Redesigning archive literacy service by using social media as a tool: Cases in Japan archive centers

Md. Mukhlesur Rahman[a] and Md. Zahid Hossain Shoeb[b]

[a]Japan Advanced Institute of Science and Technology (JAIST), Nomi, Japan
[b]University Librarian, North South University (NSU), Plot-15, Block-B, Bashundhara, Dhaka-1229, Bangladesh

The purpose of this study is to explore the type of social media tools used in archive centers; and to analyse the scope of using social media in archival literacy. The study employed a qualitative research methodology. Primary data were collected through a structured open and close-ended questionnaire from person in-charge/planning manager/manager/director of the prefecture, municipal, city, and university archive centers in Japan. A total of 92 questionnaires had been distributed, and 68 (75.56%) responses were collected for analysis. Results show that the National Archives of Japan (NAJ) has a good number of twitter and Facebook followers along with a good number of the subscribers of YouTube and RSS. So far, though prefecture and municipal archive centers use social media and other web-based tools, most of them provide only basic information about their archival center. They do not evaluate and utilize users' feedback for revitalizing their service. The study proposed an interactive archive literacy model integrating users, archive centers, and social media tools to make the user literate.

Keywords: Archive literacy; Knowledge management; Archive management; Social media; Value co-creation

Introduction

Archives are unpublished and unique records bearing evidence of important cultural, historical, governmental activities of a country, community, or civilization. Archives help the researchers to gather first-hand facts, data, and evidence for education and historical research. Besides, as a historically significant document, archives bear the functional, social, emotional, and epistemic value of important past events. For these reasons, archival institutions throughout the world are preserving those valuable contents for hundreds of years. In Japan, the National Archives of Japan (NAJ) is the main custodian body of the collection and preservation of archival resources. In addition to NAJ, there are regional archive centers in almost all prefectures, municipal and city offices, including some academic institutions. In general, these centers are collecting, preserving, and ensuring security to archival resources available under their jurisdiction. Besides preservation, providing access to archival content also an equally important issue for archival centers.

Archive centers are supposed to provide user-friendly services so that users can easily understand the content and its values. But very often, users do not know what types of materials are available in their local archive center and how to use them. A few archive centers have a web-based archival service delivery system. Accordingly, archival centers must consider user-focused archive services for communicating more users and optimal utilization of archival content for generating new knowledge.

Social media tools provide an opportunity for individuals and organizations to connect. Usages of social media among archival services are growing[1] day by day. Hence, integration of social media and other RSS tools may be a good alternative for archive centers to communicate with users and delivering archive services for promoting archival knowledge. But very few research has been conducted on the application of social media tool for promoting archive literacy. This research aims to address the scope of social media in promoting archive literacy.

Review of literature

Archive Literacy using social media

Literacy is a set of individual skills that are needed to participate in society as well as for self-dependency actively. These skills may differ from individuals and also from one field to another. Accordingly, literacy has many branches, including media literacy, digital literacy, technology literacy, and many more. However, in the library and information management field, the term 'information literacy' is widely used for more than twenty-five years. However, The American Library Association (ALA) defines 'information

literacy' as a 'set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information'[2]. Later, the competencies have been amended in the year 2016.

Local and situational context has an effect on several literacy practices. Literacy practices are embedded in situational contexts, creative and intellectual expression, and cultural engagement, which have a mass form of availability yet. "Literacy scholars acknowledge intellectual interdependence between learners and teachers in a particular culture, as learners do not merely absorb messages in the cultural environment but actively co-construct them." [3] Several faces of literacy, whether it is archival, information, digital, or media literacy, those appropriate in the shift from individual to collaborative, which is more effective [4].

Performing the search on the Scopus database (see, Figure 1) using (TITLE-ABS-KEY ("archiv* literac*"), besides other e-resources, only 15 results found. The literature on archive literacy was not sufficient. In general, archive literacy refers to an individual's ability to find, identify, manage, evaluate, and use archival information for developing individual knowledge, research, and development. Archive literacy may be defined as the knowledge, skills, and abilities necessary to effectively and efficiently find, interpret, and use archives, manuscripts, and other types of unique, unpublished primary sources[5]. The Society of American Archivists, in their "SAA Statement of Core Values and Code of Ethics," state that, "access to records is essential in personal, academic, business, and government settings, and use of records should be both welcomed and actively promoted" [6].

Archive literacy is required for the basic understanding of archival institutions, principles, access, and use of archives based on evidence from historical content. To be competent in archive literacy, users have to follow some basic steps of understanding and using archives. Figure 2 describes such basic steps that a user must know to get maximum benefits from archives.

In the cycle, the first activity is to *know* about the content of archives. In other words, users should be aware of what types of contents they need, how and where they can get the contents. Besides, users should have a clear understanding of their needs. Users can assess their understanding with self-question about who, when, where, why, how, and what type of contents are available on their need. The next step is *Interpret,* where users need to understand the importance, historical context, and value of content. In the *Evaluate* phase, users are required to find out
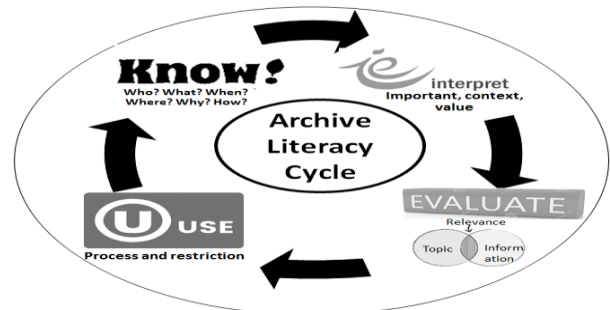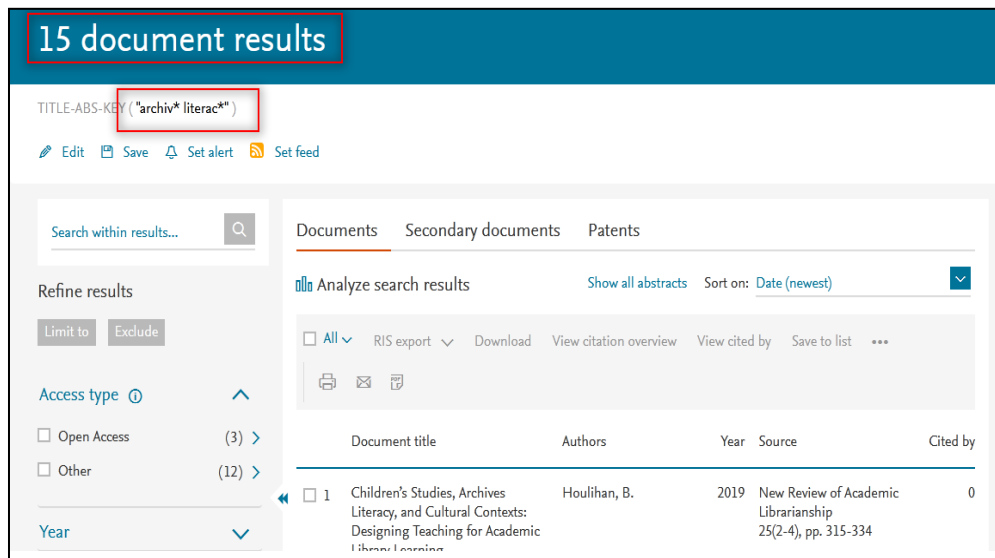

Fig. 2 — Archive literacy cycle

Fig. 1 — Search result with the number of documents

the relevance between the information need and available contents, i.e., the appropriateness of the content relevant to research. *Use* indicates the process of handling the content, including restriction to access. If a user has a basic knowledge of the mentioned four issues, he can be considered as an archive literate person.

Need of archive literacy

Archives play a vital role in historical research. As a primary source of information, archives codifies traditions, cultural practices, legends, ways of viewing self within the world, clan, and tribal affiliations, and so on[7]. But finding important documents relevant to historical research is difficult. It has been stated that archive users must have the ability to understand and use archival terminology to get full intellectual access to an archival collection[8]. Accordingly, archive literacy among users, information seekers as well as general users are important for understanding how community members were adapted to the changes, adopted the changes, or alienated themselves from the changes over one generation to another[9]. Human civilization is interdependent between one generation to another. The new generation depends on the old for their intellectual inheritances, and the old depends on the new for innovations and adaptations. Archival documents act as the bridge between the old generation and the new one. Archive literacy emphasizes on reinterpretation, questioning, and critiquing of literacy practices by new generation, and that new generations impact older ones in a recursive way[9]. Archive literacy is a lifelong, cross-generational, and sense-making learning process to be fully information-literate researcher must be able to find, access, interpret, and utilize all forms of information, including cultural heritage and archives. Researchers argues that, "Archival literacies allow students to see, smell, and touch actual documents, photos, letters, diaries, and writings that provide a sensory experience that cannot be compared to viewing a digital surrogate. These are all issues that are also wrapped up the notions of what and how we collect materials with the archival institution"[10].

Integration of social media in archive literacy

Information management in the 21st century has been changed radically to keep pace with the changing users' expectations and way of information-seeking behavior. Information centers are forces to adopt a participatory and collaborative approach to using different web technologies. Now users expect digital content in virtual space where they can easily access and interact for their research and engagement[11]. The 21st century heralded the age of social media and Web 2.0, characterized by user participation and collaboration in online spaces through technologies[12]. Accordingly, social media have been widely used in libraries and museums in order to disseminate a variety of information to the wider public[13,14]. However, the use of social media in the archival services is relatively new[15].

To meet up such users demand, archive centers reorganized their service pattern through integrating various web 2.0 tools like social tagging, bookmarking, commenting, wikis, RSS feeds, and reference services through instant messaging[12]. Social media tools can provide incredible opportunities for exposure and engagement by regularly updating content, active forum discussions, and interactions[16]. Nowadays, archival institutions throughout the world have been using social media tools for content delivery, promotion of their work, improving public relations, enriching social networking, etc. Archives centers consider social media as a 'community hubs' for strengthening relationships with the users' community as well as other organizations for better access of content, increasing visibility of collection, promoting the reputation of the center and advocating for the value of the archive's resources and services[16]. Literarure affirmed that the social media platform emerged in 2004, but the use of social media in archives started much later. The adoption of social media in archives can promote the public image and the communication strategy of the archival services[17]. The use of social media among archival services and archivists is growing, and it is easy for these services and their staff to establish a Social Media presence[1]. Previous study explored that the most widely used social media platforms used in archives centers are Facebook (83%) and Twitter (54%)[18]. Another study revealed that now 66% archives centers prefer to disseminate archival information and news regarding services through social media accounts and 44% centers promote information literacy of their users through social media[17].

Objectives

Archive centers preserve cultural heritage and valuable records, which are important sources of information and identity of past events. But it is observed that the contents of local archives centers cannot contribute to the research as expected. This is

because local archives centers have limited technological equipment for strengthening collaboration with users. Besides, local archive centers –

(i) have little scope for sharing service knowledge with other centers;

(ii) do not evaluate users' expectations and demand for improving service quality; and (iii) local archives centers have little interest in initiating new services relating to archive literacy and promotion.

This research aims to demonstrate how to increase archive literacy using social media tools. The specific objectives are to 1) explore how archival institutions deliver archival service to users; 2) determine the type of social media tools used for promoting archive literacy; and 3) analyze the perception of using social media in archival literacy services in Japan.

Methodology

To meet up the above objective, the study followed the qualitative research methodology. The primary data were collected through a structured open and close-ended questionnaire using Likert type scale (1 = Strongly disagree to 5 = Strongly agree). Sample data were collected from the Head/In-charge of 68 prefectural, municipal, and academic archive centers in Japan. For secondary data, different literature, including journal articles, project proposals, research reports, and conference proceedings papers, were reviewed. The collected data were analyzed by frequency count and percentage methods using Statistical Package for Social Sciences (SPSS) version 17.0 for Windows and MS-Excel. Besides, SmartPLS 3.2.8 is used to analyze the relationship among variables and clusters relating to the integration of social media in archive literacy. Findings were presented in graphs, figures, and tables.

Results of the study

Use of social media in archives center

The National Archives of Japan (NAJ) has a strong social media presence relating to archive literacy. The study found that NAJ has over 44 thousand twitter followers, 1297 Facebook followers, along with YouTube and RSS followers. By June 2019, NAJ posted 46,085 tweets, and on average, each tweet has been retweeted 220 times by followers. More followers indicate that whenever NAJ posts any archival content in their social media tools, the content reaches to the users' inbox or social media pages. As a result, users willingly or unwillingly can know about the content and develop their archival knowledge.

In addition to NAJ, some local archive centers also started using social media tools in their respective centers. But using social media in the local archive center is in the beginning stage. The study found that 56.7% of the prefecture and local archive centers do not have any social media tools, while 43.3% of centers maintain social media tools for easy interaction with users. Figure 3 illustrates the availability of social media used in local archives centers in Japan.

From the figure, it is observed that the most widely used social media tools available in the prefecture and local archive centers in Japan are Twitter, followed by Facebook. Other social media tools include organizational Blogs and Instagram. But very few archive centers use RSS and other social media tools to promote archive literacy. However, some archives centers also use more than one tool in their center.

However, though most of the prefecture and municipal archive centers use social media and other web-based tools, they provide only basic information about their archival center. It is difficult to get archive information from the social media tools used in local archive centers. Besides, very few of them evaluate and utilize users' feedback for redesigning their service.

Constraints of social media

Social media have many apparent advantages in proving archive services to individual door-step. At the same time, archive centers also face difficulty in initiating social media services in their center. In the survey, it is found the most (56.7%) of the local and prefecture archive centers of Japan do not have any social media tools. The study identified constraints of not implementing social media tools in the archives center. The findings were presented in Table 1 below.

Table 1 shows that the most important constraints of local archives center in Japan are lack of IT support staff (47.73% agree and 11.36% strongly agree) followed by unavailability of digital contents (43.18% and 18.18% respectively). Besides, resource security
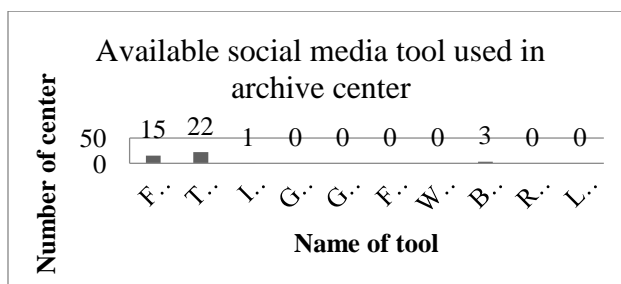

Fig. 3 — Available social media in the archive center

Table 1 — Constraints of using social media

Constraints of Social Media in Archives

Affecting issues	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Digital content	4.55	18.18	15.91	43.18	18.18
Lack of related technologies	4.55	15.91	22.73	40.91	15.91
Confidentiality	9.09	20.45	22.73	36.36	11.36
IT support stuff	2.27	4.55	34.09	47.73	11.36
Lack of interest	20.45	27.27	31.82	9.09	11.36
Official policy	13.64	40.91	25.00	0.00	20.45

and confidentiality is also a major concern for not integrating social media in archive services. Besides, many archive centers do not have official policies to integrate such a tool in their archive services.

Besides, selecting suitable tools also difficult for local archive centers. This is because different tools have different restrictions. For example, if a center initiates Flickr, it faces a post limit to 200 photos. In the case of Twitter, the center needs to limit the character to 140 in any single post. Other tools also have such limitations.

Revitalization of archive literacy

Implementation of archive literacy training through social media depends on three major issues: benefits of using social media, the motivation of the concerned organization and its staff, and organizational capability of adopting new tools and services. In this case, the role of the archive staff is very strong. They have to think: what is the importance of a particular archive, how the archive can make sense among users, which distribution channel can be most effective, etc. This research considers these activities as the motivation of staff towards using social media. Staff motivation also includes: awareness of changes, the adaption of web-based services, collaboration, and cooperation with users. Besides, archive staff must consider the expected benefits of using social media in the archive center. The social media benefits may include: strengthening collaboration with users, getting new ideas from users, improving service quality, and more user interaction in archive services. In addition, archive staff also have to think about organizational adaptability. Organizational adaptability includes: whether staff have a culture of adapting new services or not, whether management always ready to accept new ideas, whether the center is well supported in adopting new technologies, and what is the state of decision making for a new initiative in the center, etc. This research thinks that identifying core issues is

important for adopting social media and providing archival literacy using social media tools. Considering these facts, the research constructed following three hypotheses for testing:

H1: Perceived benefits of social media positively influence with the motivation of staff to adopt social media in archive literacy

H2: Perceived benefits of social media influence organizational effectiveness

H3: Motivation of staff have a positive association in organizational effectiveness.

After constructing hypothesis, the research set acceptance criteria. The two-tailed accepted P-Value is 0.05.

Fig. 4 represents the hypothetical relationship among the variables of revitalizing archive literacy using social media. In terms of reliability and validity among the variables, the Cronbach's Alpha of motivation of staff, organizational adaptability, and benefits of social media are 0.728, 0.810, and 0.725, respectively, which is acceptable. The 97.5% confidence intervals are: 0.651 (H1), 0.604 (H2), and 0.581 (H3).

In the figure, it is observed that social media benefits positively influence the motivation of staff in adopting social media. At the same time, staff motivation also influenced by organizational effectiveness. Hence, hypotheses 1 and 3 supported in P-Value 0.000 and 0.019 in the two-tailed test with T Statistics 2.365 and 4.768, respectively. But there is less relationship between social media benefits and organizational effectiveness. Hence, hypothesis 2 (P-Value 0.151) is not acceptable.

Proposed Archives literacy model

Digital humanities emerged as an interdisciplinary framework for integrating digital technologies and engaging archives in humanities research and teaching[19]. Digital humanities demonstrate the value of archives through preservation, promotion, and providing long-term access to digital content.

Similarly, users' expectations of archives have been changed. Now, users expect that archival content will be available in digital form so that they can virtually interact with the content. The archival institution must to response such users' expectations. They need to incorporate more digital content, finding tools in their customer service system. The integration of social media tools in archive management is an important part of archival communication and digital curation.

Accordingly, considering the hypothesis test result, the study proposed an interactive archive literacy model, which will connect users and archive centers through social media tools. Figure 5 illustrates the proposed archive literacy model.

In the proposed model, there are four clusters of social media-based archive literacy: archive staff,

archive center, collaboration, and users. Each cluster has its activities. Archive center generally collects, process, appraise, preserve, and share archival content. These functions are usually performed by archive staff. However, archive staff also need to perform some promotional activities: policy planning, initiating new services, solving existing problems, and improving the service quality. The function of users is to know, interpret, evaluate, and use archival contents. Users also collaborate with other users through sharing/commenting on content, communication, and interaction with other users. In this case, social media tools used in the archive center serve as a hub for the above four clusters. In general, concerned archive center staff upload content to social media tools. Some other members also involved with managing
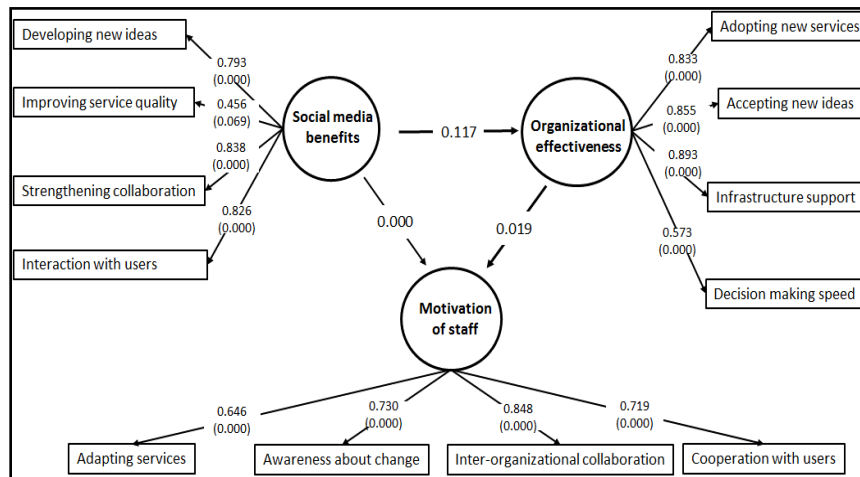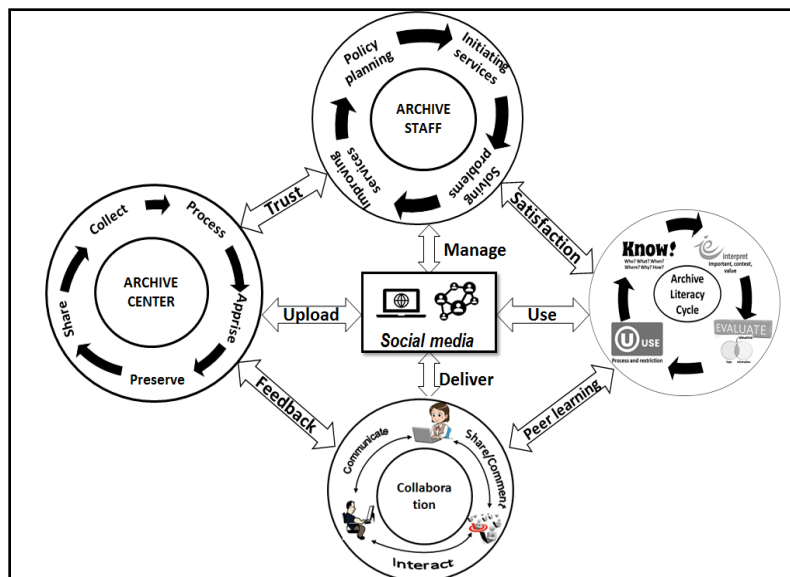

Fig. 4 — Entity-relationship among constructs

Fig. 5 — Proposed archive literacy model

such content and handling users' queries and other issues. Users generally access and use social media content and interact with peer-learners.

In the case or promoting archive literacy, with the help of social media, users not only can know about the archival contents but also can collaborate with other users. Besides, they can promote archive literacy among other users by sharing/commenting on desired content, interacting with other users, and communicate with the archive center as well as archive administrator regarding the content. At the same time, archives staff also able to communicate and interact with users. They can promote content by posting social media. Social media can deliver the content to the users who are linked to the concerned center's social media tools. In this way, archive literacy can be increased with the inategration of social media tools in archive management and distribution services.

Conclusion

Historians heavily rely on archives for their research and scholarship. They have competency in using archival resources. But knowing past artifacts, the anthropological background of a nation, their cultural heritage, the root of civilization, etc. are a basic right for every human being. However, getting such evidence and knowing the fact is not easy for all. Archive centers collect and manage that historical evidence. They also use different technologies, including social media in doing so. Social media tools have the enormous potentiality to have a positive impact on the promotion of archive literacy as well as strengthening the relationship with users' community, with other institutions, creating new users access points, etc. Archivists and curators, as well as archives and museum management authority, should embrace social media as a tool for promoting the archival knowledge in society. In this area, very insignificant studies have been conducted. So this study may be an addition to exploring in the discipline of archival management along with social media for value co-creation.

References

1   Garaba F, Availing the liberation struggle heritage to the public: some reflections on the use of Web 2.0 technologies in archives within the East and Southern Africa Regional Branch of the International Council on Archives (ESARBICA), *Information Development*, 28 (1) (2012) 22-31.

2   Information literacy competency standards for higher education. Available at: https://alair.ala.org/handle/11213/ 7668 (Accessed on 15 March 2019).

3   Carol D L and Peter S, *Vygotskian Perspectives on Literacy Research: Constructing Meaning through Collaborative Inquiry. Learning in Doing: Social, Cognitive, and Computational Perspectives*. (Cambridge University Press; Cambridge), 2000.

4   Renee H, Media Literacy Foundations. *The International Encyclopedia of Media Literacy*, (2019) 1-19.

5   Sammie M, Lawrence M and Sharon W, Archival literacy for history students: identifying faculty expectations of archival research skills, *The American Archivist*, 77 (2) (2015) 394-424.

6   Ashley N V, The right to be forgotten: an archival perspective, *The American Archivist*, 81(1) (2018) 100-111.

7   Ellen C, Toward a rhetoric of new media: Composing (me) dia, *Computers and Composition Online,* (2004).

8   Elizabeth Y and Deborah T, AI: archival intelligence and user expertise, *The American Archivist*, 66(1) (2003) 51-78.

9   Suzanne K R, Heritage literacy: adoption, adaptation, and alienation of multimodal literacy tools, *College Composition and Communication*, (2009) 573–586.

10   Rebecca H, Information literacy and instruction: embracing informational and archival literacies: challenges and successes, *Reference & User Services Quarterly*, 58 (3) (2019) 153-157.

11   Gordon D J and Cory L N, Web 2.0 and archives, *The Interactive Archivist: Case Studies in Utilizing Web 2.0 to Improve the Archival Experience*, (2009).

12   Marissa K M, Outreach 2.0: promoting archives and special collections through social media. *Public Services Quarterly*, 10 (2) (2014) 157-168.

13   Curtis R R, Social media, libraries, and Web 2.0: how American libraries are using new tools for public relations and to attract new users, *South Carolina State Documents Depository,* (2009). Available at: https://dc.statelibrary.sc.gov/ bitstream/handle/10827/6738/SCSL_Social_Media_Librari es_2009-5.pdf?sequence=1 (Accessed on 26 April 2019).

14   Rebecca W, The use of social media in museums, *Report for Peterborough Museum and Archives, Project ID*, *4157*, (2011).

15   Milasenko, The use of social media in archives. *Athens: Department of Library and Information Sciences (Technological Educational Institute of Athens),* 2013

16   Melissa T, The digital wunderkammer: Flickr as a platform for amateur cultural and heritage content, *Library Trends*, 59 (4) (2011) 686-706.

17   Lina B and Giannakopoulos G, The use of social media in archives, *Procedia-Social and Behavioral Sciences*, 147 (2014) 510-517.

18   Rebecca H, Survey results: social media use in archives and special collections (2012). Available at: http://rebeccahopman.com/ index/wp-content/uploads/2014/09/2012surveyresults.pdf. (Accessed on 12 December 2018).

19   Arjun S, Archives and special collections in the digital humanities, *Digital Curation in the Digital Humanities*, (2015) 27-47.