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## Adoption of Social Networking Tools in Public University Libraries in Ghana

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### **Abstract:**

*The current dynamics of information and the recent technological revolution has compelled academic libraries worldwide to embrace web technologies. The focus of this study is to assess the extent of utilisation of social networking tools adopted in the well-resourced public universities in Ghana. The study used quota sampling to select 32 professional librarians from UG, KNUST, UDS and UCC to answer questionnaires. Simple descriptive tools such as charts and percentage tables were used to present the findings of the study. The study exposed that, the most utilised social networking tool used among professional librarians was Facebook then Instant messaging. However, librarians were aware and sometimes use LinkedIn, Twitter, Blogs, Wikis, Flickr, Slideshare, and YouTube. Professional librarians used social networking tools for dissemination of library news, library events, group discussion, general library information, sharing e-resources, and offering library resources. Therefore, it was recommended that professional librarians should be encouraged to use the social networking tools for their intended purposes and observe all ethics regarding it use. Also, the libraries should be stocked with adequate ICT infrastructure and vibrant internet connectivity to ensure proper functioning and effective usage of networking tools.*

**Keywords:** Social Networking Tools, Social Networking Sites, Web 2.0 Tools, Academic Libraries

### **1. Introduction**

Web 2.0 tools have become more fashionable in recent times which have gained its way in the academic circles. A number of academic libraries particularly those in developed countries have successfully embraced and adopted web 2.0 tools as useful educational tools (Tripathi and Kumar, 2010). The current dynamics of information and the recent technological revolution has compelled academic libraries worldwide to embrace web 2.0 technologies (Vyas and Trivedi, 2014). Examples of web 2.0 applications adapted in most libraries include social networking tools like Twitter, Facebook, Flickr, blogs, YouTube, RSS and instant messaging (Mahmood and Richardson, 2011). The use of these social networking tools has now become more common particularly among the youth in higher education circle like Polytechnics and university (Kemrajh, 2013). Due to the increasing usage of social networking tools among students in polytechnics and universities worldwide, the academic libraries have used that opportunity to adopt them to manage the libraries for easy sharing of information, notices, news, directions, and couching of library users in the university communities (Kemrajh, 2013).

Academic libraries do not only capitalise on this technological invention to communicate among professional librarians but to provide avenue for making web users access countless library resources in a digitised or soft copy formats prior to having the books sitting on the shelves in the library (Dickson and Holley, 2010). In other words, the social networking tools have enabled academic libraries to transform the physical library into an open space where information can be access by all at any place at any time. In most academic libraries, the most frequently used social networking tools include; bookmark sites, media sites like Facebook, YouTube, Twitter, and WhatsApp, Viber and Tango. These Web 2.0 tools can be grouped into four depending on how the information is acquired, disseminated, organised, and shared (Chua and Goh, 2010). Findings of Chu and Du (2013) have exposed a lot of benefits and relevance of the social networking tools usage in academic libraries. The study will therefore investigate the extent of usage, benefits and challenges is the adaptation of social networking tools in well-resourced Public University Libraries in Ghana.

### 1.1. Problem Statement

Despite the tremendous growth and expansion of internet facilities in Africa in the past few decades, studies pertaining to social networking tools usage in university libraries are not adequate (Wardofa, 2014; Tripathi and Kumar, 2010). According to Wardofa, (2014), there is lack of information on social networking tools adopted in African academic libraries. The available articles written on web 2.0 tools indicates that a minor proportion of African libraries have adopted social networking tools (Munatsi, 2010; Makori, 2012; Pienaar and Smith, 2008; Munatsi, 2010;). Notwithstanding, none of these articles exposed adoption and utilisation of web 2.0 technologies in Ghanaian academic libraries particularly the public universities. Meanwhile, Wordofa (2012) argues that social networking tools are beneficial in ensuring easy communication between libraries, students, library users, and library patrons. Beside, Africa emerged as the fastest growing continent in terms of utilisation of Facebook in the year 2011 (Socialbakers, 2011) while report from ITU News (2012) indicates that Africa experiences 82.3% of annual growth rate in international bandwidth which is the one of the fastest in the world and 52.1% international bandwidth per internet user. This recent internet development has been capitalized upon to invent social networking tools to improve academic libraries services and communication between the world and the physical library within a wireless setting. Notwithstanding, observation are that, there is a paucity of empirical studies on the use and relevance of web 2.0 technologies among academic libraries in Ghana. It will therefore be very exciting to see how the fastest growing internet facilities and broadband width commensurate with the utilisation of social networking tools particularly in academic libraries of Ghana. This study seeks to assess the extent of utilisation of social networking tools adopted in the well-resourced public universities in Ghana. Findings of the study will therefore contribute to knowledge and fill the knowledge gap by focusing on types of technologies adopted, extent of utilization and challenges associated with its adoption.

### 1.2. Objectives

The study seeks to;

1. Ascertain the types of social networking tools adopted in the well-resourced public universities libraries in Ghana.
2. Find out the extent of utilization of social networking tools in the well-resourced public universities in Ghana.
3. Identify its benefits of social networking in academic libraries.
4. Identify challenges that hinder the smooth utilisation of social networking tools in the well-resourced public universities libraries in Ghana.

## 2. Literature Review

### 2.1. The Concept of Social Networking and Social Networking Sites (SNS)

Social networking is primarily a web platform which makes it possible to reach out to others on the internet (Cohen, 2009; Stelzner, 2009). It is a web of relationships that link users together. It connects people of common interest together to build a community of relationships (Hartshorn, 2010). Social networking provides a two way interaction between people, groups or institutions to build a common conversation (Bedell, 2010). This indicates that conversation is the core value of social networking and allows two or more users to communicate to themselves (Hartshorn, 2010). In other words, social networking is a direct interaction among users and the person or people a user accepts to connect with (Cohen, 2009). Social networking unlike social media allows one to determine precision in the number of people available to be connected to and to whom one feels to return comments (Hoffman and Fodor, 2010). Simply put, social network is the web of relationships that connect people together. Being social, it seeks to promote friendship, business connections, mentoring within formal and informal groups and organisation.

Social Networking Sites (SNS) are therefore an online platforms designed to; facilitate the connection and relationships with people through real-life connections, create and share content, and engage in conversations (Boroughs, 2010; Stephens and Collins, 2007; Barsky and Purdon, 2016). Features of SNS include the power to create a personal profile portfolio; post comments, photos sharing, videos, and links; add other users as "friends"; communicate with other users via e-mails and instant messaging; update statuses; and find other users' profiles using a search engine. Also, some SNSs allow users to post a survey that others may complete. Most SNSs are accessible through multiple platforms, including web and mobile devices. Boyd and Ellison (2007) have advanced three key descriptions of social networking sites. Firstly, SNS is a platform that enables users to create and publish a profile that reflect their identity or likeness visible to the public. Secondly, SNS allows users to accept preferred friends and reject or remove people he/she dislikes and lastly, SNS enables one to view and manage contact or friends list and switch between individual profile pages (Boyd and Ellison, 2007). Interestingly, each SNS are distinct in the way it looks, the design and options and unique contact list.

There are a number of social networking tools which have the primary focus of posting, viewing and downloading videos such as YouTube and Flickr although it may provide additional options outside its main scope (Hoffman, 2009). For instance, YouTube and Flickr which is purposeful for sharing videos can be used to create personal and company profiles and interact with other users (Hoffman, 2009). Generally, social media sites have been described as useful for chatting with networking community, studying diverse issues, and sharing files like image, sentiments, and comments among others with users (Burkhardt 2010). Some SNS though have specific focus or direction of use. For instance, YouTube and Flickr is purposefully designed for sharing of file and therefore any secondary use such as establishing contacts is limited. Nevertheless, this study included tools that allow some degree of interaction among users such as YouTube, Flickr, Blogs, Slideshare, among others because studies conducted by Chu and Du (2013), indicated they were significantly regarded and used as such by librarians from reputable universities in the world.

### 2.2. *Global usage of Social Networking Tools across Libraries*

There are a number of web 2.0 technologies adapted in libraries across the world. A survey across United States libraries identified a number of social networking tools accepted and used in the American academic libraries which include networks for sharing videos, audios, popularly termed as vodcast and podcast in that order; bookmarking sites for sharing photos and tagging, mash-ups, instant messaging, blogs and micro-blogs, RSS, wikis, and social networking sites (Mahmood and Richardson, 2011). In developed countries particularly, the US, Canada, UK and Australia estimates are that 76.2% of 277 academic libraries in Australia, Canada, the UK, and the US use one or more social networking tools (Tripathi and Kumar, 2010). Also, two-thirds of university libraries in Australia use either one or excess of Web 2.0 tools particularly those for sharing audios, messages, blogs and RSS (Linh, 2008). When assessing the popularity of web 2.0 tools adapted across four developed nations university libraries namely US, Canada, UK and Australia by Tripathi and Kumar (2010), it was revealed that the professional librarians preferred mostly blogs and instant messaging. Similarly, the six most popular social networking tools across three continents namely; North America, Europe, and Asia using 120 state owned academic libraries included; social networking services, RSS, instant messaging, blogs, social tagging, and wikis (Chua and Goh, 2010). Furthermore, research shows that most students are heavy users of Web 2.0 tools (Booth, 2009; Barnett et al., 2010; Ayiah and Kumah, 2011). For instance, Ayiah and Kumah (2011) found that most students (62 per cent; n=4335) frequently used social networking sites in Ghana.

Graham et al. (2009) studies outlined the benefits and usefulness of social media tools and found out that Facebook has relevance outside the academic library which is used to establish and harness professional connection between library staff and across the general population. Social networking tools particularly Facebook allows people to post and share automatic notifications, photos, and comments. It also allows users the chance to create personal profile or join user groups created by employers, schools and colleges (Stone, 2007). Facebook gives unlimited number of user the opportunity to gather around a particular course to act or decide on issues of common interest (Tiryakioglu and Erzurum, 2011). Users who have joined groups gives them the platform to discuss work, ask questions, criticise opinions, send information and support other users views (Tiryakioglu and Erzurum, 2011). However, Twitter offers myriad options such as micro blogging (Jasra, 2010; Tweeternet, 2010).

### 2.3. *Relevance of Social Networking Tools across Libraries*

Libraries worldwide have adopted social networking tools to promote two-way communications and dynamic content outside the physical structure or library space (Buigues-García and Gimeñez-Chornet, 2012; Stephens, 2006). The two-way communication enables librarians to answer reference questions (Chua and Goh, 2010). In the same way, professional librarians have certain information which they create and share within the library communities by create search boxes of their OPACs and databases (Mahmood and Richardson, 2011; MacAdam, 1998). According to Harinarayana & Raju, (2010), libraries act as backend of the information they create and share to induce community participation and knowledge sharing. Therefore, the libraries use the social networking tools to build and sustain their academic networks through constant information flow (Ayu & Abrizah, 2011). Again, social networking tools allow professional librarians to improve library services and resources through knowledge gathering and sharing (Buigues-García and Gimeñez-Chornet, 2012). This is of particular benefits to social science researchers who may want to gather professional knowledge from unlimited number of librarians and library users online (Poynter, 2010; O'Dell, 2010). Aside communication between library users and professional librarians, social networking tools improve patron-driven services with little or no expense by connecting and sharing with much more patrons to win new ones to utilise their services (Casey and Savastinuk, 2006; Redden, 2010). Social networking tools are used to converse with patrons on issues such as subscriptions, online databases trails, to teach information library skills, and to promote library services and resources (Wardofa, 2014).

It provides room to share better content including music, webcast, and videos other than simple text in real life without geographical restrictions (Edosomwan et al., 2011). Librarians with the aid of social networking tools are able to converse, discuss, obtain feedbacks, create new information, enhance collaboration and participation, and provide a platform for sharing experiences among users on their operations and services (Stephens and Collins, 2007). In school libraries, web 2.0 tools particularly Twitter and Facebook are beneficial in publishing announcements pertaining to resources, workshops, courses, database trials, new publications, service disruptions, staff promotions and appointment, and change of library hours (Kim and Abbas, 2010). This is because the two platforms are good at syndicating and dispatching information (Cahill, 2009). This has promoted and established professional relationships among librarians within and without the school libraries (Graham, 2009).

The social networking tools facilitate easy communication between people, community or employees (Carton, 2009). People such as librarians send and receive messages within and without their confinement (Ritholz, 2010). In other words, it helps people to transmit messages online from one computer user to another (Edosomwan et al., 2011). It enhances messaging and policy interactions between individuals and organisations within the educational institutions and friends (Edosomwan et al., 2011). By this, it improves social commitment, participation, educational strategies and communication skills. Social networking allows people to express themselves through discussions, asking of questions and critique on decisions of a group with a common goal that binds them together (Tiryakioglu and Erzurum, 2011). It offers high participatory opportunity and social commitment to foresee to the realisation of educational goals.

In the education cycle, social networking provides opportunity to easily share; job announcements, arrange conferences, publish studies and course plan, and avenue to mobilise funds to support educational programmes (Seguin and Seguin, 1995). Social networks as an educational tool enhance information dissemination with instant feedbacks; ability to share visual and auditory learning; improving research knowledge; and enhance open forum between employees or management (Annku, 2014). It breakdowns time and

location barriers in communicate and allow users to communicate free at any time and at any place to improve individual learning (Annku, 2014). Social networking strengthens team work through sharing of project ideas in knowledge and experience (Edosomwan et al., 2011).

Social networking tools improve accessibility, storage, and processing of library information (Nazim, 2015). In the library, social networking enhances resource sharing to facilitate library operations through provision of quality information and other services delivery which are of academic importance (Peyala, 2011). Librarians and library users use social networking tools to purposefully communicate and share information and knowledge within and outside the library (Dickson and Holley, 2010; Tripathi and Kumar, 2010). It does not only allow them to communicate but to enhance data transfer among library users (Mavodza and Ngulube, 2011).

#### *2.4. Challenges Associated with Social Networking Tools*

Research undertaken across Kerman academic libraries exposed a problem related to lack of requisite knowledge in the social networking tool (Nazim, 2015). He found out that the librarians were ignorant and had little knowledge about the social networking tools which impeded flow of information among librarians (Nazim, 2015). In addition, Ramzan and Singh (2009) undertook similar studies in Pakistan academic library and found out that lack of computers, internet connectivity, licensed applications, and library software impeded the use of social networking tool. Also, it was exposed in a survey that more than half of the respondents fail to read or post comment during online group discussions (Valenzuela et al. (2009). Also, it was found out that some users fail to use the social networking tools for their intended purposes (Roblyer et al., 2010). When Selwyn (2009) analysed the postings on social networking tools he found out that only 4% a population of 68,169 use them for educative purposes. Hew (2011) emphasised this in his study and claims social networking tools particularly Facebook has very little educational use. In a survey conducted in academic health science librarians, Hendrix et al. (2009) found out two main reasons why the librarians discarded the use of Facebook which include inadequate time and lack of relational use of the app in the library setting. That is to say, some social networking tools such as Facebook do not have any significant benefit in the library setting (Hendrix et al., 2009). However, Mack et al. (2007) claims that Facebook allows university students to communicate with librarians get information to improve their academic work.

### **3. Methodology**

#### *3.1. Population*

The population chosen for the study was public universities in Ghana. The study targeted professional librarians from the four well-resources public universities in Ghana including; University of Development Studies, University of Ghana, University of Cape Coast, and Kwame Nkrumah University of Science and Technology.

#### *3.2. Sampling Technique*

The quota sampling technique was used to select 50% of all professional librarians across the selected universities. The various universities had divergent number of professional librarians employed in their libraries and there for effective comparison of results, the quota system was used to select equal proportions of respondents. Field survey revealed that the total number of professional librarians or senior staff in UG, KNUST, UCC and UDS were 24, 10, 16 and 14 respectively. Therefore, using a quota sample of 50%, 12, 5, 8, and 7 respondents were selected from UG, KNUST, UCC and UDS in that order

#### *3.3. Instruments for Data collection*

The data instrument that was utilised in collecting information from the field was semi-structures questionnaires. The questions were semi-structured in nature. Some aspects of the questionnaire had strict options for respondents to choose from whilst others had open ended questions for various views and opinion of respondents.

#### *3.4. Data Analysis*

Data obtained from the field was analysed using Statistical Package for Social Sciences (version 20.0). Results of the study were displayed with simple descriptive statistical tools including frequency tables, percentages, and bar graphs.

### **4. Data Analysis and Discussion of Findings**

#### *4.1. Background Information (Socio-demographic Data)*

The socio-demographic information of respondents who were sampled in the five universities is shown in Table 1.



| Variables                  | Frequency | Percentage |
|----------------------------|-----------|------------|
| <b>Gender:</b>             |           |            |
| ▪ Male                     | 16        | 50%        |
| ▪ Female                   | 16        | 50%        |
| <b>Qualification:</b>      |           |            |
| ▪ BA/BLS                   | 5         | 15.6%      |
| ▪ MLS/MA                   | 27        | 84.4%      |
| ▪ PhD                      | 0         | 0%         |
| <b>Staff Position:</b>     |           |            |
| ▪ Professional Librarians  | 32        | 100%       |
| <b>Name of University:</b> |           |            |
| ▪ University of Ghana      | 12        | 37.5%      |
| ▪ University of Cape Coast | 5         | 15.6%      |
| ▪ KNUST                    | 8         | 25.0%      |
| ▪ UDS                      | 7         | 21.9%      |

*Table 1: Background Information*  
*Source; Fieldwork, 2015*

From Table 1, it was found out that out of the 32 respondents who were sampled for the study, half were females whilst 50% were males. This indicates that there is no particular gender which is preferred in managing Academic Libraries. This also indicates that there has been improvement in female education and enrolment in the formal sector economy. Majority of the Librarians were MLS/MA (84.4%) holders whilst only few were BA/BLS honours (15.6%) honours. However, it was found out that none of the Librarians who were sampled have pursued their PhD. All the respondents who were sampled were professional Librarians which are incongruence with their level of education. Since the study used a quota system of 50% to determine the number of librarians to be sampled from each university depending on the total number of professional librarians, it was found out that majority of the respondents were sampled from UG representing 37.5% then KNUST comprising 25.0% before UDS representing 21.9% then UCC composing of 15.6%. This indicates that UG has more professional librarians than all the public universities in Ghana whilst the least were employed in UCC.

#### *4.2. Awareness and Utilisation of Social Networking Tools among Professional Librarians*

The study exposed professional Librarians awareness of social networking tools. Results as displayed in Table 2 shows that all the respondents who were sampled had idea about social networking tools adopted across the university libraries. Upon further probe, respondents were allowed to mention examples of social networking tools they were aware of and the extent of their usage in the university libraries as exposed in Table 2.

The study found out that, the professional Librarians in the public well-resourced universities in Ghana were aware of web 2.0 tools including; Facebook, Twitter, LinkedIn, Instant messaging, Wikis, Flickr, Slideshare, Blogs and YouTube. Among these, respondents were more aware and highly use Facebook (875%) than any other social networking tool in the library. This finding is in line with Kemrajh (2013) assertion which identified Facebook and Twitter as the two most increasingly used social networking tools in the university certain for promoting library services. However, findings on Twitter are not confirmed by this study but shows mixed report. Unlike Kemrajh (2013) findings endorsing Twitter and Facebook, this current study found out only Facebook and instant messaging as the two most widely used tools among professional librarians. It was found out that 71.9% of the respondents use Instant messaging than LinkedIn (40.6%). The three most prominent and well utilised library resource tools included Facebook, Instant messaging and LinkedIn in that order. However, it was revealed that the least known and used social networking tools in the public university libraries were Slideshare (3.1%) and YouTube (3.1%) followed by Wikis (9.4%) and Blogs (9.4%).

Table 2, shows that although Facebook was the most popular and well used social networking tool, comparatively, it is more fashionable in both UCC (100%) and UG (100%) than all the other public well-resourced universities but less used in KNUST (62.5%). Similarly, Instant messaging which is the second most fashionable and well utilised social networking tool is mostly used by UG (100%) and KNUST (100%) librarians and least among UDS library staff (0%). This indicates that whilst UG and KNUST librarians fully use Instant messaging, none of the UDS librarians ever use them which could be due mostly to ignorance of the tool. Also, among the least utilised social networking tools among professional librarians, it was found out that YouTube and Slideshare were never used in three universities including UG, UCC and UDS but only in KNUST. Similarly, Wikis and Blogs; the second least utilised social networking tools was not used in UG, UCC and UDS but only in KNUST libraries.

Among the other social networking tools, Twitter was not used in UCC and UDS whilst was mostly used in UG (33.3%). Also, LinkedIn was never used in UCC but prominently used in KNUST (50%) followed by UG (33.3%). From assessment, it was found out that the level of utilisation of Twitter, LinkedIn, and Flickr in UG were the same (33.3%). Similarly, the rate of utilisation of Blogs and Wikis in KNUST were the same (62.5%) just as they used Flickr, Slideshare and YouTube (12.5%). Surprisingly, it was found out

that the only two social networking tools used among UCC professional librarians were Facebook and Instant messaging whilst LinkedIn and Facebook were the only two used in UDS.

| Social Networking Tool | Extent/<br>Awareness | Universities |       |       |       |     |     |     |       | Total |      |
|------------------------|----------------------|--------------|-------|-------|-------|-----|-----|-----|-------|-------|------|
|                        |                      | UG           |       | KNUST |       | UCC |     | UDS |       |       |      |
|                        |                      | No.          | %     | No.   | %     | No. | %   | No. | %     | No.   | %    |
| Facebook               | Use                  | 12           | 100   | 5     | 62.5  | 5   | 100 | 6   | 85.7  | 28    | 87.5 |
|                        | Don't use            | 0            | 0     | 3     | 37.5  | 0   | 0   | 1   | 14.3  | 4     | 12.5 |
| Instant messaging      | Use                  | 12           | 100   | 8     | 100.0 | 3   | 60  | 0   | 0.0   | 23    | 71.9 |
|                        | Don't use            | 0            | 0     | 0     | 0.0   | 2   | 40  | 7   | 100.0 | 9     | 28.1 |
| Twitter                | Use                  | 4            | 33.3  | 2     | 25.0  | 0   | 0   | 0   | 0.0   | 6     | 18.8 |
|                        | Don't use            | 8            | 66.7  | 6     | 75.0  | 5   | 100 | 7   | 100.0 | 26    | 81.3 |
| LinkedIn               | Use                  | 4            | 33.3  | 4     | 50.0  | 0   | 0   | 5   | 71.4  | 13    | 40.6 |
|                        | Don't use            | 8            | 66.7  | 4     | 50.0  | 5   | 100 | 2   | 28.6  | 19    | 59.4 |
| Blogs                  | Use                  | 0            | 0.0   | 3     | 37.5  | 0   | 0   | 0   | 0.0   | 3     | 9.4  |
|                        | Don't use            | 12           | 100.0 | 5     | 62.5  | 5   | 100 | 7   | 100.0 | 29    | 90.6 |
| Wikis                  | Use                  | 0            | 0.0   | 3     | 37.5  | 0   | 0   | 0   | 0.0   | 3     | 9.4  |
|                        | Don't use            | 12           | 100.0 | 5     | 62.5  | 5   | 100 | 7   | 100.0 | 29    | 90.6 |
| Flickr                 | Use                  | 4            | 33.3  | 1     | 12.5  | 0   | 0   | 0   | 0.0   | 5     | 15.6 |
|                        | Don't use            | 8            | 66.7  | 7     | 87.5  | 5   | 100 | 7   | 100.0 | 27    | 84.4 |
| Slideshare             | Use                  | 0            | 0.0   | 1     | 12.5  | 0   | 0   | 0   | 0.0   | 1     | 3.1  |
|                        | Don't use            | 12           | 100.0 | 7     | 87.5  | 5   | 100 | 7   | 100.0 | 31    | 96.9 |
| YouTube                | Use                  | 0            | 0.0   | 1     | 12.5  | 0   | 0   | 0   | 0.0   | 1     | 3.1  |
|                        | Don't use            | 12           | 100.0 | 7     | 87.5  | 5   | 100 | 7   | 100.0 | 31    | 96.9 |

Table 2: Awareness and Utilisation of Web 2.0 Tools in University Libraries

Source; Fieldwork, 2015

Further deliberation revealed how respondents became aware of social networking tools before utilising them as displayed in Figure 1. Results from the study as shown in Figure 1 indicates that most of the Librarians got to know the social networking tools through personal studies (26) and workshops (22) whilst few got to know through on the job training (14) and interaction with colleague professionals (11). This indicates that one's ability to know social networking tools depend on his or her ability to study or interact with people or the provisions of employees through on the job training and workshops.

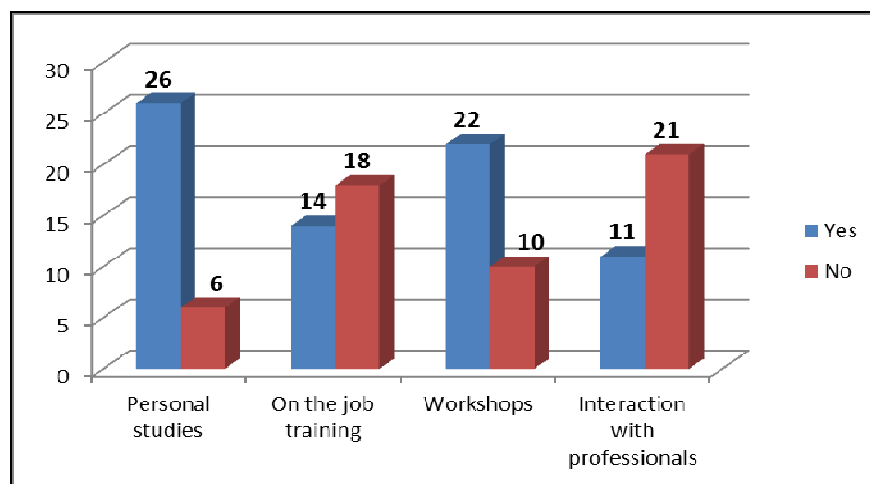


Figure 1: How Respondents became aware of the Social Networking Tools

Source; Fieldwork, 2015

Further probe revealed the duration or frequency of usage of web 2.0 tools as indicated in Table 3. The study revealed that majority of the sampled respondents use social networking tools daily (22) whilst only few used it on weekly basis (4). It was found out that more males (12) than females used social networking tools daily whilst more females (3) used them on weekly basis than males (1). It was found out that, 6 librarians did not answer the question which could indicate that they don't use social networking tools at all

|                | Gender    |           | Total     |
|----------------|-----------|-----------|-----------|
|                | Male      | Female    |           |
| Frequent usage |           |           |           |
| Daily basis    | 12        | 10        | 22        |
| Weekly basis   | 1         | 3         | 4         |
| No response    | 3         | 3         | 6         |
| <b>Total</b>   | <b>16</b> | <b>16</b> | <b>32</b> |

Table 3: Frequency of Social Networking Tools Usage by Gender

Source; Fieldwork, 2015

#### 4.3. Benefits of Social Networking Tools in University Libraries

The survey assessed the benefit derived from usage of social networking tools in Academic Libraries. It was found out that social networking tools are relevant in dissemination of library news, library events, group discussion, general library information, sharing e-resources, and offer library resources as indicated in Table 4. Social networking tools were mainly used in the university libraries to disseminate library news information among users. Information shared on the platforms included; book search, news, announcement and guide on recent library management techniques. This finding is backed by Tiryakioglu and Erzurum (2011) who identified the content of conversation on social media to include activities, events, announcements, directions, guidance, and advice and personal feelings. From Table 4, it was found out that UG mainly used social networking for library news dissemination (100%) and group discussions (75.0%) whilst KNUST librarians used them for group discussions (75.0%). However, UCC librarians use social networking tools mostly to offer library resources representing 100% and for general library information representing 100%. General library information and group discussion were the main use of social networking tools among UDS librarians.

Comparatively, UG professional librarians (100%) often used the social networking tools to share library news information than all the other universities but least applied in UDS (42.9%). Similarly, UG (66.7%) used social networking tools to share library events such as impending forums and workshops followed by KNUST (62.5%) then UCC (60%) before UDS (42.9%). It was exposed that while web 2.0 tools were used to share general library information and library resources mostly in UG (66.7%), it was never used for such purposes among UCC professional librarians (0%). Also, social networking tools were used for group discussions widely among UG librarians (75%) followed by UDS (42.9%) and least among UCC librarians (20%). However, KNUST (75%) used social networking particularly for sharing e-resources before UDS (42.9%).

| Benefits                    | Response | Universities |      |       |      |     |     |     |      | Total |      |
|-----------------------------|----------|--------------|------|-------|------|-----|-----|-----|------|-------|------|
|                             |          | UG           |      | KNUST |      | UCC |     | UDS |      |       |      |
|                             |          | No.          | %    | No.   | %    | No. | %   | No. | %    | No.   | %    |
| Library news dissemination  | Yes      | 12           | 100  | 5     | 62.5 | 3   | 60  | 3   | 42.9 | 23    | 71.9 |
|                             | No       | 0            | 0    | 3     | 37.5 | 2   | 40  | 4   | 57.1 | 9     | 28.1 |
| Library events              | Yes      | 8            | 66.7 | 5     | 62.5 | 3   | 60  | 3   | 42.9 | 19    | 59.4 |
|                             | No       | 4            | 33.3 | 3     | 37.5 | 2   | 40  | 4   | 57.1 | 13    | 40.6 |
| Offer library resources     | Yes      | 8            | 66.7 | 3     | 37.5 | 0   | 0   | 3   | 42.9 | 14    | 43.8 |
|                             | No       | 4            | 33.3 | 5     | 62.5 | 5   | 100 | 4   | 57.1 | 18    | 56.3 |
| General library information | Yes      | 8            | 66.7 | 5     | 62.5 | 0   | 0   | 4   | 57.1 | 17    | 53.1 |
|                             | No       | 4            | 33.3 | 3     | 37.5 | 5   | 100 | 3   | 42.9 | 15    | 46.9 |
| Groups Discussion           | Yes      | 9            | 75.0 | 2     | 25.0 | 1   | 20  | 3   | 42.9 | 15    | 46.9 |
|                             | No       | 3            | 25.0 | 6     | 75.0 | 4   | 80  | 4   | 57.1 | 17    | 53.1 |
| E-resources                 | Yes      | 2            | 16.7 | 6     | 75.0 | 1   | 20  | 3   | 42.9 | 12    | 37.5 |
|                             | No       | 10           | 83.3 | 2     | 25.0 | 4   | 80  | 4   | 57.1 | 20    | 62.5 |

Table 4: Benefits of Social Networking Tools

Source; Fieldwork, 2015

#### 4.4. Challenges in Using Social Networking Tools in University Libraries

The study also revealed the factors hindering the effective use of web 2.0 tools in the academic libraries as shown in Table 5.

It was found out that; inadequate computers, lack of internet connectivity or network failure, unstable power supply, abuse of networking tools specified usage, and lack of requisite knowledge and community acceptance as emphasised by Ramzan and Singh (2009) study in Pakistan academic library. Ramzan and Singh (2009) accept that lack of computers and internet connectivity impeded the use of social networking tool. However, this study did not find lack of licensed applications and library software as a barrier to social networking tool usage unlike Ramzan and Singh (2009) findings which endorsed them. The study found out that the major challenge to effective utilisation of social networking tool in the four well-resourced public universities libraries in Ghana is lack of knowledge and community acceptance of the networking tools (40.6%). This finding is backed by Nazim (2015) who found lack of requisite knowledge in the social networking tool among Kerman academic librarians. Nazim (2015) exposed that the librarians were either ignorant about the social networking tool or had little idea about them which hindered their use. The study found out that the universities do not offer any education in social networking tools and therefore the only hope is to learn on the job training. However,

respondents claimed that they are hardly taught social networking tools during orientation, workshops and seminars which are rare among professional library staff. Earlier, it had been mentioned that majority of the librarians learned the social networking tools either by themselves or through professionals and friends. However, a challenge to this is lack of community acceptance of the social networking tool by library staff when one wants to introduce it. The Librarians failed to embrace and use tools offered by colleague staff as unimportant or unbinding and hardly adopt it as a common platform to share information. Lack of education and community acceptance was a peculiar challenge to librarians in UCC (80%) than in UG (66.7%) and hardly a problem in KNUST (0%).

The second major challenges confronting utilisation of web 2.0 tools in the selected university libraries were lack of internet connectivity or network failure (25%) and abuse of the use of networking tools (25%). It was observed that some libraries in the universities particularly UDS were not served with internet facility. In areas where, internet facilities were available, the internet connectivity was poor or unstable particularly in UDS (85.7%), KNUST (12.5%), and UCC (20%). Lack of internet connectivity and network failure was not a challenge in UG (0%) which indicates full network access across all its libraries. This is due to the fact that UG has employed professional Internet Service Providers which give quality internet service to its libraries. Abuse of the use of networking tools was a challenge in two universities particularly KNUST (50%) and UG (33.3%). It was exposed that some librarians failed to use the social networking tools for their intended purposes as endorsed by Roblyer et al. (2010). It was found out that, some librarians have shifted from academic utilisation of the platforms to social unrelated issues or private discussions. Selwyn (2009) buttressed this assertion with his assessment on the posting on social networking tools and found out only 4% relation to educative purposes. Some respondents also claimed that some librarians fail to reply information or comment during discussions which could be due to ignorance. Valenzuela et al. (2009) backed this assertion when he found out that more than half of the respondents fail to read or post comment during online group discussions. The study attributed this problem to ignorance rather than little educational use of some social networking tools as expressed by Hew (2011) and Hendrix et al. (2009) on his critique on Facebook.

Unstable power supply was a challenge only in KNUST (25%). UDS do not experience any power outages by virtue of the regions it is situated which are excluded from the on-going power rations. Similarly, inadequate computer was a challenge only in KNUST (12.5%) as emphasised by Ramzan and Singh (2009). This could imply that the university is either growing beyond its computer infrastructure which needs to be addressed. It could also imply that some sectors of the library do not require proactive provision of information and hence not supplied with the facility.

| Challenges   | Universities |       |       |       |     |     |     |       | Total |       |
|--|--------------|-------|-------|-------|-----|-----|-----|-------|-------|-------|
|  | UG           |       | KNUST |       | UCC |     | UDS |       |       |       |
|  | No.          | %     | No.   | %     | No. | %   | No. | %     | No.   | %     |
| Inadequate computers                                 | 0            | 0     | 1     | 12.5  | 0   | 0   | 0   | 0.0   | 1     | 3.1   |
| Lack of internet connectivity/ network failure       | 0            | 0     | 1     | 12.5  | 1   | 20  | 6   | 85.7  | 8     | 25.0  |
| Unstable power supply                                | 0            | 0     | 2     | 25.0  | 0   | 0   | 0   | 0     | 2     | 6.3   |
| Abuse of the use of networking tools                 | 4            | 33.3  | 4     | 50.0  | 0   | 0   | 0   | 0     | 8     | 25.0  |
| Lack of requisite knowledge and community acceptance | 8            | 66.7  | 0     | 0     | 4   | 80  | 1   | 14.3  | 13    | 40.6  |
| Total  | 12           | 100.0 | 8     | 100.0 | 5   | 100 | 7   | 100.0 | 32    | 100.0 |

Table 5: Challenges confronting utilisation of Social Networking Tools in university Libraries

Source; Fieldwork, 2015

## 5. Summary, Conclusion and Recommendations

### 5.1. Summary and Conclusion

The study found out the awareness of social networking among professional librarians in well-resourced public universities in Ghana. It was respondents were aware of web 2.0 tools including; LinkedIn, Facebook, Slideshare, Instant messaging, Twitter, Wikis, Flickr, Blogs, and YouTube. Professional librarians became aware of these tools particularly through personal studies, workshops, on the job training, and interaction with colleague professionals. The study found out that Facebook was the most popular and well utilised social networking tools among professional librarians whilst the least utilised was LinkedIn. Specifically, Facebook was more fashionable in UG and UCC whilst Instant messaging; the second popularly utilised social networking tool was more much utilised in UG and KNUST libraries. However, instant messaging was never used by UDS librarians whilst YouTube and Slideshare were never used in three universities including UG, UCC and UDS. Similarly, Wikis and Blogs; the second least utilised social networking tools was not used in UG, UCC and UDS. Also, Twitter was not used in UCC and UDS. Differing times were used to engage in social networking tools on daily and weekly basis. It was exposed that more males than female librarians used social networking tools daily whilst more females used them on weekly basis than males.

The study found out that social networking tools were beneficial in dissemination of library news, library events, group discussion, general library information, sharing e-resources, and offering library resources. UG librarians mostly used social networking for library news dissemination and group discussions whilst KNUST librarians used them purposely for group discussions. However, UCC librarians utilise web 2.0 tools mostly for offering library resources and general library information. However, general library information and group discussion were the main use of web 2.0 tools in UDS libraries. The major factors confronting effective use of web 2.0 tools across university libraries included inadequate computers, lack of internet connectivity or network failure, unstable power supply, abuse of specific networking tool usage, and lack of requisite knowledge and community acceptance.



### 5.2. Recommendations

1. The universities should conduct workshops, on job training and seminars to professional librarians on specific social networking tool to improve community acceptance and utilisation among users for effective communication.
2. The libraries should be stocked with adequate ICT infrastructure and vibrant internet connectivity to ensure proper functioning and effective use of the social media networking tools.
3. Also, it is recommended that in the era of power outages, the university libraries should be served with standby power supply to provide energy to feed the ICT infrastructure.
4. Professional librarians should be encouraged to use the social networking tools for their intended purposes and observe all ethics regarding it use.
5. Universities should employ professional Internet Service Providers to give quality internet service to its libraries.

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