Preserving Library Binding Knowledge in National Library of Indonesia

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ABSTRACT

Knowledge loss because of employee retirement is a disadvantage for the institution. The reduction and displacement of staff in the National Library Binding Technical Subdivision has the potential to lose the knowledge of the institution because that knowledge is still a tacit knowledge. This study investigated efforts that will and have been made to maintain knowledge that belongs to the institution and can be used for the benefit of the institution. This research is a preliminary study with interview methods and analysis it with related document. The results of this study indicate loss of knowledge due to knowledge is only owned by senior employees and the process of transferring knowledge between employees is not optimal. The preservation of knowledge potentially loss is conduct by capturing, writing and disseminating the knowledge. The findings of the study show influential leadership plays roles in giving respect and trust to create a positive work culture.

Keywords: Knowledge loss; Knowledge management; Library binding knowledge; National Library of Indonesia; Retirement.

INTRODUCTION

In the business world, it is now starting to develop from providing as much information as possible to choosing and sorting information that is important and useful for the sustainability of the organization. Companies or organizations have made knowledge of both members knowledge and organizational an asset. The benefits of knowledge management are reducing costs because of reducing errors, creating innovations to increase competitiveness with competitor products, formulating the best processes in production to improve quality and efficiency.

Knowledge management contributes to preserving organizational knowledge, a strategy in transforming individual knowledge into community knowledge to become organizational knowledge that shapes attitudes and culture within the organization. The involvement of individuals, community of practice and organizations is an important component to the success of Knowledge Management.

The scarcity of human resources and skills in rebinding rare and ancient library materials is a matter that needs to be studied and formulated solutions to this for the sustainability of the organization. Human resources in the binding technical subdivision amounted to eight people with the division of tasks is binding five people, supervising the quality of one person and graphic design of one person. The closest threat to the organization is the reduction or loss of bookbinder staff in the next four years because of retirement age. In addition to loss of energy, the other thing is the loss of personal knowledge entering retirement age. Organizations have very little control when faced with the potential for loss of knowledge due to aging and the retirement of workers resulting in enormous losses to the organization (Egeland, 2017). Martins and Meyer (2012) agree that many organizations are faced with the challenge of losing organizational knowledge and competitive advantage because of employee layoffs, retirements, staff turnover, organizational mergers and acquisitions, and competitive recruitments. There needs to be an organizational strategy to overcome this so bookbinding knowledge that is owned by an expert person can be inherited to other staff or become organizational knowledge. The first step before it can be shared is to preserve the knowledge of each employee, especially those who have long working hours in the unit.

Another thing that is an obstacle in the preservation of knowledge in the unit is the movement of employees in the last 2 years, thus reducing employees who can continue the bookbinding experience in the unit. Another problem is the increase in work volume every year but the number of employees tends to decrease. Even though there are additional employees, the work ability or knowledge cannot be compared with senior employees or those who are entering retirement age.

OBJECTIVE AND RESEARCH QUESTION

Objective of this study is to investigate efforts that will and have been made to maintain knowledge that belongs to the institution. The study is guided by the following research questions:
1. What knowledge has the potentially to be loss in the binding knowledge due to the retirement process in the binding technical subdivision?
2. To what extent the processing of knowledge transfer between members in the binding technical subdivision?

LITERATURE REVIEW

A. Knowledge Management

Before referring to the understanding of knowledge management it's good to review the differences in knowledge and information in advance. Knowledge is different from data and information. Information is data that has been processed and has meaning for the user. While knowledge is the individual's meaning of information received. Knowledge is more personal and different for each individual. Knowledge is divided into two, structured, unstructured, some are easy to convey and some are difficult to convey.

Knowledge that is easily shared is explicit knowledge. Whereas knowledge that is not easily shared, it is difficult to articulate tacit knowledge. This type of tacit knowledge is stored in one's mind and can be seen from his actions but is difficult to record (Jones and Leonard, 2009). Some of the nature of knowledge (Dalkir, 2011) are:

1. Using knowledge does not mean spending it.
2. Transfer of knowledge does not mean eliminating it.
3. Knowledge is abundant but the ability to use it is limited.
4. Most organizations realize the value of knowledge at the last moment.

Each employee has their own knowledge of the work they do because of experience or intuition. Employees who stop, leave, move jobs will bring the knowledge they have to the detriment of the organization. Knowledge that is shared between employees who are then developed and experienced modification so as to produce innovation is an organization's advantage. Now many business institutions see knowledge as part of company assets that can increase the value of the product or the value of the company itself in the eyes of the user. Turning individual knowledge into institutional knowledge and maintaining it is a necessity to compete and reduce production costs due to loss of knowledge.

According to Jones and Leonard (2009) knowledge management is the process of gaining knowledge from organizations and other sources and turning it into explicit information so that employees can use it and turn it into their knowledge which results in the creation and improvement of organizational knowledge. Another definition of knowledge management is a series of activities that are used by organizations to identify, create, explain and distribute knowledge to be reused, known and studied in organizations (Almah, 2013). According to Nonaka and Takeuchi knowledge management can also be interpreted as a process of systematic application approaches to capture, organize, manage and disseminate organizational knowledge to speed up work, reuse best practices and reduce the cost of re-employment of each project (Dalkir, 2011). In conclusion, knowledge management is the creation and improvement of knowledge to produce innovation with the aim of increasing work effectiveness, reducing costs and providing the best results for the organization.

Knowledge management is formed from tacit and explicit knowledge. Both of these knowledge are very different and appropriate strategies are needed to turn tacit into explicit so that it is beneficial to the organization. Both types of knowledge, according to Nonaka and Takeuchi in Dalkir (2011) can be converted through four types of conversion processes, namely: Socialization, Externalization, Combination and Internalization. The four types of conversion are called SECI Process (S: Socialization, E: Externalization, C: Combination, I: Internalization).

- Socialization is the process of sharing knowledge with face-to-face, social interactions and is natural. This form is the easiest step because it remains in the form of tacit knowledge, and remains in the mind of the source of knowledge.

- Externalization is the meaning of tacit knowledge into explicit knowledge through a process of dialogue and reflection. In this stage each individual can write, record, describe or make the tacit knowledge become real. The intermediary role is

sometimes needed because of the difficulty of changing the type of knowledge into other types of knowledge, this intermediary is in charge of extracting, modeling and creating knowledge in other forms. If the first process is individual to individual then this process is individual to group, such as the results of meetings or meetings, agreement on procedures used and so on.

- Combination is the process of converting explicit knowledge into new explicit knowledge through systems and applications. Changing knowledge at this stage is group knowledge into organizational knowledge. The results are in the form of organizational documents such as manuals, technical manuals, Standard Operational Procedures (SOP).

- Internalization is the process of learning and taking explicit knowledge by members to become tacit knowledge.

B. Success Factors in Knowledge Management

Changing tacit knowledge to organizational knowledge is the most difficult process in the concept of knowledge management. According to Jones and Leonard (2009) organizational knowledge is a collection of knowledge contained in organizations, originating from current and past employees. The organization has knowledge if the organization can take and write it in various formats and ways to preserve that knowledge, even when the employee is no longer with the organization.

Many organizations implementing knowledge management are an indication this concept is successful in providing benefits to the organization. If an application of the concept of knowledge management it turns out fails, so it needs to be considered and reviewed again. The success of knowledge management in organizations is the character of the organization and the character of the initiative. Compatibility between the two is needed because just one of them is suitably caused to fail at the stage of implementation. Organizational characters include innovative and collaborative culture, while the characteristics of the initiative: support from top management, formal staff from Knowledge Management, incentives based on quality, communication to members about knowledge management.

a. Organizational character

Culture in organizations affects the application of knowledge management. These two factors in character can provide success and hinder the conversion process from tacit knowledge into organization knowledge.

- Culture of innovation
According to Fidler and Johnson in Jones and Leonard (2009) factors that can mediate the success of the application of knowledge management are organizational cultural norms of innovation. The culture of innovation supports new innovations and is open to new things to support the organization. Innovation culture supports the application of knowledge management in terms of knowledge sharing. If there is awareness of each

member of the organization by sharing knowledge to help fellow members, the conversion from tacit knowledge to organizational knowledge will be easy and smooth.

- Collaborative Culture

It is important for an organization to communicate with its members regarding the needs of collaborative culture in the organization. Inadequate and ineffective communication will make it possible for members not to be involved or even involved but not wholeheartedly. Some of the problems that make it difficult to apply knowledge sharing are that people don't like to share their best ideas, there are some people who think they are more expert than others so they don't cooperate . The first condition occurs if they have a perception "knowledge is power", employees can only get a promotion if they have knowledge. So the role of the organization is to change the mindset. In the second condition occurs when members feel other members have nothing to offer. The solution offered is to build team work so that the awareness of each individual has weaknesses and by working together in a team it can solve any problem as easily and quickly as possible. The existence of a collaborative culture facilitates the process of sharing knowledge on the concept of knowledge management.

b. Initiative character

In addition to organizational culture, the character of initiative plays an important role in the successful conversion of tacit knowledge into organizational knowledge.

- Support from top management

Every change must be refused, so the support of the highest management plays a role in the change. With the support of the management, the members feel confident that they are involved and fully support the knowledge sharing process. Distrust of members causes employees or members to protect their knowledge and keep the knowledge hidden.

- Formal Knowledge Management Staff

Formal staff needed before implementation begins, to find and explain knowledge management before implementation. Knowledge Management staff are responsible for determining where the knowledge is, who and what knowledge they have. Formal employees also find out where the organization's ignorance lies and make plans to reduce ignorance.

- Quality based incentives

If incentives are given based on quantity, excess information will be produced, but not necessarily the organization. There needs to be a supervisory group to check the quality of submitting knowledge to the Knowledge Management system. The process by means of the information submitted has been assessed and is significant knowledge. Another problem is the simultaneous delivery process at the end, so it is necessary to arrange a delivery schedule and periodic inspection of information.

- Communication about Knowledge Management

Effective Communication strategy is needed to support the implementation of Knowledge Management initiatives. Each member must voluntarily participate in the

process of converting tacit knowledge into organizational knowledge. It is also important that the organization says that Knowledge Management is a cycle so that with members sharing their knowledge they will gain new knowledge so that it can also improve the quality of each member. Seminars and workshops are one part of communication conveying the importance of Knowledge Management.

Obstacles in the process of disseminating knowledge
1. Lack of trust between members
2. Cultural differences, language and references.
3. There is no time and place to communicate.
4. Lack of appreciation for knowledge owners
5. There is a culture of competition between members
6. Lack of absorbing capacity from the recipient.
7. Believing knowledge is a privilege of certain groups.
8. Not tolerant of mistakes.

The spread of knowledge depends on the transmission and absorption by individuals and groups in the organization. It is hoped that the process of delivering knowledge and being absorbed will change culture and increase value for the organization.

C. Strategy for Maintaining knowledge

Social and cultural relationships play an important role in shaping knowledge as a source of unique competitive advantage. Using social relations is an easy and efficient way to share knowledge between individuals. The role of the division of human resources to help social relations among employees can improve the knowledge sharing process. Arguably the strategy of maintaining knowledge is a reactive effort.

According to Daghfous (2013) Strategies that need to be considered the level of management in maintaining and reducing the loss of knowledge are:
1. The strategy must be in harmony with the vision and culture of the organization
2. Design and implement a comprehensive strategy on all lines and networks for knowledge management. To facilitate strategy and coordination can make the position of director of Knowledge Management and also priority activities such as mapping, retention and dissemination of knowledge.
3. There needs to be strong commitment and support from management
4. Search for and maintain a source of critical knowledge and prioritize storage of knowledge.
5. Support strategies for disseminating knowledge to the management level.
6. The need for a combination of technology and other initiatives such as cross training, rotation and mobility.

D. A brief history of the Library Binding section in the National Library

Based on Law No.43 of 2007 concerning libraries in article 1 paragraph 5, it is said that the National Library is a non-departmental government institution (LPND) that carries

out government tasks in the library that functions as a building library, reference library, deposit library, research library, library preservation, and the center of library networks, and is located in the national capital. The National Library of the Republic of Indonesia was established in 1989 based on Presidential Decree number 11 of 1989. This institution is a combination of the Library Development Center, the National Library of the Ministry of Education and Culture and the Regional Library in the Province.

The existence of a library binding unit coincides with the formation of the National Library of the Ministry of Education and Culture on May 17, 1980. The function of the organization in carrying out library binding is the responsibility of the field of reprography based on Minister of Education and Culture Regulation No. 0164/0/1980, described the functions of the reprographic field doing reprography, carrying out binding, preservation, collection conservation, publishing. The repro field consists of the reprographic section, the conservation and binding section, and the publishing section.

After Presidential Decree No. 11/1989 the National Library organization of the Ministry of Education and Culture became the National Library of Non-Departmental Government Institutions. The institutional structure has change, the conservation and library binding section changed its name to the binding section and the improvement of library materials under the Division of publishing and maintaining library materials. This Division is under the Deposit and Conservation Center.

After 1998 there was the development of the organization through the Presidential Decree 50/1997 with the establishment of preservation center. Binding unit as part of the conservation division was that year. Based on the search for documents, the library binding unit has been realized since the beginning of the formation of the National Library it could even be that the function of the unit had been carried out long before the merger of institutions into the National Library.

Knowledge and abilities about binding are brought from these original institutions. Based on information from *pustakawan utama* (highest level librarian in Indonesia) Supriyanto, binding knowledge was obtained from the original unit before merged, the National Archives of the Republic of Indonesia, and from education and training ever held in Malaysia with him as a participant.

Library binding knowledge is knowledge based on skills and experience. The longer someone is engaged in the job, the more proficient and skilled the person is. So senior workers have broader and more diverse knowledge, therefore, it is necessary for the institution to preserve it. Another thing is the collections are valuable and even rare, so there need to special handling and caution.

RESEARCH DESIGN

The study used a qualitative research approach through semi-structured interviews and content analysis in order to understand how the technical binding subdivision preserving the knowledge. The participants were two bookbinders were experienced in binding over twenty years we call it senior employees, three bookbinders were started work in

2015 we call new employees and Head of Binding Technical Subdivision. In addition to interviews, documents related with the organization also collected.

Furthermore, the interviews took place at the organization in November 2018 and Februari 2019, were recorded on the voice recorder and transcribed manually on Word document for analysis.

Data analysis: data analysis was conducted by examining and studying all of the data collected using stage from data reduction, coding and afterward summarized it into a conclusion and interpreting it as a finding.

RESULTS

Employees in binding technical subdivision amount to eight with five people as bookbinders. Two of them have more than twenty years of experienced working as bookbinders, while the three other have officially joined in 2015. About Two and three years before, there was a reduction in employees with the retirement of two and one workers moving to another unit. In 2018 there a reduced one employee with binding experienced at least ten years because of moving of work. Employees in the binding unit will enter retirement age around the next three to four years, leaving a worker who will retire eight years from now. With these conditions, it is interesting to see the readiness and plan of the organization in the future.

The possibility that occurred due to the departure of these bookbinders was the loss of all or part of the knowledge that was important to the organization. Interviews are conducted to identify what knowledge is threatened or potentially loss and the effort to maintain the knowledge.

Based on interviews with senior employees, they gained knowledge through education and training in the early years of work such as making hardcovers from the leather (hardcover leather and *pilung* see figure 1), making *pilung* (rounded back hardcovers), making protective boxes (see Figure 2). These skills are obtained from training and direct practice. These skills are not ordinary skills because making leather cover or making *pilung* is a work of art and for high-value collections. These jobs are rarely done and only two senior employees have the knowledge and the experience.

Interviews with employees who entered in 2015 were conducted to determine what knowledge has not been mastered so that the knowledge has the potential to be lost. When asked what jobs are difficult, it is answered "*Itu bikin kotak untuk lantai tiga*", in english "makes a box for the third floor", the third floor refers to the physical repair unit of the library collection that deals with damage to rare and high-value collections such as rare books, rare magazines and ancient manuscripts. It was further said by the employee "*saya motongnya belum bisa*" in English "I can't cut it yet ". "*ya kalau bikin (kotak) kita, yang motongnya ya … (melihat para pegawai senior)*", in english "so if we make a (box) that us, but for the cut… (see the senior employees)". Then later when asked about the reduction of employees due to retirement period, then the response given by the employee was , "*Ya, itu mas kalau pilung mas, saya belum menguasai*", in

English "for make *pilung, I have not mastered it* ". So this new worker does not or does not yet master the making of the *pilung* so that if the expert staff retires then no one can do the making of *pilung*. From the results of the interviews, the transfer of knowledge between workers is still not optimal, this can occur because the capacity of the recipient's capacity is limited based on the age of all workers over fifty years of age or due to lack of training and less of experience.
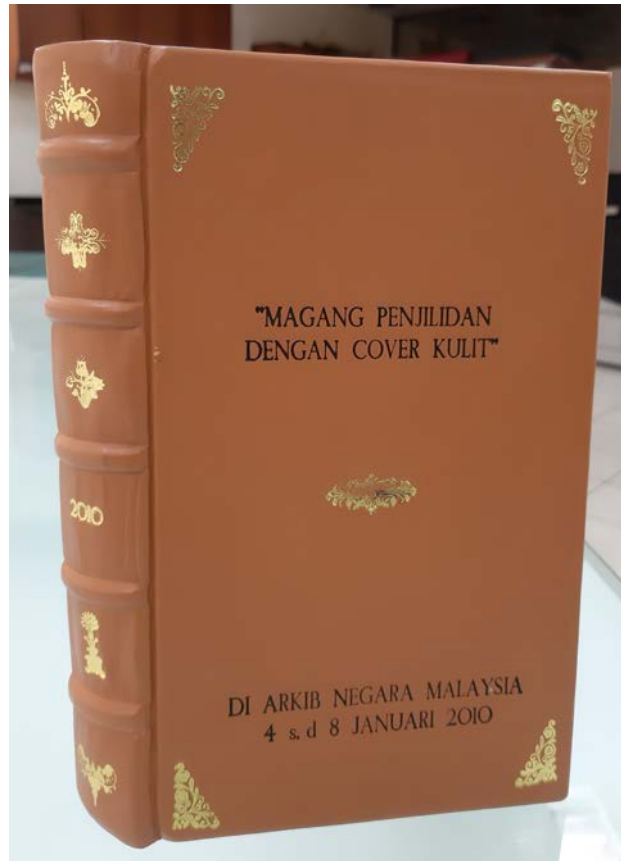

Figure 1: Examples of hardcover leather books with *pilung.*

Based on these interviews it can be identified knowledge gained from experience and the better their work because trained from experience and produce to intuition to do the work for example in cutting boards to make collection storage boxes. There is knowledge that is indeed difficult, such as making a leather cover and making *pilung*. Unfortunately, the making of *pilung* and making a leather cover is now no longer done or seldom, because small number of collections and inadequate devices. According to senior employees, what is done routinely is ordinary work or simple binding, whereas for high-value collections, it supposed to apply a special binding technique, the collection of leather covers is replaced by leather too and books with rounded backs are kept round.

Figure 2: Protective Box

It also found that in the process of transferring knowledge from experts to new members through asking and observing. For mentoring, then the senior worker answers, "*untuk pendampingan terus ga juga, karena kita kerja juga. Masing-masing punya target*" in english "the mentoring is not routine, because we work too. Each has a target". When asked to junior employees, they chose to learn directly by working, the answers given, "*Ya kalau saya pilih langsung kerja, malah lebih cepat gitu*", in english "*Yes, I choose to learning by doing, it will be even faster*". Some jobs still "*contek* " (see and imitate directly what senior work does) such as making protective boxes for rare collections. based on interviews above the most effective method is to look directly and imitate experts in work.

Interviews with direct leaders at the binding subdivision are carried out. Based on interviews ideally binding technical subdivision consists of fifteen people, so there is imbalance of the number of workers required by the number of existing members. So it is reasonable to transfer knowledge between individuals is not optimal because according to the recognition of senior employees, each staff already has their respective job targets. For now, the fulfillment of the number of workers by means of transferring workers from other units, while the addition of new workers is possible next year. The fulfillment of these new personnel also encountered obstacles because the qualifications requested were not according to their needs. Knowledge in the binding unit is preserved through the creation of a guidebook based on the statement of the head of the binding unit as follows, "*Untuk melestarikan pengetahuannya dibikinlah buku pedoman, gitu caranya ga bakal hilang kan*" in english "To preserve the knowledge made by the guidebook, so the method will not disappear, right ". Based on analysis, the guidebook was titled *Pedoman Teknis Penjilidan Bahan Perpustakaan* year of 2013. But the disadvantages were none how to make hard covers from the leather, making pilung (round back), so that both of these knowledge are threatened with loss. In the next interview, he admitted that there were still deficiencies in the National Library publication guidebook, because the making of *pilung* and hard covers of leather was not listed there, then in the future the manual would be revised. There is a concern that some binding knowledge will be lost, but there will still be time for the next two or three

years before the experience expert retires knowledge has been transmitted to the new generation, through guidebook making and training. The head of the binding technical unit also expressed the employees who had just joined the study binding by "*bertanya, melihat, mendengar, membaca*", in English "asking, seeing, listening, reading". The process is for new employees to be given one or two weeks to practice and see senior work and then given job targets under the supervision of senior workers. After three to six months of work then they are released to work alone. However, his acknowledgment of supervision was not carried out throughout the day, according to the recognition of senior workers, because they also had work targets. The level of difficulty of the work is also adjusted to the ability of each worker.

There are assessments from senior employees about new employees, because according to him "*cuma untuk yang baru-baru ini kurang peduli, kurang menjiwai*", in English "the new guys are less concerned, lacking inspiration". It indicates that there are organizational and professional values that are not embedded in the souls of new employees or can be assessed as less successful internalization process. Based on the results of interviews, it is also revealed the role of leaders who understand the work done by their subordinates produces a positive work culture such as caution, thoroughness, and respect from the staff.

CONCLUSION

There is a potential loss of binding knowledge such as making *pilung* and making leather cover in the National Library because there will be retirements employees for the next three years. The knowledge need to be preserved through the capturing, recording and writing of knowledge involves with senior employees so that knowledge remains within the organization. Transfer of knowledge between employees needs to be maximized such as mentoring, learning by imitating and then being released to be independent with a designated senior assessment. Organizations providing sufficient time for the new generation to study directly with experienced employees. The need to appoint seniors who are given the task of mentoring until new employees can do the most basic work with a relatively short time. There needs to be incentives for members who have superior knowledge so that knowledge sharing among members is carried out and facilitates the conversion of tacit knowledge into organizational knowledge. Organizations must fulfill the number of workers and the ideal workload so that they can maximize knowledge transfer and discussion between workers to overcome obstacles in the field.

Each leadership has its own policy in training new employees. In accordance with the narrative of senior employees, the leadership previously had a policy of new employees not being given risky jobs until the employee mastered the binding technique at least the basic one. Unlike now the short training was given a job target, even though this was actually done because it did not fulfill the ideal number of workers. There needs to be standard and standard regulations in training new employees.

In several studies that have been carried out, it is explained the importance of the role of the highest management and formal staff in knowledge management especially the

work culture that supports knowledge sharing. Then the advice is, this study could be the beginning of the formation of a knowledge management team and the top leadership could play its role in supporting the team for the success of the institution.

National cultural heritage is a matter that is vital for national identity, so the products of national culture should be preserved as well as physical and information by the library as a guardian of knowledge for future generations, including preserving knowledge of conservation.

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