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Author(s)	Rahman, Md. Mukhlesur
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Resource integration for value co-creation in archival service ecosystem

Abstract

Archives are unpublished original documents relating to past important historical, cultural, and administrative evidence that have particular message to future generation. As a primary source of documents archives bear functional, social, emotional and epistemic value for education and research. Besides, archives also preserve cultural heritage and historical evidence of nations, regions, organizations, communities, and individuals which are regarded as original source of information for historical research. For ensuring safety and security of such valuable documents, almost all the countries of the world established national as well as regional archives centers. But it is observed that archival resources cannot contribute to the education and research as expected. This is because 1) archive centers have little scope of collaboration with other centers for sharing service knowledge; 2) most of the centers do not evaluate users' feedback and demand on archives for initiating new service or improving existing services; and 3) archives centers are usually do not have advisory committee to suggest/coordinate archive related services. As a result, though archival content bears significant value of its own, they cannot create much users' impact in specific context of knowledge creation. In general, archival science and archive related studies discuss about the preservation and management issues of archival content but could not address how to create more users' impact during service encounter. Archive centers need to adopt services based on users' demand for enhancing archival value.

In Service-Dominant logic (S-D Logic) value can be co-created when service providers and service recipients actively involve and apply their skill and knowledge in the co-creation activity for the benefit of each other. VCC allow service receiver to co-construct the service experience to suit service context. In other words, VCC aims to foster the discovery of users' interest and value, which can be turn into innovation and competitive advantage. Value co-creation interact with two or more actors where service providers and receiver integrate resources to co-create value in service process. Service system is a dynamic role played by actors and other resources during value co-creation process. In service ecosystem, actors and their respective resources are linked together through value propositions in a network of relationships. Service ecosystem approach helps to elaborate the relationship between the development of value propositions and the co-creation of values. Actors within a service ecosystem are attracted to share their knowledge and skills, responding to value propositions that offer potential benefits.

For effective archive management system, and to meet ever changing demands on archives as well as to deal with the information seeking and using behavior of archive users, archive centers need to redesign service frequently. In this case, archives center alone cannot handle all issues related to archive management and users' satisfaction. Archive centers need to create mutual relationship with other center for knowledge sharing and exchanging competency. Besides, the value co-creation concept help archive center to build sustainable services. Archives center need to involve stakeholders for managing archival content and involve users for design services appropriate for users. Hence, archive service needs to redesign services from Value Co-creation (VCC) and service ecosystem point of view.

Considering the above issues, the main objective of the research is to develop an integrated archive management framework for increasing archival value. The specific objectives include to 1) review different management strategies used in archive services; 2) identify the factors of value co-creation in existing archive management framework; and 3) develop an integrated archive management framework incorporating value co-creation strategy.

To attain the above objectives, this study identifies the key mechanism of co-creating values in archives through answering one Major Research Question (MRQ): How to develop an integrated archive management framework for promoting archival value? and three Subsidiary Research Questions (SRQs) as- SRQ1: What are the strategy of existing archive management and services?; SRQ2: What are the factors involve in value co-creation in archives? and SRQ3: How to integrate resources from different actors in archival value co-creation?

To find out the answer to the above questions first of all, the research reviewed literature on major issues of archive management practice throughout the world. During literature review special focus were given to archive digitization, digital preservation, web-based services in archives, user involvement in archive services, service ecosystem, value co-creation in archives, etc. Secondly, the research conducted case study on two national level archive management practice in Bangladesh and Japan for determining value co-creation and resource integration activities in archive services. Thirdly, the research collected primary data from local archive centers of Japan using structural questionnaire for validating conceptual framework on value co-creation activities in archive services. In most cases, questions were adapted from previous empirical studies on stakeholder involvement in archives, organizational effectiveness, users' involvement in archives, value co-creation in archives etc. and modified to reflect the local situation on the basis of the findings and discussion of the studies. In order to get center specific data, a total of 92 questionnaires had been distributed to the person in-charge/planning manager/manager/director of the center, and 68 (75.56%) responses were collected for analysis. Among the respondents 44.12% are prefecture archive centers, 32.35% are municipal archive centers and 11.76% are city and academic archive centers each. Resource integration and value co-creation activities of local archive centers in Japan have been measured with 21 structural questions and 02 open-end question divided into four sub-categories. A total of 128 items were analyzed using 9 Likert type questions (5-point Likert), 11 check box question and two open-end questions. The collected data were analyzed by frequency count and percentage methods. Besides, descriptive analysis methods were followed using SPSS (version 17.0). In addition, SmartPLS 3.2.8 were used for analyzing Structural Equation Modeling (SEM).

Result shows that archive management practice witnesses many changes during several decades. Initially, archival resources were confined to specific place for preservation. People could hardly access and use archival contents for research and development purposes. In addition, improper handling and physical degradation was main threat for archival resources. To come up such physical threat and to ensure usability, durability and intellectual integrity, archive enters throughout the world moved to digitization process. Later on, with the development of Web 2.0, archive management system throughout the world incorporated interactive communication tool archives 2.0 in archives services. In addition, adoption of different social media tools helps archive centers to deliver archive service to individual doorstep. Social media tools also enable archives centers and users to co-create values through discussion and feedback, following, commenting, sharing and so on. But most of the local archives centers in Japan do not have web-based services. Besides, majority (53%) of local archive centers in Japan do not have advisory committee for administration and initiating new services based on users' demand; 74% centers do not maintain any collaboration with other centers; along with limited use of users' feedback in designing new services or developing quality of existing services.

The study explored that archive services is associated with three actors: archive center staff, stakeholders, and archive users. In general, stakeholders and archive users include different category of people like researchers, academic experts, historians, IT experts, politicians, government officials, local representatives, etc. Each of the actors have different level of skills and knowledge (operant resources). Integration of resources from those expert professionals could jointly increase archival value. But for exchanging ideas, there needs a co-creation platform. Though the platform may be physical or web-based, web-based space is more appropriate to communicate and deliver services to distance users. In this case several components reflect the success of archival value co-creation. Archival value co-creation components include stakeholders' involvement, motivation of staff of archive centers, co-creation platform, participation of users in knowledge sharing, and organizational creativity and effectiveness. Each of components of archival value co-creation have different essence which act upon another component for value co-creation. Considering the two-tire relationship, the research formulated six hypotheses relating the archival value co-creation. The hypotheses were tested with the primary data collected from local archive centers in Japan and found that out of six hypotheses, five were supported.

This research identified that there are several separated but vital entities linked together for uplifting archival value. In other words, archive service ecosystem requires direct or indirect relationship among different actors. From the literature review and finding from data analysis, the study identified eight essences that works behind archive service ecosystem as - Essence 1: Stakeholders improve quality of archive services through considering the future direction of archive center; Essence 2: Staffs have attention to potential changes regarding users' expectation as well as have positive attitudes toward the changes; Essence 3: Social media platform promotes easy access to archival content for users; Essence 4: Social media platform improves recognition of archive center; Essence 5: Social media reduces communication gap between archive center and users; Essence 6: Users provide feedbacks on services which help archive administrator to develop new service ideas; Essence 7: Staffs' positive attitude in adopting new services is the basis of functioning archive management ecosystem; and Essence 8: Organization cultivates creative climate by appreciating new ideas and services as well as providing technological supports. Considering the essence, the study proposed an archival value proposition framework including implementation guidelines. While testing the model it is found that prefecture archive centers are best suited the model.

The existing literature on archival studies emphasized on different issues of archive preservation and management. But as far the researcher aware, no study has been conducted on archive management from service ecosystem point of view. Therefore, the present research can serve as a pioneer of archive management in service ecosystem and value co-creation point of view. This research address different issues of interaction between users and archives center to know each other service system and develop mutual understanding for designing better services. Stakeholders involvement in archive management addressed in this research provides new opportunity for archive centers in sharing risk and getting direction from other concerned except archive management staff. The research also addressed technological issues for connecting archives centers and users for value co-creation. By implementation of the proposed value co-creation model provided in this research, both archive centers and users can create better understanding and emotional connection for archival education, entertainment, and participation. In addition, the proposed value co-creation framework can be helpful tool for archive administrator who are struggling to build up archival values to re-design their archive services.

By implementing the proposed framework users can have easy and wider access to archival content which will increase archival value-in-use. Archive center will be able to generate new service idea from users, and implementation guideline from stakeholders. As a result, archive center can improve their management process as well as build trust to both users and stakeholders. Effective preservation and management are the main concern of stakeholder. Through value co-creation dialogue with archive center, stakeholders can be benefitted by effective management of archival content.