

A Study on the use of Facebook, RSS, Blogs and Twitter (Web2.0) among selected academic libraries from 6 Gulf countries namely: Kingdom of Saudi Arabia, United Arab Emirates, Qatar, Bahrain, Oman and Kuwait

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Abstract:

This paper aims to explore and study the current usage trends of Web2.0 namely **Facebook, RSS, Blogs and Twitter** among selected higher education institutions' libraries in 6 gulf countries namely: **Kingdom of Saudi Arabia, United Arab Emirates, Qatar, Bahrain, Oman and Kuwait**. Websites of the selected libraries would be compared on the extent of the usage of these tools, the participation level and their purpose. The author would also share his opinion and suggestions on improving the current trends pertaining to the area of Web2.0 and libraries. The impact and importance of Web2.0 on libraries cannot be disputed. Since gaining popularity in mid-2000, libraries around the globe have jumped onto the Web2.0 bandwagon. Among the common examples of Web2.0 used by libraries today are namely: social networking sites, blogs, wikis, folksonomies and video sharing sites. Libraries are using Web2.0 to (among others):

- market their services / resources to their community,
- announce latest library news,
- provide their online guides / notes for their resources among others.

Though such tools have been implemented by most libraries around the world, some of the challenges faced by libraries are:

- participation level – casting the net to a wider audience
- selection of web2.0 tools
- effectiveness of present web2.0 tools used by the libraries

Introduction:

The advent of Web2.0 technologies over the past 5 years has impacted libraries in a number of ways. Communications between users and libraries which used to be one-way and static are now much more dynamic. Through social networking sites, blogging, twitter and wikis, libraries are able to reach out to the masses and elicit feedback and information from users in a short period of time.

From limited participation, the web has progressed from online shopping transactions and online forums and newsgroups to providing an interactive experience where collaboration and participation are rampant (Kroski, 2008). Social networking sites such as Facebook allow users to make comments and feedback on libraries postings on the latest happenings in the libraries. Blogs, on the other hand, can be used as a platform to disseminate library's collections such as electronic resources. Twitter, on the other hand, facilitates the quick transfer of messages/pictures while RSS (Really Simple Syndication) facilitates for the quick transfer of library news and information to users.

Fernandez mentioned in his article on the strengths of the social media tools. Among those, he described that these tools:

- Are Freely available
- Is Easy to set up
- Can connect to a large number of users within a short period of time
- Facilitate the input of feedback and opinion from users with the library staff

(Fernandez, 2009)

From the criteria outlined above, one can see how the impact of social media can have on libraries especially in the areas of communication and marketing library's resources and latest news.

Purpose

The purpose of this paper is to explore and study the current usage trends of Web 2.0 namely Facebook, RSS, Blogs and Twitter among selected university libraries in the gulf region – Kingdom of Saudi Arabia, United Arab Emirates, Qatar, Bahrain, Oman and Kuwait. Selected libraries website from the gulf region were explored and compared on the extent of usage of these social media tools.

Definitions

Blogs are defined as websites that allows users to search, read and browse chronological entries of events (Stephens & Collins, 2007). In addition to that, a blog “is an online journal or web site on which articles are posted and displayed in chronological order” (Kroski, 2008). Kroski elaborated further that blogs have several common features such as postings permalinks, taggings, archives, search capabilities and blogrolls among others. Users are also allowed to make comments on the blog postings and there is the archives feature as well.

RSS (Really Simple Syndication) is a technology that provides news and other content to be released by publishers (Kroski, 2008). It allows the distribution of headlines list, notices and even full-text content (Bansode, Dahibhate, & Ingale, 2009). Users are able to select the contents or areas of interest. Instead of searching for the information, it gets pushed to them.

Stuart (2010) described twitter as a “140-character microblogging service” (Stuart, 2010). Through twitter, libraries can share information on latest news, resources and related library matters to users. Sewell (2013) described twitter as a tool for users to compose “quick, short messages” to highlight developments or latest news and happenings (Sewell, 2013). Bosque et al (2012) added that with the limited amount of characters, messages are straight to the point and are usually distributed via “instant messages, mobile phones, e-mail, or the web” (Bosque, Leif, & Skarl, 2012).

Social networking sites such as Facebook “offer a portal to information, knowledge, and people, where members can share content and establish relationship with others” (Kroski, 2008). Users can share their opinions and respond to others’ comment on a particular issue or subject area. Features that are available in social networking sites would include user profiles, groups/communities, user blogs, send messages, friends’ list, users comments and search features.

Literature review

There have been a number of research studies conducted on the use of social media tools such as Facebook, Wiki, Twitter and RSS by libraries. Mahmood and Richardson (2011) noted that 100 of the Association of Research Libraries in the United States of America “were found to be using various tools of Web 2.0” (Mahmood & Jr, 2011). Blogs, RSS and social networking sites were among Web 2.0 tools mostly adopted. RSS was the most popular tool while instant messaging followed closely behind. Out of the 100 websites, eighty-nine (89) libraries “had a presence on Facebook” (Mahmood & Jr, 2011). Their exploratory study

showed that the most common uses of RSS were for “publishing news/announcements” followed by “sharing items published on library blog” (Mahmood & Jr, 2011). Social networking sites such as Facebook and Myspace were often used for transmitting library news/events followed by the sharing of videos and pictures. Blogs were used for “publishing library news/announcements/events” as well as “marketing library services and encouraging use” (Mahmood & Jr, 2011).

Li et al (2011) surveyed top 30 Chinese university libraries web sites and noted that the use of Web 2.0 technologies were not pervasive among the Chinese universities. Only “two-thirds of Chinese universities libraries deployed 1 or more Web 2.0 technologies” (Si, Shi, & Chen, 2011). 15 libraries implemented RSS technology. Their main purposes were “for news or notification, new books and information push for commercial databases information, customized subject information and user information” (Si et al., 2011). Blogs were not commonly adopted by the selected libraries' websites. Only 3 websites implemented blogs.

One of them was a study on the level and “use of Web 2.0 applications and the correlation between Web 2.0 applications and the quality of library websites” (Chua & Goh, 2010). They based their research on 120 library websites from Asia, Europe and North America. Among their findings was that the number of North American libraries who have implemented blogs, RSS and social networking sites were more as compared to those in Europe and Asia. Their finding revealed “blogs are commonly used to generate interest in subject-specific topics” on top of interacting and communicating with users (Chua & Goh, 2010). RSS is used for communicating “news and events, updates of resources, or collections on their websites” (Chua & Goh, 2010). Social networking services such as Facebook and Myspace were used by libraries as another form of communication medium as well as a means to have a more personalized way of engaging users (Chua & Goh, 2010).

Han and Liu (2010) also did an online survey and content analysis on top 38 Chinese universities. Their study revealed that more than two-thirds of them have adopted one or more kinds of Web 2.0 tools. In addition to that, it showed that “RSS are the most common” (Han & Liu, 2010). 21 out of the 38 universities used RSS as a technology to inform users about interesting news to the users such as library news and events, new books availability or information on databases (Han & Liu, 2010). However, only 5 universities deployed blogs as a means of communication between librarians as well as “publicizing news about information resources and library events” (Han & Liu, 2010). According to their study, social networking services were used to disseminate events, access resources, provide reference services and photo sharing (Han & Liu, 2010). Han

and Liu (2010) concluded that Web 2.0 technologies in the sampled 38 university libraries were in “basic development stage” (Han & Liu, 2010).

Kim and Abbas (2010) investigated Web 2.0 tools on randomly selected 230 academic library websites and 184 users. They discovered that “RSS and blogs were widely adopted by academic libraries while users widely utilized the bookmark function” (Kim & Abbas, 2010). 65% of the surveyed library websites uses blogs, while 73% uses RSS. Only 15% used twitter.

In another study conducted by Tripathi and Kumar (2010), they indicated that RSS, instant messaging and blogs were the most commonly used Web 2.0 technologies deployed by academic libraries (Tripathi & Kumar, 2010). They surveyed 277 university library websites from Australia, Canada, United Kingdom and the United States. It revealed that out of 151 websites from United States 56% are using instant messaging, 34% uses blog while 22% deploy RSS (Tripathi & Kumar, 2010). On the other hand, 35% of 82 library web sites from United Kingdom are using RSS, followed by blog (26%) and instant messaging (7%). Tripathi and Kumar described RSS usage in the USA was for communicating general news and university news followed by library news and events and new books (Tripathi & Kumar, 2010). Academic libraries in UK used RSS for the same reasons as the United States.

The use of blogs in the study conducted by Tripathi and Kumar (2010) revealed that 30% of surveyed libraries in US stated blogs were deployed to communicate to their users on new databases, followed by general information (26 per cent) and downtime of servers/databases (23%) (Tripathi & Kumar, 2010). UK libraries tend to use blogs for disseminating information of new databases (24%), followed by downtime of servers/databases (21%) and informing users of the libraries' hours of operation/holidays (20%).

From the study, it can be inferred that there are similarities concerning the usage of RSS and blogs. However, the authors added some good practices for combining both the Web 2.0 tools and library services. Among them, they mentioned that blogs should be created to address the specific needs to a particular user group, publishing a set of rules and regulations on the acceptable behavior when using the Web 2.0 tools and these tools should be “used with well-defined purposes and standard norms” (Tripathi & Kumar, 2010).

Harinarayana and Raju (2010) explored the application of social media tools by university libraries web sites (Harinarayana & Raju, 2010). They discovered that out of 57 universities sampled from Times Higher Education web site, 37 (65%) of them used RSS for releasing information to users on news, events and announcements (Harinarayana & Raju, 2010). In addition to that, 15 (26%) of them have implemented blogs. Harinarayana and Raju (2010) added that

there was a variety in the ways blogs was used :- such as subject-specific blogs for library users, information news and library services (Harinarayana & Raju, 2010). Their study also pointed out that 9 per cent of the surveyed libraries were using social networking tools; the most popular being Facebook (Harinarayana & Raju, 2010).

Xu et al (2009) stated that 42% of 81 academic library websites in the New York State surveyed have adopted 1 or more Web 2.0 tools (Xu, Ouyang, & Chu, 2009). This meant that less than half of the 81 academic library websites were using one or more Web 2.0 applications (Xu et al., 2009). Their study exposed that the most commonly used Web 2.0 technologies is Instant messaging followed by blogs and RSS (Xu et al., 2009). Social networking sites were not implemented extensively among the surveyed library websites. Xu et al (2009) mentioned that blogs were used as “news bulletin” (Xu et al., 2009). Announcements on library news were sent out by the librarians that allowed users to make comments (Xu et al., 2009). RSS was used as “one major tool for aggregating news or selected types of information” (Xu et al., 2009).

According to a content analysis study by Linh (2008), close to two thirds of Australasian university libraries “deployed one or more Web 2.0 technologies” (Linh, 2008). According to his study, 4 main types of Web 2.0 used were RSS, Blogs, Podcasts and Instant Messaging. 64% of the libraries used RSS while 36% adopted blogs. Among the purposes of RSS uses were for announcing new books followed by new electronic journals and library news and events (Linh, 2008). Blogs, on the other hand, were used for spreading information on library services, library news and events and research tools (Linh, 2008). However, Linh concluded that the usage level of Web 2.0 were still low among the Australasian libraries.

Research Objectives and Methodology

The objectives of this research are:

- To identify which university library websites that uses either one or all of the Web 2.0 technologies: Facebook, Blogs, RSS and Twitter.
- To know the purpose of using these social media tools
- To provide suggestions of improvements in the use of social media

This was an exploratory study that involved content analysis on the selected library websites. These websites were visited and browsed to check for the presence of the selected social media tools. The university libraries were selected from Wikipedia (contributors, 16 November 2013). Only library websites that used English as the communication medium were selected. In addition,

only universities that have library websites are selected. University library websites that were selected are as follows:

	Kingdom of Saudi Arabia	Qatar	United Arab Emirates	Bahrain	Kuwait	Oman
Number of Public Universities	28	1	11	4	1	2
Number of Private Universities	5	9	16	10	2	12
Grand Total	33	10	27	14	3	14

Table 1. Breakdown on number of selected university libraries websites by country

Comparison of Web 2.0 tools by countries:

Kingdom of Saudi Arabia

A total of 5 private university libraries and 28 public universities were surveyed. Out of the 5 private university libraries web sites, 4 (80%) of them are using the selected social media tools. On the other hand, only 13 (45%) of the public university libraries web sites are using either Facebook, Twitter, RSS or blogs.

The most commonly used Web 2.0 tools are Facebook and Twitter. About 18% of the surveyed university libraries use Facebook while another 15% use Twitter. Most of the libraries (97%) do not deploy blogs. Only 12% of the libraries use RSS.

However, it can be noted that there are some libraries that deploy the social media tools that link back to their respective university accounts. For example, library web sites from Dar Al Uloom University, Al Yamamah University, King Saud bin Abdulaziz University for Health Sciences, Qassim University, Islamic University of Medina, Yanbu Industrial College, Al Jawaf University and Tabuk University have links pointing back to their respective universities account.

Table one below shows the breakdown of the social media usage among university libraries in the Kingdom of Saudi Arabia.

Selected Social Media Tools	Non-existent	Existent	Pointed back to University account
Facebook	55%	18%	27%
Twitter	58%	15%	27%
RSS	82%	12%	6%
Blogs	97%	0%	3%

Table 2. Social Media usage in Saudi Arabian libraries

There are common similarities in the purpose of using the social media tools such as Facebook. Most of the libraries that use it for:

- Library promotion: Announcing library operating hours, off-campus access for electronic resources, general news about the library, sharing of Photos, information on library collections
- Library Services: orientation and training programs such searching online databases and OPAC, online guides
- Outreach: Welcoming messages to students, new staff changes and new appointments
- Feedback: Obtaining information via online surveys

Table 2 below shows the breakdown of the usage purpose of Facebook:

Usage	Yes	No
Library Promotion: General News, Library Collections, Photo sharing	6 (100%)	0
Library Services: Training classes, online guides	6 (100%)	0
Outreach	6 (100%)	0
Feedback: Online Surveys	1 (17%)	5 (83%)

Table 3. Purpose of Facebook usage in Saudi Arabian libraries

On another note, 15% of the surveyed libraries deploy Twitter. Out of which, all of them are coming from public university library web sites. None of the private institutions are using twitter.

The purpose of using twitter among Saudi Arabian university libraries web sites is similar to that of Facebook. Table 3 shows the breakdown of the main usage of twitter:

Twitter Usage=5	Yes	No
Library Promotion: General News, Library Collections, Photo sharing	5 (100%)	0
Library Services: Training classes, online guides	4 (80%)	1 (20%)
Outreach	5 (100%)	0
Feedback: Online Surveys	1 (20%)	4 (80%)

Table 4. Purpose of Twitter usage in Saudi Arabian libraries

In addition to that, 4 libraries use RSS to inform users on the libraries'

- new arrivals
- sources of information

However, not one university library is using blogs as a medium for communication to their users.

Online catalogs were also explored to see whether there is any evidence of social media tools. 4 out of 33 sampled libraries deploy RSS within their online catalogs. RSS are used for:

- subscribing to search results
- new materials

In addition to that, some of the online catalogs were inaccessible due to the access restrictions (logging username and password) imposed by the libraries.

Qatar

A total of 10 institutions were chosen for this exploratory study. Out of which, 1 is a public institution while 9 of them are private institutions. 80% of the surveyed Qatari university libraries web sites are using either one of the social media tools. The most used social media tool among them is RSS followed by Twitter and Facebook.

30% of the library web sites are using RSS, another 20% implemented Twitter while only 10% deployed Facebook. However, it was noted from the study that 60% of them have links that pointed back to the University Facebook account while another 50% has embedded links that pointed back to their University Twitter account. The surveyed libraries did not use blogs as part of their communication medium with their respective users.

Selected Social Media Tools	Non-existent	Existent	Pointed back to University account
Facebook	30%	10%	60%
Twitter	30%	20%	50%
RSS	70%	30%	0%
Blogs	100%	0%	0%

Table 5. Social Media usage in Qatari libraries

The main uses Facebook are for:

- Library promotion: Announcing library operating hours, off-campus access for electronic resources, general news about the library, sharing of Photos, information on library collections
- Library Services: orientation and training programs such searching online databases and OPAC, online guides

On another note, some of the uses of Twitter are for:

- Informing users on the opening hours of the library, guides on using electronic resources,
- Conducting library online survey,
- Announcing news related to the library environment

30% of the libraries that are using RSS used it for subscribing to OPAC search results. None use it for pushing information such as “New arrivals” or for training alerts.

United Arab Emirates

A total of 27 private and public university libraries were selected for this study. Out of which, 11 of them are public institutions while the remaining 16 are private institutions. 82% of the public institutions are using one of the social media tools. On the other hand, 75% of the private institutions are using them.

Libraries in the UAE preferred RSS compared to the rest of the selected social media tools. 30% of them are using RSS followed by Facebook and Twitter with 4% respectively. However, it can be noted that even though the libraries do not have an account of their own on Facebook, Twitter, RSS and Blogs, a number of them have links that point back to their respective university accounts. For example, 63% of the surveyed libraries have links to their university Facebook account while 56% of them link back to their university Twitter account. Only 4% provide RSS link to their university account.

Selected Social Media Tools	Non-existent	Existent	Pointed back to University account
Facebook	33%	4%	63%
Twitter	41%	4%	56%
RSS	67%	30%	4%
Blogs	100%	0%	0%

Table 6. Social Media usage in UAE libraries

Abu Dhabi University Library uses their Facebook account for library promotion and library services such as training sessions while their Twitter account has similar information as what was on their Facebook account. Their twitter account has 402 followers and the library has made a total of 2,011 tweets.

30% (8 libraries) of the libraries use RSS for library promotion such as pushing library collection information to users and general news about the library.

RSS Sampled=8	Yes	No
Library Promotion: General News, Library Collections, Photo sharing	8	0
Library Services: Training classes, online guides	0	8
Outreach	0	8
Feedback: Online Surveys	0	8

Table 7. Purpose of RSS usage in UAE libraries

A check in the online catalog revealed that RSS is not prominently used. In addition to that, a number of the UAE libraries are using LIWA: Library Information Web Access that is a Project of UAE Lib Consortium. LIWA is a shared online catalog interface between Higher Colleges of Technology, United Arab Emirates University and Zayed University.

Bahrain

4 public university libraries and 10 private university libraries from Bahrain were surveyed. 50% of the private university libraries have implemented 1 of the 4 social media tools. In addition to that, another 50% of the public university libraries have used one of the selected social media tools.

The common purpose of using Facebook is for library promotion and library services: informing users on the library opening hours. On top of that, 6 other universities (43%) have links pointing back to their respective university Facebook account.

Twitter was not deployed directly by the libraries. However, 43% of them have links that point back to their university accounts. Blogs are not used by any of the libraries while only 7% of the libraries use RSS as part of their communication tool with their users.

Selected Social Media Tools	Non-existent	Existent	Pointed back to University account
Facebook	50%	7%	43%
Twitter	57%	0%	43%
RSS	93%	7%	0%
Blogs	100%	0%	0%

Table 8. Social Media usage in Bahraini libraries

Kuwait

3 university library web sites were sampled in this study (1 Public and 2 Private institutions). 33% of the surveyed libraries use either one of these social media tools. Facebook and Twitter are commonly used while RSS and blogs are not implemented by any of the surveyed libraries.

Gulf University for Science and Technology is the only library surveyed that has implemented Facebook and Twitter. Facebook is used for sharing information on library promotion, library services and outreach while their twitter account is also used for similar reasons.

Selected Social Media Tools	Non-existent	Existent	Pointed back to University account
Facebook	67%	33%	0%
Twitter	67%	33%	0%
RSS	100%	0%	0%
Blogs	100%	0%	0%

Table 9. Social Media usage in Kuwaiti libraries

A check on the respective online catalogs revealed that none of them are using any form of social media tools such as RSS.

Oman

As for the case for Oman, 36% of the surveyed university library web sites are using 1 of the selected social media tools. None of the private institutions have deployed any social media tools while only 1 public institution has implemented at least one of these tools.

Selected Social Media Tools	Non-existent	Existent	Pointed back to University account
Facebook	64%	7%	29%
Twitter	79%	7%	14%
RSS	93%	0%	7%
Blogs	100%	0%	0%

Table 10. Social Media usage in Omani libraries

Sultan Qaboos University is the only one that is using Facebook and Twitter as part of their communication tool with library users. Both of these social media tools are used for their library promotion and library services. In addition to that, it was noted that, as with the case with the other Gulf countries, a number of these libraries have links pointing back to their universities account as shown in Table 9.

Summary and Suggestions:

This is an exploratory study conducted on selected 101 university library web sites from the gulf countries. Out of the 101, 48 (48%) of them are public institutions and 53 (52%) of them are private institutions. Out of the 4 social media tools selected, RSS (16%) is the most popular while Facebook (11%) and Twitter (10%) follow closely behind. Blogs were rarely implemented by the selected Gulf library web sites.

However, it can be noted that 42% of the universities have link that points back to their University Facebook account, followed closely by Twitter (37%) and RSS (4%). Blogs is the lowest used social media tool.

Sampled 101	Non-existent	Existent	Pointed back to University account	Total
Facebook	48%	11%	42%	100%
Twitter	53%	10%	37%	100%
RSS	80%	16%	4%	100%
Blogs	99%	0%	1%	100%

Table 11. Social Media usage among Gulf Countries libraries

The finding is similar to Mahmood and Richardson, Li et al, and Linh where they noted that RSS is the most popular social media tool used by ARL libraries in USA, Chinese Libraries, Australasian libraries respectively. This was also the same case as in the studies done by Tripathi and Kumar and Harinarayana and Raju. Both of their findings showed that RSS are the most popular social media tools as compared to the rest.

A comparison of the 6 countries revealed that 80% of libraries in Qatar and 78% of libraries in United Arab Emirates have implemented at least 1 of the 4 social media tools. The usage of these social media tools is not widespread among the remaining 4 gulf countries: 52% in Saudi Arabia, 50% in Bahrain, 36% in Oman and 33% in Kuwait. The tables below show that usage levels among the gulf countries.

Kingdom of Saudi Arabia	Public Libraries	Private Libraries		Total (Private and Public Libraries)
Using Social Media Tools	46%	80%		52%
Not using Social Media Tools	54%	20%		48%

Table 12. Percentage breakdown of social media penetration between private and public libraries in Saudi Arabia

Qatar	Public Libraries	Private Libraries		Total (Private and Public Libraries)
Using Social Media Tools	100%	78%		80%
Not using Social Media Tools	0	22%		20%

Table 13. Percentage breakdown of social media penetration between private and public libraries in Qatar

United Arab Emirates	Public Libraries	Private Libraries		Total (Private and Public Libraries)
Using Social Media Tools	82%	75%		78%
Not using Social Media Tools	18%	25%		22%

Table 14. Percentage breakdown of social media penetration between private and public libraries in UAE

Bahrain	Public Libraries	Private Libraries		Total (Private and Public Libraries)
Using Social Media Tools	50%	50%		50%
Not using Social Media Tools	50%	50%		50%

Table 15. Percentage breakdown of social media penetration between private and public libraries in Bahrain

Kuwait	Public Libraries	Private Libraries		Total (Private and Public Libraries)
Using Social Media Tools	0%	50%		33%
Not using Social Media Tools	100%	50%		67%

Table 16. Percentage breakdown of social media penetration between private and public libraries in Kuwait

Oman	Public Libraries	Private Libraries	Total (Private and Public Libraries)
Using Social Media Tools	50%	33%	36%
Not using Social Media Tools	50%	67%	64%

Table 17. Percentage breakdown of social media penetration between private and public libraries in Oman

It can be noted that the usage patterns for the social media tools are similar to other libraries surveyed in other parts of the world. Most of these purposes are to provide information for the users on library operating hours, collections and training programs as well as guides. Online catalog was another platform in which social media tool like RSS can be deployed. Users can obtain saved search results as well as receiving news on latest arrivals in the library.

However, this study does have its limitations such as:

- It does not explore and compare the number of entries for the selected social media tools
- It does not explore the interaction level within the social media tools

In a recent report by Salem and Mourtada (2012), they mentioned that the total number of Facebook users in the Arab world is around 45 million (by end June 2012) (Salem & Mourtada, 2012). They added that GCC countries such as UAE, Kuwait and Qatar are among the top 5 Arab Facebook users. On another note, the number of active Twitter users in Arab region are high: Saudi Arabia with 830,291, Kuwait with 370,987, UAE with 263,070, Bahrain with 72, 468 Qatar with 59,835 and Oman with 9,832 (as of June 2012) (Salem & Mourtada, 2012). From the data above, there are opportunities for libraries in the Gulf region to tap into especially Facebook and Twitter.

Social media tools, if properly harnessed, can be a powerful tool in reaching out to the masses. As Fernandez stated, "users can be anywhere to receive information-related news from librarians" (Fernandez, 2009). With so many mobile devices, tablets and computer devices becoming more available and affordable, the chances of library users applying any social media tools to their devices are great. However, librarians need to consider several factors in order to ensure continuous success for social media implementations:

- Proper planning on using and implementing: The importance to know the information needs of the users

- Continuous monitoring of new trends and technological advancements in social media tools
- Moderation: Having appointed library staff to moderate the exchange of communication/information that passes through the social media tools
- Rules and Regulations: Setting up the acceptable norms of interactions within social media tools

Further Research:

More in-depth study could be conducted to elicit information:

- Preferred Social media tools by library users
- Determining how social media tools can better serve the library users as well as serving the mission and vision of the libraries
- Eliciting information from library users on the information that they like to receive from libraries

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Appendix A

List of selected universities:

Kingdom of Saudi Arabia:

Breakdown: 28 Public Universities and 5 Private Universities.

S/No University Name

- 1 King Saud University
- 2 Imam Muhammad bin Saud Islamic University
- 3 Saudi Electronic University
- 4 Prince Sultan University
- 5 Riyadh College of Dentistry and Pharmacy
- 6 Dar Al Uloom University
- 7 Alfaisal University
- 8 King Saud bin Abdulaziz University for Health Sciences
- 9 Al Yamamah University
- 10 Al Majma'ah University
- 11 King Abdullah University of Science and Technology
- 12 King Abdulaziz University
- 13 Effat University
- 14 Dar Al-Hekma College
- 15 College of Business Administration (CBA)
- 16 Jeddah College of Technology
- 17 Ibn Sina National College for Medical Studies
- 18 Umm Al-Qura University
- 19 Taif University
- 20 King Faisal University
- 21 King Fahd University for Petroleum and Minerals
- 22 Prince Mohammad University
- 23 Hafr Al-Batin Community College
- 24 Islamic University of Medina
- 25 Taibah University
- 26 Madinah College of Technology
- 27 Yanbu Industrial College
- 28 King Khalid University
- 29 Qassim University
- 30 Al Jawf University
- 31 Al Baha University
- 32 Najran University
- 33 Tabuk University

Qatar:

Breakdown: 1 Public University and 9 Private Universities

S/No University Name

- 1 Qatar University
- 2 Carnegie Mellon University in Qatar
- 3 College of North Atlantic Qatar
- 4 Georgetown University School of Foreign Service in Qatar
- 5 Northwestern University in Qatar
- 6 Texas A&M University at Qatar
- 7 Virginia Commonwealth University in Qatar
- 8 Weill Cornell Medical College in Qatar
- 9 University College London Qatar
- 10 University of Calgary Qatar

United Arab Emirates:

Breakdown: 11 Public Universities and 16 Private Universities

S/No University Name

- 1 Higher Colleges of Technology - Abu Dhabi branch
- 2 Higher Colleges of Technology - Al Ain branch
- 3 Abu Dhabi University
- 4 ALHOSN University
- 5 Khalifa University - Abu Dhabi branch
- 6 Masdar Institute of Science and Technology
- 7 United Arab Emirates University
- 8 Zayed University - Abu Dhabi branch
- 9 Higher Colleges of Technology
- 10 Zayed University
- 11 Emirates College for Management & Information Technology
- 12 Al Ghurair University
- 13 American University in Dubai
- 14 British University in Dubai
- 15 Hamdan Bin Mohammed e-University
- 16 Institute of Management Technology, Dubai
- 17 International Horizons College - Dubai
- 18 Middlesex University - Dubai Campus
- 19 University of Dubai
- 20 American University of Sharjah
- 21 University of Sharjah
- 22 Higher Colleges of Technology - Sharjah branch
- 23 Ajman University of Science and Technology
- 24 Gulf Medical College, now Gulf Medical University
- 25 American University of Ras Al Khaimah

- 26 RAK Medical & Health Sciences University - College of Dental Sciences
- 27 Fujairah College

Bahrain

Breakdown: 4 Public Universities and 10 Private Universities

S/No	University Name
1	Arabian Gulf University
2	Bahrain Polytechnic
3	College of Health Sciences
4	University of Bahrain
5	Ahlia University
6	Applied Science University
7	Bahrain Institute of Banking and Finance
8	Delmon University for Science & Technology
9	Gulf University
10	RCSI-Medical University of Bahrain
11	Royal University for Women
12	The Kingdom University
13	University College of Bahrain
14	Talal Abu Ghazaleh University College of Business

Kuwait:

Breakdown: 1 Public University and 2 Private Universities

S/No	University Name
1	American University of Kuwait
2	Gulf University for Science and Technology
3	Kuwait University

Oman:

Breakdown: 2 Public Universities and 12 Private Universities

S/No	University Name
1	A'Sharqiyah University
2	Alburaimi University College
3	Dhofar University
4	Gulf College of Oman
5	Ibra College of Technology
6	Majan University College
7	Mazoon College
8	Modern College of Business and Science
9	Muscat University College

- 10 Oman Medical College
- 11 Scientific College of Design
- 12 Sohar University
- 13 Sultan Qaboos University
- 14 University of Nizwa