

Knowledge Management for Living Library Model: A Case Study of Suan Sunandha Rajabhat University

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Abstract—Library is considered as the educational sources both in and outside of the system. In order to foster and support the reading behavior, searching for new knowledge, researching including support the education which focus on the learner as a center. Together with the advanced information and telecommunication technology, it leads to development in all kinds of education particularly in the university's library which needs to be adjusted in its own vision both in management and services according to the modern digital technology. This research is to study about the Living Library through thinking systems and applied to develop the Living Library in order to suit with the management. The result showed that the virtual library was combined in 4 factors as the following 1) services 2) activities 3) physical and 4) human resources. By conducting questionnaires, it found out that people who used the virtual library preferred it to improve all 4 factors. From the feedback of participants found that 85.58% supported the center's physical change. 84.97% supported the human resources improvement. 82.29% supported the service improvement and 82.02% supported increasing activities.

Index Terms—living library, knowledge management, library operation

I. INTRODUCTION

Libraries are the learning sources that aim to encourage people to love learning and reading, to support studying and research and stand side by side with education reformation. Library in university has to be transformed and developed to be up-to-dated in order to serve students in the digital world. Some library used model of modern libraries to operation service for support user's learning. Librarians and all staff should support users' learning and provide information for them. Many libraries have been using the concept of living library to use widely around the world. Living library focuses on how to make users stay longer in the library and how to increase the number of users. Therefore, library uses new technique and equipments to encourage people to come to use the library more often. In the old time, library had some obstacles which made the operation stuck. The most common problem was the unclear operation plan in the library. Research team has thought about the living

library concept in digital age and would like to use this idea with our library: Academic Resource Center at Suan Sunandha Rajabhat University.

Living library has many explanations and defined by many academics and researchers. The Prime Minister Thaksin Shinawatra said in a seminar. "New Dimensions of Reform Higher Education Thailand: Heart of the Nation" Library has a problem of budget for purchasing, but no users. This concept must be changed. Library must have technologies and open all the time [1] The library must have valuable services, many kind of resource, physical facilities safe, comfortable and inviting for the users [2]. However, all terms share similar idea which says that living library is the library that has both modern books and the bank of online information together. Library must provide the best IT management to support searching process. Living library should also share and learn for the community. Living library will attract more people to come to use the library.

Many researcher try to survey factors of living library. Namtip Wipawin mentioned that Living library consist of 2 main parts: people (users and providers) and object (facilities, environment and system) [3]. Furthermore Bureau of Academic Affairs and Educational Standards suggest that the Living Library consist of five factors. Firstly is Knowledge: library must consist of information data, information resources and all knowledge in the library in forms of papers, video, audio visual and electronic files. All these knowledge should be accessed easily among users. Second factor is environment: there should be all activities corners in the library (service corner, self-study corner) fresh air, good facilities and create learning environments to support users. Third factor is technology: library should have technology for searching information, fast and quality. Create library service on internet. Such as information retrieval system, registration system online, automatic printing data, electronic payment. Fourth factor is people: Librarian is the main coordinator among students and teacher in terms of providing service with great service mind. Final factor is system: the access system and operation should be renewed to be updated and match with users' needs [4]. Panya Sooksan studied the factor of living library and the results showed that living library must provide information to users on internet network. Library services

have quality and variety. Information material used to up to date. Users' need services and network television for support reading and self-study [5]. The living library factor can support director of university for create the policy of living library and activities of teaching [6].

In additional, Patchara Thippayamahing studied about living library of Ratchanakharin Rajabhat University by using interviews, questionnaires and focus groups. The results found that consumers need to improve the quality of services and environment in library such as coffee corner, entertainment corner, new books corner, and computer services [7]. Some researcher tried to evaluation of the library project including in four areas. The results showed that users have satisfaction of services and learning's activities [8]. Moreover, Piyanut Suchit tried to evaluation of Users' satisfaction in library. The study found that all sample groups had high level of satisfaction in three aspects including service providing process, staff and facilities [9].

In this research, our library also known as academic resource center will be focused on thinking system idea of living library in terms of services, activities, physical and library's staff to find the development model for this center in order to answer users' need and create satisfaction among users.

The paper is organized as follows. Section II discusses objective and scope area of this paper. The modified framework of this paper is described in Section III. The experimental design is explained in Section IV. The experimental setting is shown in Section V. Results from the experiments are presented in Section VI. Finally, the conclusion and future work are given in Section VII.

II. OBJECTIVE AND SCOPE AREA OF RESEARCH PAPER

The objective and scope area divides in two sections. Section A describes in the objective of this research paper, Section B discusses in scope area and Section C suggest the benefit of this research.

A. Objective

- To study the model of living library.
- To develop and improve operational model of the library to be suitable for library user in Suan Sunandha Rajabhat University.

B. Scope Area

- Study the library users who are students, teacher and staff of Suan Sunandha Rajabhat University.
- Study the library users' need toward library operation in four areas: Services, Activities, Physical and Library's staff.

Services concept is library service include iPad service, Self-check machine: Library Self-service check-out and check-in stations, book searching system, multimedia room, extending service hour till midnight during exam period, wide variety of content, book cart service, unlimited book borrowing, book bags service, smart classroom service and digital library system (reading and watching movies online).

Activities concept is the activities in library include Library Orientation, AEC exhibition, moral and ethics activity, service about knowledge for community near library, academic exhibition, work skill exhibition, career seminar, mini concert and various contests.

Physical concept focuses on improving the physical facilities and convenient. For example, Green Library project, Sign and placard (clear, standards), Place is convenient and modern, cleanliness, create learning environments, specific area, reading corners with the good light, reading seat be sufficient, good air system and clean toilets.

Human resources concept on service mind, serve service in quickly, expert in their job, create a great service, good communication skill, good information technology skill, be a good listener, attention about users' need, English skill, personality and responsible.

- The research was conducted from July to September, 2014.

C. Benefit of This Research

- There will be the practical model of living library for Suan Sunandha Rajabhat University.
- There will be the operation plan for the library in terms of services, activities, physical and library's staff.
- The results can be used can part of the policy planner in the future semester.

III. THE LIVING LIBRARY FRAMEWORK

In this section, "Fig. 1," illustrates the framework of this study. In this conceptual framework show the relation idea about living library, the operation of academic, design the operation for the university and the final operation model.

The detail of the experimental design is discussed in section IV.

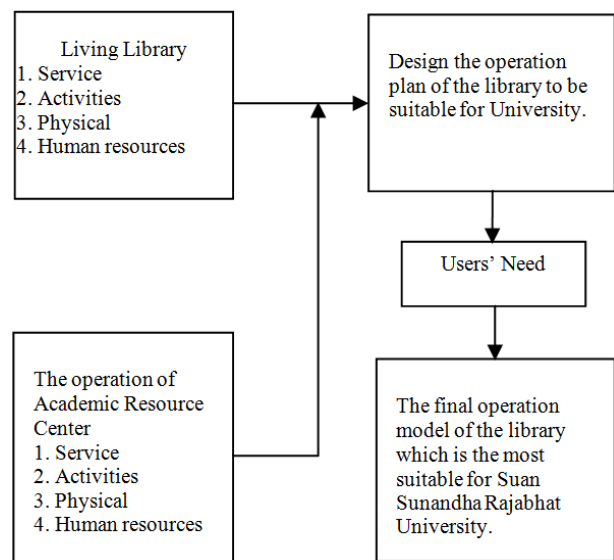


Figure 1. The framework of living library

IV. THE EXPERIMENTAL DESIGN

This research use both qualitative and quantitative research. The research was conducted by use concept of knowledge management and the experimental design as follow:

A. Concept of Knowledge Management

Knowledge management in organizations means accumulation the knowledge from personal or document. Organize it and make it can access easy. Encourage a personal to use the knowledge for develop ability and good performance. Knowledge Management Process has seven steps, First, Indications of knowledge, such as consider that the vision, mission and goals. What's a knowledge we need to know. What's kind of knowledge. Where's knowledge. Second, Creation and acquisition of knowledge, such as the creation of new knowledge, finding from the outside, keeping the old knowledge, get rid of the knowledge that is no longer valid. Third, Organize the knowledge, structured the knowledge to prepare for the retention of knowledge in the future. Fourth, Processing and refinement of knowledge, such as improved document format as standard, using the same language, content up-to-date. Fifth, Access to knowledge, easy to access the knowledge they need by information technology. Sixth, Knowledge Sharing, By documented, knowledge database, Cross-functional teams, quality and innovation events, communities of learning, the mentor, the switching task, etc. Seventh, Learning, We should make learning a part of the job. Such as, create the knowledge, use the knowledge, new experiences from using the knowledge, and turnover to continue. The process as "Fig. 2"

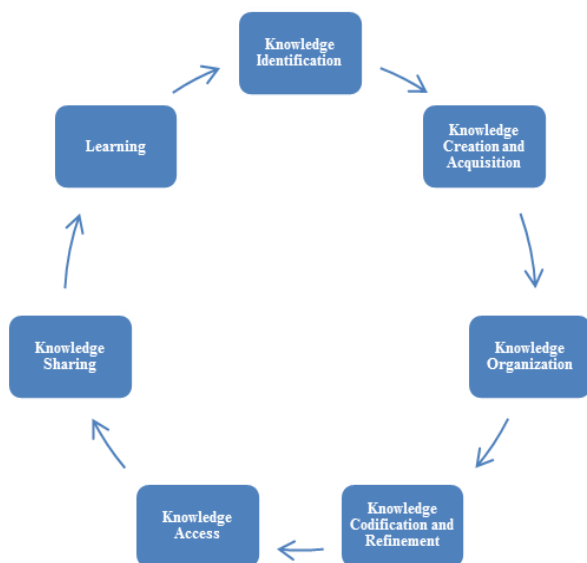


Figure 2. The knowledge management process

B. The Experimental Design

This section is done parallel with thinking system or knowledge management process. The step of experimental design is showed in "Fig. 3"

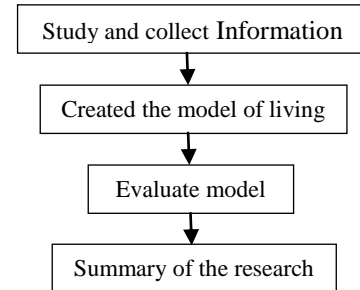


Figure 3. The process of experimental design.

- Study and collect information: Living library was studied from many resources such as books and online. We ran the knowledge share and paid a visit to the top 4 best university libraries in Thailand (Srinakharinwirot University, Burapa University, Silpakorn University and Samutsakorn Discovery Learning Library). We also conducted the meeting in focus group to find out the right model of living library for our university. The process of a study and data collection in "Fig. 4"

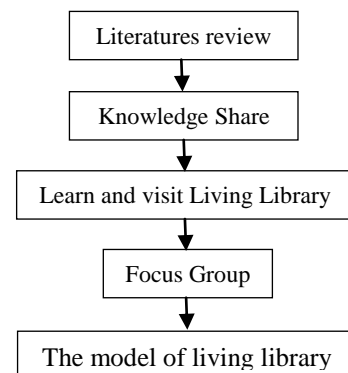


Figure 4. The process of study and data collection

- Created the model of living library: The model of living library was created based on the digital-world basis. We also learned from the related document, shared knowledge and met in the focus group. The four factors of living library are explained below.

Services: S-Library concept means library will provide all facilities and services for make users feel convenience. Our library provide iPad service, Self-check machine: Library Self-service check-out and check-in stations, book searching system, multimedia room, extending service hour till midnight during exam period, wide variety of content, book cart service, unlimited book borrowing, book bags service, smart classroom service and digital library system (reading, watching movies online).

Activities: A-Library concept mean the various activities about knowledge, Information retrieval skill and information literacy. Some of the activities are Library Orientation, AEC exhibition, moral and ethics activity, service about knowledge for community near library, academic exhibition, work skill exhibition, career seminar, mini concert and various contests.

Physical: P-Library concept focuses on improving the physical appearance of the library to be more attractive. There were several activities that the library did to make it better. For example, Green Library project, Sign and placard (clear, standards), Place is convenient and modern, cleanliness, create learning environments, specific area, reading corners with the good light, reading seat be sufficient, good air system and clean toilets.

Human resources: H-Library concept is how to encourage library's staff to serve and help students better than before. Library's staff must have service mind, serve service in quickly, expert in their job, create a great service, good communication skill, good information technology skill, be a good listener, attention about users' need, English skill, personality and responsible.

The model of living library was created from four factors follow in equation, as in (1):

$$L\text{-Library} = S\text{-Library} + A\text{-Library} + P\text{-Library} + H\text{-Library} \quad (1)$$

- Evaluate model: The model of living library was then tested and verifies the validity of the model. How to test and verify the accuracy of the model by create research tool. We used the questionnaires which had the questions involving the previous information about living library.
- Summary of the research: This process was taken to make the final living library model.

V. EXPERIMENTAL SETTING

The experimental setting is divided into four sections. Section A describes the population and sample group, section B discusses tool of experiment, section C show method of Data collecting and section D describes analysis and evaluation metrics.

A. Population and Sample Group

Population in this research was 30,504 library users in Academic Resource Center at Suan Sunandha Rajabhat University. The sample group was taken by Yamane formula [10]. The reliability value was set up to be 95% e = acceptable error here was 0.05 by equation, as in (2). Finally, 402 participants were chosen from the population, as in

$$n = \frac{N}{1 + Ne^2} \quad (2)$$

B. Tool of Experiment

The model of living library, we used focus group from member of knowledge sharing community. There were 29 members in the focus group.

The model of living library for Suan Sunandha Rajabhat University, we used the questionnaires. There were 3 parts in the questionnaires that we gave out to the sample group. Questionnaires' questions were general part, the expectation of users toward library, and comments.

C. Data Collecting

First set of data was collected from documents and literatures. Later, we ran the knowledge share to discuss

about living library with staff from different libraries, including visiting them.

Another set of data for the research were from questionnaires. The data were collected from a sample of 402 people who are members of the library and the data processors for the operation of a resource center.

D. Analysis and Evaluation Metrics

- The study of living library operation was in the descriptive essay.
- The living library model development was analyzed by calculating the frequency, percentage, average and standard deviation.
- Testing the hypothesis by statistic ANOVA and Multiple Comparison.

VI. EXPERIMENTAL SETTING

The results showed that most of our users' need to improvement about the physical of the library (85.58%), especially the cleanliness of the library. No unpleasant smell. The cleaner will continuous checking area. The second is a facility for users and up-to-date service. The library will provide equipment and innovation to support users. In terms of Library's staff, users' need to improvement it (84.97%), especially a service mind, it does not discriminate and communication skill. The users' need to have the excellent services from the human resources or library's staff. Focus on equally of service, use innovation for service, expert in their job, efficiently, fast and correct, make an impression to users. In terms of services, users' need to improvement it (82.89%), users' need Self-check machine the most, secondary is extending service hour till midnight during exam period, provide a service with technology, and expanding opportunities to use the library. In terms of activities, users' need to improvement it (82.02%). They requires Library Orientation the most, secondary is activities of work skill, academic exhibition, career seminar. Especially, activities can be made practical and make money. The result of Users' Need as in "Fig. 5"

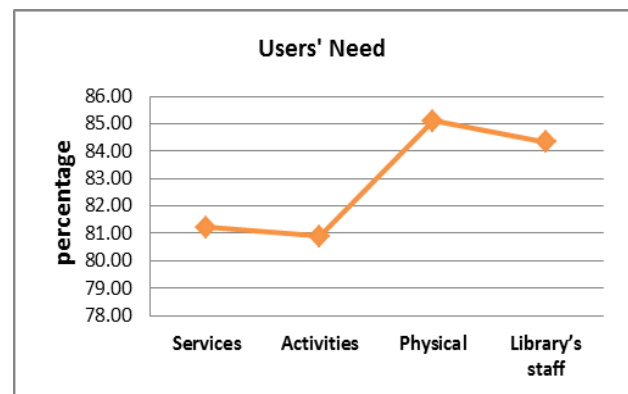


Figure 5. The result of users' need

One Way ANOVA was applied to test whether there is a difference among the mean value from four different factors. As shown in Table I.

TABLE I. ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.888	3	.963	2.245	.082
Within Groups	228.084	532	.429		
Total	230.972	535			

From ANOVA table was found that $F=2.245$ Sig = .082 ($\alpha=0.05$) which means that all four factors were very important for the support of living library promotion.

TABLE II. MULTIPLE COMPARISON

(I) Factor	(J) Factor	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
S-Library	A-Library	.0434	.07999	.588	-.1138	.2005
	F-Library	-.1361	.07999	.089	-.2933	.0210
	LS-Library	-.1040	.07999	.194	-.2612	.0531

* The mean difference is significant at the .05 level.

VII. CONCLUSION AND FUTURE WORK

From studying the model of living library, we found that the most important factors to make it happen involve services, activity, physical and library's staff. The detail of factor is changes according to environment library and users' need. The 4 factor is important for operation living library and other library can adapt to your library. Future research in the area consists of extending green library and digital library.

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