60.6	84.8	75.9	96.0	85.7	82.3

Table 5: Overall assessment

Discussions

The overall assessment of the workshop in terms of: relevance of the topic; relevance of material presented; adequacy of allotted time; presenter's delivery; and overall assessment was very good. Even though topics were individually rated, the average ratings were very encouraging. On the rating on scale of 1-5 as stated above, and illustrated in Table 6, each assessment scored above 3 and on the average of at least 4 points. This result is similar to the findings of Russell (2007) where the participants rated the presenters' efforts above 3. So also was Bowen-Chang and Hosein's (2009) results where participants rated the adequacy, completeness, and understanding of the presentation on the average above 60%. This is an indication that the workshop was successful.

The general comments made by the participants threw more light on some evaluations. Thirty one items were recorded and these were categorised into seven – relevance of the workshop; technicality of the topic; inadequate time for explanation; understanding; practicality; delivery; and overall usefulness of the workshop.

The topics that were seen as technical were also commented on as not having enough time for more explanation and presenters were "forced" to conclude abruptly. In another vein the material presented was so much the presenter rushed through due to time constraints. These the participants said affected their understanding to some extent. Majority of the comments indicated that the workshop was relevant and useful. Only one comment indicated that an expert should have been brought to deliver a particular topic.

Assessment	Topic A	Topic B	Topic C	Topic D	Topic E	Topic F	Average
Relevance of the topic	4.3	4.3	4.5	3.9	4.7	4.4	4.4
Relevance of material presented	4.2	3.9	4.2	3.8	4.5	4.1	4.1

Adequacy of allotted time	3.8	3.5	4.2	3.9	4.2	4.2	4.0
Presenter's delivery	4.0	3.5	4.2	3.8	4.4	4.4	4.1
Overall assessment	4.7	3.7	4.2	3.8	4.5	4.2	4.2

Table 6: Scoring on scale of 1-5

Participants expressed excitement about the workshop that it had been a good forum for the university community to discuss and know about digitization and what is available and what is not. On the other hand, participants were disappointed that the workshop was not as "hand-on" as they had hoped. They also thought time allocated to the presentations was not enough for some presenters to go into detail.

Discussions of the various groups

Information Technology 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 enhance access to the IR materials.
- IT staff 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 the digitization project.
- Will the Alfresco Content Management System 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.

- Pictures at the Public Affairs Directorate and documents at the Procurement Unit need to be scanned and digitized.

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 in to one community.
- 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 to help speed up their processing and delivery.
- The digitisation and delivery of the newspapers should be sped up so that it could be a source of income for both UG and Newspaper publishing houses.

Follow-up initiatives

- After the workshop, the university' IR policy has been approved and it is operational. The IR office is being set up in the Balme Library to co-ordinate and to promote IR activities on campus.
- A follow up hands-on workshop has been organized for librarians, researchers, and records managers, most of whom attended the first workshop, under the topic – *Records management, digitization and Institutional Repository.*
- The submission rate into the IR has increased making the UG's research output more visible.

Conclusion

The study was an evaluation of the perception of participants of digitization training workshop in the University of Ghana. The results showed that 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 the beginning and further trainings should be organized purposely for practical hands-on. To a greater extent the workshop established the need for digitization framework in the university, and policies to guide the digitization, the Institutional Repository (IR) and copyright. In addition, the result would guide future training workshops.

References

Barton, A. J. , Dixon, B. E., Skopelja, E. N. and Javed, S. (2013), "A case of study of semantically enhanced public health digital collection", *Journal of Library Metadata,* Vol. 13, No. 4, pp. 367-380.

Bowen-Chang, P. & Hosein, Y. (2009). Cataloguing training at the University of the West Indies, St Augustine: a case study. *Library Review,* Vol. 58, No. 2, pp. 97-108.

Jones, R.A. (2005). Empowerment for digitization: lessons learned from the making of modern Michigan. *Library Hi Tech,* Vol. 23, No. 2, pp. 205-219.

Kriegsman, S. (2002). Catalogue training for people who are not cataloguers: the Colorado digitization project experience. *Cataloging & Classification Quarterly*, Vol.34, No.3, pp.367-367.

Maraso, A. L. (2005). Educating future digitizers: the Illinois Digitization Institutes' basic and beyond digitization training program. *Library Hi Tech,* Vol. 23 No. 2, pp. 187-204.

Perry, C.A. (2005). Education for digitization: how do we prepare? *The Journal of Academic Librarianship,* Vol. 31, No. 6, pp. 523-532.

Russell, A. (2007). Training professionals to preserve digital heritage: the school for scanning. *Library Trends,* vol. 56, No.1, pp. 288-297.