

Development strategy of human resource competency in the preservation field

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Abstract

Background of the study: The Center for Preservation and Media Transfer of Library Materials of the National Library of Indonesia (PNRI) is also responsible for restoring various types of collections. It is necessary to increase and develop competence in handling these collections, considering the various conditions and types of library materials. Preservation of the physical and information needed to make the collection last longer.

Purpose: To formulate the strategies for improving and developing the competence of preservation human resources in this unit.

Findings: Based on the SWOT analysis, this unit is in quadrant I, meaning that it has great strengths and opportunities to improve and develop competencies. The recommended strategies are: a) facilitating staffs to gain knowledge through education, training, comparative studies, workshops and other conservation events, b) facilitating Preservation Human Resources certification, c) development of managerial and sociocultural competencies, for Head of Working Group, Sub Head of Working Group and staff who are also members of the facilitators/teachers, d) establish various preservation SOPs, e) work closely with the Education and Training Center to accommodate preservation staff training needs, f) create plans for improving and developing well-structured resources, g) sharing knowledge independently among preservation staff. h) Massive socialization of Preservation Performance Competency Standards (SKKNI) to preservation human resources, so that the standards can become a reference for preservation human resources in their work.

Conclusion: Competency improvement and development is needed so that preservation activities at the National Library of Indonesia can run even better, so that they can be more beneficial in society.

Keywords: *competence, library, preserver, librarian, preservation, SWOT*

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Introduction

In the 2020-2024 Strategic Plan of the National Library of the Republic of Indonesia, article 1, point three, it is stated that the National Library is a Non-Ministerial Government Institution which carries out government duties in the library sector which functions as a supervisory library, reference library, deposit library, research library, library preservation, and library network center, and is located in the nation's capital ([Indonesia, 2020](#)). It is also stated in Law no. 43/2007 concerning Libraries Article 1 number 1 states that libraries are institutions that manage collections of written works, printed works and recorded works professionally with a standard system to meet the educational, research, preservation, information and recreational needs of library users ([Indonesia, 2007](#)). From these two legal bases, it can be concluded that one of the roles of the National Library of Indonesia is as a conservator, especially as a conservator of library material collections.

Based on data obtained through a survey at the National Library of the Republic of Indonesia in 2019 conducted by librarians at this agency (not published), it is known that there are at least 13,219 copies of ancient manuscripts in the National Library of the Republic of Indonesia. This number has the potential to increase, because ancient manuscripts also receive additions every year from collection development/acquisition activities. Over time, these existing manuscripts will experience degradation, even though the time period is not the same. Various factors, both internal and external to library materials ([Razak, 1995](#)) can influence the condition of the collection, causing damage or degradation to the ancient manuscript collection. As found in the collection of ancient manuscripts belonging to the National Library of Indonesia, based on the results of the 2019 survey, there was some damage as follows:

Table 1. Damage to Ancient Manuscripts from the National Library of Indonesia Collection

Condition / Type of Damage	Quantity (copies)	Percentage (to total collection)
Number of collections	13.219	100%
Binding Damage	4.485	33,93%
Ink Corrosion	4.231	32,02%
Brown Spots (foxing)	11.710	88,58%
Mildew Stains	1.677	12,69%
Ripped	4.958	37,51%
Insect	8.649	65,43%
Fragile	4.051	30,64%
Sour	9.896	74,86%

Data processed by researchers (2023)

Source: Results of the 2019 Ancient Manuscript Condition Survey (not published)

Of course, it is not easy to handle so many internal and community collections. Many factors will influence the pace of conservation activities. Apart from Indonesia's natural conditions which are prone to disasters (in some areas), temperature, humidity and so on, the availability of tools and materials, competent human resources are certainly needed in handling these collections.

The library collection itself does not only consist of paper-based collections, but there are several other types. ([Sudiarti, 2021a](#)) states that there are daluang, bamboo, wood, lontar, wood and also pumpkin as writing media for manuscripts found in the Indonesian National Library. Meanwhile, based on data from the Center for Bibliography and Library Material



Processing collected on the website satudata.perpusnas.go.id, it is known that there are at least 1,037,105 collection titles that have been cataloged between 2006 and 2020. The types of library materials cataloged include ([Indonesia, 2018](#)):

Table 2. Number of collection titles cataloged from 2006-2020.

No.	Types of library materials	Number of titles
1	Monograph	754.590
2	Periodicals	84.336
3	Electronic Source	40.426
4	Sound Recording	31.680
5	Cartographic Materials	30.499
6	Micro Shape	21.523
7	Manuscript	11.715
8	Video Recording	8.488
9	Braille	1.377
10	Graphic Materials	71
11	Periodical electronic source	50
12	Periodic microforms	8
13	Mixed Ingredients	52.342

(Source: [satudata.perpusnas.go id](http://satudata.perpusnas.go.id))

Please note that the number of titles is not the same as the number of copies. One title may have several copies. From this it can be concluded that the number of real collections is much greater than the number of catalog titles.

There are quite a few rare collections and ancient manuscripts in the community. The conditions also vary. There is a need for cadre formation or coaching for conservationists in the regions or in the community, so that they have the competence to handle conservation in their area, as an extension of the National Library of Indonesia conservationists. The National Library of the Republic of Indonesia, which carries out its function as a supervisory agency (both libraries and librarian human resources), has an interest in cadres of conservation workers in various regions in Indonesia. Of course, those who will be cadres are conservationists who are already competent and able to convey it (transfer knowledge) well. From this transfer and sharing of knowledge, it is hoped that regional conservation human resources can carry out conservation in their region and surrounding areas. With the need for the cadre of conservationists in the regions, competency is needed from the human resources of the development agencies to transfer and share this knowledge, in addition to their main competency in technical conservation work. This means that if you want to fill an empty glass, of course you need something that will fill the glass. It is not possible to share knowledge and abilities, if the person sharing it does not have the knowledge to share.

[Sudiarti \(2021b\)](#) once wrote that the Preservation Center was in a state of HR emergency. The need for competent human resources is increasingly felt, when collecting the results of the implementation of Law no. 13 of 2018 concerning the Handover of Printed and Recorded Works ([Indonesia, 2018](#)) which is under the Deposit Directorate is also waiting to be handled. Of course, preventive and curative actions for these collections, which require special competence, are under the responsibility of the Center for Preservation and Media Transfer of Library Materials. This will of course extend the tasks that must be carried out by the Center for Media Preservation and Transfer together with its human resource conservationists.

Preservation itself includes 2 (two) types, namely information preservation, which is the preservation of the content or contents of a manuscript. This preservation is through media transfer, digitization and online uploading of certain parts of the manuscript. Meanwhile,



secondly, physical preservation. In this preservation, the physical manuscript is cared for, maintained and repaired, so that it can last longer.

The perpetrators of preservation are Civil servants in National Library of Indonesia with the functional position of librarian specializing in preservation as well as conservator and media transferor, which are general functional positions. Conservators concentrate on physical preservation (conservation), while media transferors concentrate on media transfer or information preservation. To become a physical conservation librarian, you need an educational background in the field of Mathematics and Natural Sciences or library science. Meanwhile, for information conservationists, the educational background required is Computer Science or IT (Information Technology).

For conservators and media transferors, this is usually held before the Civil servants takes the functional position of librarian. To be able to become a conservation librarian, further education in the library field is required through in-passing training or Expert Level Librarian Candidate (CPTA) training organized by the National Library of Indonesia Education and Training Center. Meanwhile, Civil servants with educational backgrounds in Library Science can immediately become librarians, after submitting a DUPAK (List of Proposed Credit Score Assessments) and completing the required documents.

These conservation librarians will be the ones who will carry out direct preservation of collections of library materials and ancient manuscripts in the National Library of the Republic of Indonesia, as well as those belonging to the community or other institutions that need them, based on a priority scale. Not all librarians can carry out preservation measures for these ancient manuscripts. The unique condition of the manuscript (its physical condition and information), as well as its rarity, including the state of damage it has experienced, requires special handling. This means that special skills are required that need to be continuously honed and deepened. This is due to the complex condition of the manuscripts that must be repaired, in addition to the different conditions for each manuscript. The learning process needs to continue, in addition to the learning by doing process which is always carried out.

The long time it takes to carry out physical repairs for each collection means that the collection has to "queue" to be repaired according to a priority scale. It is true that not all manuscripts need to be repaired, but over time, collections will experience degradation, a decline in their physical quality. This is why collections can sometimes only be handled when their condition is "severe" enough. Speed and accuracy factors are needed here. Apart from the availability of tools and materials, the competency of the human resources who do the work is also needed.

New forms of media, as well as digital or online forms from high-value collections owned by the Indonesian National Library, are needed by the public, in this case library users. Indonesia's geographical conditions are so vast that direct access to the targeted collections is limited. Digital form, which can be accessed from anywhere and at any time, is an alternative solution. The ease of the public in accessing information is one of the important things that must be fulfilled by the Indonesian National Library as a form of service to the community. For this reason, acceleration is needed in digitizing the National Library of Indonesia's collections, especially its superior collections.

In order to accelerate digitalization, adequate infrastructure is needed in addition to the competence of human resources to preserve the information itself. The education and training (training) currently organized by the National Library of Indonesia Education and Training Center is not sufficient to support the development of human resource competencies for information preservation in their technical work. Information preservation training held by the National Library of Indonesia's Education and Training Center is more targeted at librarians or information preservation implementers outside the National Library of Indonesia's Media



Preservation and Transfer unit. This is proven by the fact that almost all of the resource persons (mentors) for the information preservation training came from the media transfer unit of the National Library of Indonesia's Media Preservation and Transfer Center.

The same thing also happens with physical preservation (conservation). The currently available training related to physical preservation is more targeted at librarians or physical conservationists outside the National Library of Indonesia's Media Preservation and Transfer Center. The resource persons or training mentors are dominated by conservationists from this Center. Under these conditions, human resources at the Media Preservation and Transfer Center actually share their knowledge and experience, rather than being participants who receive new knowledge.

This condition is understandable, because the National Library of Indonesia is a supervisory agency for libraries and librarians throughout Indonesia. However, this situation actually strengthens the need for conservation human resources to have opportunities to increase their competence. This increase in competency is to meet the need for technical implementation in the field (the main job) as well as to share knowledge (knowledge sharing) for librarians or conservation implementers throughout Indonesia.

The current processes and strategies for developing HR competencies at the Media Preservation and Transfer Center have apparently not been running optimally. There are not many conservation human resources who take advantage of the rights and obligations to develop Civil servants competencies proclaimed by the government in Republic of Indonesia Law no. 5 of 2014 concerning Civil servants of 20 JP each year ([Indonesia, 2014](#)). This condition has the potential to affect the competence of preservationists at the National Library of Indonesia Library Material Preservation and Media Transfer Center. Therefore, it is interesting to carry out research on what the actual condition of conservationist competence is currently. By knowing the current condition of conservationist competency, from there strategies can also be formulated to further optimize this competency.

Some of the current problems related to the need for competency include: the work results (output) of conservation human resources for the collections being preserved are not the same, have not been standardized, the process of preserving ancient and rare collections, especially physical ones, can take quite a long time, due to various limitations, including human resource competency, there is no special educational institution for conservation in Indonesia, the opportunity for civil servants to increase their competency by a minimum of 20 JP has not been used optimally, conservationist work is an important job that requires maximum special competency. That's why this research needs to be carried out in order to be able to: find out the condition of the competence of conservation human resources at the Center for Preservation and Media Transfer of Library Materials of the National Library of Indonesia and formulate strategies for developing the competency of human resources for conservationists at the Center for Preservation and Media Transfer of Library Materials of the National Library of Indonesia.

There is actually quite a lot of previous research regarding increasing competency, such as research conducted by [Isnaini & Affiani \(2019\)](#) regarding strategic analysis and the keys to the success of BPSDM Jambi Provincial Government, where it was found that BPSDM's position is strong and prime, so it has a great opportunity to continue to expand and grow. and achieve optimal progress. ([Kurniati, 2019](#)) conducted research on the use of SWOT in determining cyber and password security training strategies, where the results were various Weaknesses Opportunity (WO), Strength Opportunity (SO), Strength Threats (ST) and Weaknesses Threats Strategy (WT) strategies. to increase their competence. (Ayas & Sinaga, 2019) researched the strategy for developing apparatus resources in improving employee performance at the Serdang Bedagai Personnel Agency using SWOT analysis. The research found that performance achievements were not in accordance with what was expected in the



Strategic Plan, due to lack of funds. In 2019, research was carried out on human resources at the East Belitung Culture and Tourism Service. Researchers found that the existing employee appraisal system was deemed unable to measure well and had the potential to be less objective. In the strategy analysis for increasing HR competency, it is done by improving the performance assessment system and work performance of the unit staff ([Mussarrofa, 2019](#)). Then in 2021, research was also carried out with the aim of finding out the condition of managerial competence, analyzing internal and external factors, which was followed by analysis to develop the managerial competence of Civil servants in Naganraya Regency. The research results show that civil servants managerial competencies have not been developed optimally through training, because the opportunities available are very limited. Scholarships from outside the APBD have not been utilized optimally by local governments and Civil servants ([Hidayatullah et al., 2021](#)). Further research was carried out to find strategies for developing elementary school teacher competencies. It was found that what was implemented was a turnaround strategy, where social, professional and pedagogical competencies were developed through optimizing existing potential/opportunities to overcome teacher weaknesses and shortcomings. Meanwhile, personality competence is developed with an aggressive strategy, where the teacher's strengths and advantages are used to maximize existing opportunities ([Fredy & Day, 2022](#)).

From various previous studies, it was found that no one had specifically discussed strategies for increasing competency for conservationists at the Indonesian National Library. That is why this research is important, considering the urgency of competence of National Library of Indonesia conservationists which is also needed by the community and other conservationists in this country. This is also what will be the difference and novelty of this research, namely the strategy for increasing the competence of conservationists at the National Library of the Republic of Indonesia. It is hoped that the results of this research can be taken into consideration by policy makers regarding the development of conservationist competency at the Center for Preservation and Media Transfer of Library Materials.

Method

Research Design

This research uses a descriptive method with a qualitative approach. The method used in this research is descriptive with a qualitative approach. [Sugiyono \(2016\)](#) explains that descriptive research is research that aims to provide or explain a current situation or phenomenon using scientific procedures to answer a problem in an actual way. Meanwhile, Anggito and Setiawan concluded that qualitative research is collecting data in a natural setting with the aim of interpreting phenomena that occur where the researcher is the key instrument, sampling of data sources is carried out purposively and snowballing, the collection technique is triangulation (combination), data analysis is inductive / qualitative, and the results of qualitative research emphasize meaning rather than generalization ([Anggito & Setiawan, 2018](#)). This research will interpret the existing conditions based on the qualitative data that has been obtained ([Gainau, 2016](#)), to then formulate a proposed strategy for increasing the competency of conservation human resources at the National Library of Indonesia Library Material Preservation and Media Transfer Center, which is why a descriptive method with a qualitative approach is used.

Location

The research locus is the National Library of Indonesia Library Material Preservation and Media Transfer Center. The consideration for choosing this location is because this Center is responsible for preserving the information and physical collections of the National Library



of Indonesia's ancient and rare collections. This center also has the authority to create policies and guidance related to the preservation of library materials that can be implemented throughout Indonesia. It is hoped that competent human resources from this center can also share knowledge with other conservationists as well as the wider community in the country.

Key informants were selected using a purposive sampling technique, a total of 10 people. The key informants consisted of the Head of the Center for Preservation and Media Transfer of Library Materials, Main Librarian, Media Transfer Coordinator, Conservation Coordinator, two Media Transfer Staff, two Conservation Staff, Services Unit Librarian, and Overseas Conservationists.

Data collection

Data collection in this research are primary data and secondary data. Sugiyono in Jiasti (2021) explains that primary data is data that comes from direct sources or the first sources found by researchers. Meanwhile, secondary data is data that is not directly obtained, but is generally obtained from the documentation of other people or institutions.

In this research, in-depth interviews and observations are the primary data sources, while agency documentation data are secondary data sources. So, the data collection process in this research includes in-depth interviews, observations and use of documents.

Data Analysis

Data analysis will go through the stages of data collection, data reduction, data presentation and finally drawing conclusions using the triangulation method. Data is processed and analyzed using the SWOT method. The triangulation approach is used in the data validation process, triangulation is a technique for checking data from various sources, methods and times (Sugiyono, 2016). In this research, researchers conducted interviews with informants, who then checked the documents that had been collected and compared them with the results of observations of activities or activities carried out during the research.

Result and Discussion

General condition

Based on the results of interviews and observations, it was found that human resources for preservation and media transfer of library materials in terms of quantity were sufficient, especially for information preservation, while for physical preservation, additional work was still needed. Meanwhile, in terms of quality, current conditions are sufficient, but massive improvements must be made, because preservation technology continues to develop. Competency improvement and development must continue to be carried out, for all conservationists, because the community's needs and desires for conservationists and their conservation activities are also growing. The service librarian explains:

"Researchers of rare collections don't need visual displays, the important thing is that they can find them. Maybe if it's a new version that today's kids are interested in reading, flip-flip would be good. "As for researchers, most people of this age are already focused straight away, they get dizzy if they use flip-flips like that."

Meanwhile, the Media Transfer Coordinator stated, "Quality needs to be improved, adapting to standards, current developments and trends."

Competences

[Saleh \(2013\)](#) states that competence is:

"An individual's actual performance, which cumulatively, consists of knowledge, skills, motives and attitude aspects inherent in a person, which can be used to indicate the level or quality of



their ability and performance in completing certain specific jobs."

Meanwhile, competency within the scope of Civil Servants is the knowledge, skills and behavior required to carry out job duties, as explained in Article 1 of Minister of Administrative and Bureaucratic Reform Regulation No. 38/2017 ([Indonesia, 2017](#)). Competence is an important element in creating professional and competitive employees. Here civil servants is obliged to manage and improve their own competence, as well as implement it in performance.

[Sudiarti et.al. \(2022\)](#) explains the results of her research at the Tangerang City Inspectorate, namely that competency is part of considering job analysis, so that employee performance can be improved and they have a sense of responsibility for the work assigned to them.

In accordance with the 2019 SKKNI for the Library Sector which is included in the Republic of Indonesia Minister of Manpower Decree No. 236 of 2019 ([Indonesia, 2019](#)) then the competence of Conservationists at the Preservation Center can be in the key function "Preservation of library materials" which is then translated into 4 (four) main functions, namely: 1) preparing policies for preserving library materials, 2) implementing disaster management in libraries, 3) carry out physical preservation of library materials, 4) carry out information preservation of library materials.

These four main functions are then further elaborated into a number of basic function points, which are assessment points in mapping the competency of preservation staff wherever they are, including for conservation staff in the Library Material Conservation and Media Transfer unit at the National Library of Indonesia. This competency standard is a reference for both employees with certain functional positions (in this case librarians) and for non-functional employees (conservators and media transferors) to map their competencies. At the basic function point, competency measurements are carried out by focusing on knowledge, skills and attitude.

Conservation Human Resources at the National Library of Indonesia Library Material Preservation and Media Transfer Center, consisting of librarians, archivists, conservators and media transferors, have competency conditions: 1) Ability (Skill), currently quite good, but needs improvement in: technical conservation of printed collections, technical conservation of audiovisual collections, technical lighting in media transfer. 2) Knowledge, requires improvement and development of the same points as the Skill points in point 1) above. 3) Attitude, needs to be improved, especially regarding the collections being preserved, namely an attitude of caution and a sense of belonging.

PermenPAN-RB Np. 38 of 2017 ([Indonesia, 2017](#)) explains that the Competency Standards that civil servants need to have include technical, managerial and socio-cultural competencies. Conditions for conservationists at the library materials Preservation and Aih Media Center are as follows: 1) Technical, needs improvement and development, according to the conservationists' respective fields. 2) Managerial, although this is prioritized for leaders and management, conservationists also need to be equipped with management and organizational knowledge, 3) Socio-cultural, needs to be provided with training, especially for conservationists who usually act as resource persons or facilitators in sharing knowledge and also implementing conservation in the community.

Competency development is needed to improve HR competency. Even though HR competency is considered good so that it can provide good output in the form of optimal performance, competency development is still necessary. As stated by [Saleh \(2013\)](#) competency development is one of the methods that must be carried out by a public sector organization in order to improve the performance of all its apparatus, both related to dynamics, developments and changes in technology, as well as due to changes in work methods that occur within that organization. As is known, if the personal performance of the apparatus is good,



then this condition will be able to boost the organization's performance in providing services to the public.

Competency development, especially regarding core competencies for all employees in an organization, should be oriented towards these 4 (four) points (Saleh, 2013), namely: 1) replacing old personal competencies, 2) improving old personal competencies that have been weakened, 3) maintaining or protecting old personal competencies that are still considered appropriate today, and 4) instilling or building new personal competencies that are really needed by the organization. If these four things can be implemented by an organization, then this will be able to anticipate changes, demands and developments in the organization, both from outside and within the organization.

To be able to realize this competency development, a strategy is needed, so that the achievements can be maximized. The leadership of an organization, according to Rangkuti (2015), always tries to find harmony between the company's internal strengths and the external forces (opportunities and threats) of a market. This can also be done in public organizations to develop their HR competencies. As also discussed by Noe et.al., previously, regarding matters that influence strategy, the appropriate analysis process to be carried out in developing HR competencies in this research is the SWOT analysis method.

According to Riyanto & Aziz (2021) SWOT analysis is a process of identifying internal and external factors that will influence the performance of an organization/company in the future. SWOT analysis identifies an organization's strengths and weaknesses, as well as opportunities and threats that exist in the organization's external environment. By using the SWOT analysis, it is hoped that the right method or strategy for developing the organization will be obtained. SWOT analysis compares external factors Opportunities and Threats with internal factors Strengths and Weaknesses.

Based on the results of interviews and observations regarding SWOT points in efforts to increase and develop the competency of human resources for preservationists (librarians and others) at the National Library of Indonesia Library Material Preservation and Media Transfer Center, the following data were obtained:

Internal Factors

Table 3. Strengths

No.	Strengths	Weight	Relative	Rating	Score
1	HR educational background	4,00	0,07	4,00	0,26
2	Good foreign language skills for new HR	4,50	0,07	3,70	0,27
3	Atmosphere and HR work ethic	4,58	0,07	3,78	0,28
4	Desire and enthusiasm to learn	4,93	0,08	4,08	0,33
5	SOP for several conservation activities	4,73	0,08	4,15	0,32
6	Leadership support (including licensing) in developing conservationist competency	5,00	0,08	4,53	0,37
7	Number of human resources	4,18	0,07	3,70	0,25
	Total	31,90	0,52	27,93	2,09

Table 4. Weaknesses

No.	Weaknesses	Weight	Relative	Rating	Score
1	Programmed Preservation HR competency development plan	4,25	0,07	1,80	0,13
2	Unequal distribution of HR competencies (including foreign language competencies)	3,68	0,06	2,75	0,17
3	The enthusiasm for learning fluctuates	3,88	0,06	2,15	0,14

4	Budget for competency development	4,75	0,08	1,20	0,09
5	Infrastructure (especially in media transfer)	4,75	0,08	1,93	0,15
6	The quality of work output	4,30	0,07	2,68	0,19
7	Feeling comfortable with the current condition/position	3,50	0,06	1,48	0,08
8	Types of training from National Library Education and Training Center	4,25	0,07	1,33	0,09
	Total	33,35	0,55	15,30	1,04

External Factor

Table 5. Opportunities

No.	Opportunities	Weight	Relative	Rating	Score
1	overseas institutions that concentrate on conservation education	4,50	0,07	3,98	0,29
2	Technological development	4,70	0,08	4,00	0,30
3	The existence of the National Library is recognized	4,50	0,07	4,05	0,29
4	Public interest and need for digital content from ancient and rare collections	4,30	0,07	3,78	0,26
5	The need for preserving ancient and rare collections belonging to the National Library and the public	4,75	0,08	3,98	0,31
6	Conservation certification by external parties	3,70	0,06	3,33	0,20
7	Outside institutions are willing to accept National Library conservationists for training on site	4,68	0,08	4,18	0,32
	Total	31,13	0,50	27,28	1,97

Table 6. Threats

No.	Threats	Weight	Relative	Rating	Score
1	Ancient and rare collections belonging to the Republic of Indonesia abroad cannot be returned	4,75	0,08	1,68	0,13
2	Increasingly left behind by technology	4,50	0,07	2,43	0,18
3	Occupational risks	3,50	0,06	2,18	0,12
4	Stagnation of knowledge and competence	4,43	0,07	2,18	0,16
5	There are no special educational institutions for conservation human resources in Indonesia (especially conservation)	4,75	0,08	1,63	0,14
6	The bringing of information contained in original Indonesian manuscripts by outside parties	4,40	0,07	2,03	0,12
7	Degradation of the condition of rare and ancient collections belonging to the National Library and the public	4,38	0,07	2,05	0,15
	Total	30,70	0,50	14,15	1,00



Internal factors come from within the Library Material Preservation and Media Transfer Center unit. External factors come from outside this unit. The score is obtained from the results of the weighting and ratings given by the Key Informants to these internal and external factors. From the matrix (table), it is found that:

Internal Factor Analysis (IFAS)

$$\begin{aligned} \text{IFAS} &= S - W \\ &= 2.09 - 1.04 \\ &= 1.05 \end{aligned}$$

This means that the internal factor notation is above the center line of the diagram.

External Factor Analysis (EFAS)

$$\begin{aligned} \text{EFAS} &= O - T \\ &= 1.97 - 1.00 \\ &= 0.97 \end{aligned}$$

This means that the external factor notation is to the right of the center line of the diagram. The combination of internal and external factors produces a strength map as follows:

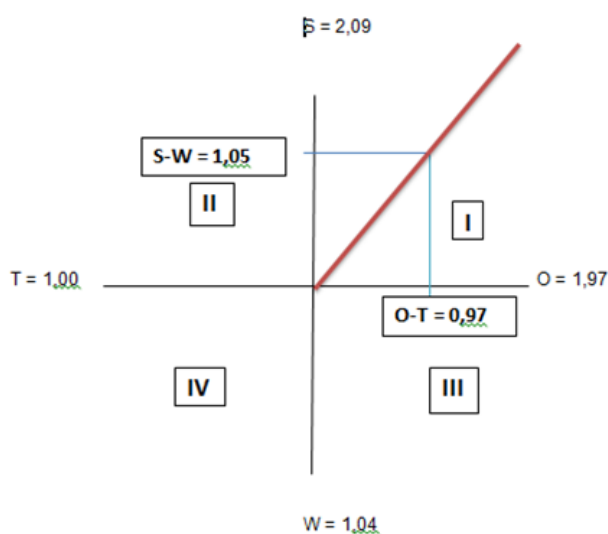


Figure 1. SWOT Analysis Quadrant (data processed by researchers)

From the results of the analysis of internal factors and external factors, it was found that the position of the Center for Preservation and Media Transfer of Library Materials for competency development is in quadrant I. This shows that the Center for Preservation and Media Transfer of Library Materials has great strengths and opportunities to improve and develop the competence of its human resources. .

Based on this matrix and the results of observations in the field, to improve and develop the competency of conservation human resources in this unit, the following strategies can be recommended: a) Facilitate conservationists to gain knowledge through education, training, bench marking (comparative studies), attending workshops and other conservation events, both at home and abroad. This includes easy licensing facilities, opportunities, funds, facilities and infrastructure. The Center for Preservation and Media Transfer of National Library of Indonesia Library Materials should be able to emulate what is done by the Center for Preservation of Library Materials of the Dutch National Library (Koninklijke Bibliotheek = KB), as stated by Foekje Boersma, Head of the KB Collection Preservation Department as follows:

"We stimulate our staff to invest in continuing education and training by following workshops, conferences etc. We have a dedicated budget for staff development at all levels at

the library. (We stimulate staff to invest in ongoing education and training by attending workshops, conferences, etc. We have dedicated a budget for staff development at all levels in the library)”

If there are limited funds, the leadership should try to find sponsors or strengthen lobbies and networks, so that budget limitations for training, bench marking and various other events that support competency development can be minimized, even if possible, down to zero budget.

b) Facilitate conservationists to obtain conservation certification from national and international institutions, so they can follow applicable conservation standards. This certification is needed, so that the competence of preservationists at the Center for Preservation and Media Transfer of National Library of Indonesia Library Materials can be recognized by the world. The Institute of Conservation (ICON) as an accreditation provider for the preservation of library materials based in the UK writes that (Conservation, n.d.):

“Becoming an Accredited Conservator-Restorer (ACR) shows clients, employers and peers that one has in-depth knowledge of conservation, a high level of competency, sound judgment and a deep understanding of the principles that underpin their practice, by demonstrating that they are proficient in ICON professional standards in conservation.”

By having or already having this certificate by conservationists at the Indonesian National Library, it is hoped that ancient manuscripts and rare collections belonging to Indonesia that are outside can be brought back to their homeland. This certification shows that Indonesia, in this case the National Library of the Republic of Indonesia, has qualified conservation human resources, who can handle the collection better.

c) Competency development in the managerial and socio-cultural fields, especially for Kapokja, Subkapokja and conservationists who are also conservation facilitators/teachers, through various training and other events. These two competencies are part of the competencies as stated in (Indonesia, 2017), that civil servants competency standards include technical competencies, managerial competencies, socio-cultural competencies. By developing managerial and socio-cultural competencies, it is hoped that conservationists will be more efficient both in institutions and in society.

d) The leadership immediately established various preservation SOPs that could be implemented at the Indonesian National Library and outside the National Library. With this SOP, it is hoped that conservationists both at the National Library of Indonesia and in the regions can equalize the output conditions of the conservation actions carried out. SOPs will also make it easier to identify conservationists' needs to improve and develop their competencies. As in research conducted at the Regional Secretary of North Bolaang Mongondow Regency where with the SOP it will be seen what things need to be improved, so that technical guidance can be implemented or carried out on human resources there, so that their competence can be improved or developed. ([Abdussamad & Amala, 2016](#)).

e) Collaborating with the National Library of Indonesia Education and Training Center to accommodate the needs of conservationists in terms of training, based on a specific training needs analysis (TNA) at the Media Preservation and Transfer Center. The needs of conservators (librarians, conservators and media transferors and archivists) in this unit are specific, unique. The conservation training and education held so far by the National Library of Indonesia Education and Training Center is general in nature, not too detailed, so it is more suitable if it is aimed at new conservationists within the National Library of Indonesia as well as conservationists in the regions. Not to mention that the facilitators (teachers) of the preservation training generally come from the National Library of Indonesia Library Material Preservation and Media Transfer Center. In this condition, the National Library of Indonesia conservationist becomes a source of learning, not a learner. In fact, what happens in the field is that National Library of Indonesia conservationists need to learn and develop their competencies further. For



this reason, learning about conservation is needed with resource persons from outside the National Library of Indonesia.

f) Create a well-structured competency improvement and development plan, along with a budget plan and funding sources. If necessary, this planning process can involve other units, such as the HR and General Affairs Bureau, the Planning and Finance Bureau, and the National Library of Indonesia Education and Training Center. The Cooperation Bureau can also be involved, if it is necessary to collaborate with external parties (especially overseas). Collaboration with external parties is needed to gain various external accesses that will support the existence of the National Library of Indonesia, especially to carry out lobbying in an effort to facilitate preservation of the National Library of Indonesia to improve and develop their competence. [Rahmawati \(2021\)](#) said that the responsibility for education and training in organizations/institutions lies with all components of the organization. Organizational leaders are responsible for delivering general policies and procedures required in implementing various training programs as well as administrative control over the implementation of training programs. The personnel department or HRD provides staff support by helping provide resources in the training program.

g) Complementing each other (sharing knowledge) with fellow conservationists independently (sourced from books, the internet, etc.), so that they can adapt themselves and their abilities to technological developments and applicable Standard Operational Procedures (SOP). This can be a good alternative for various existing limitations (funds, opportunities and so on). This continuous learning should always exist, so that competent individuals can be formed, who have competence. This is because according to [Musfah \(2012\)](#) competence is a special task which means it can only be carried out by special/certain people, where not just anyone can carry out this task. This is in line with professional duties.

Conclusion

The condition of conservation competency at the Center for Preservation and Media Transfer of Library Materials is not optimal and still needs to be developed and improved further, due to various causal factors that influence it. Internal factors include: Preservation HR competency development plans that have not been well structured, unequal distribution of HR competencies (including foreign language competencies, fluctuating enthusiasm for learning, limited budget for competency development, lack of support for existing infrastructure (especially for media transfer), feeling comfortable with the current condition/position. External Factors include: the type of training from the National Library Education and Training Center which does not accommodate the needs of preservationists, lack of socialization regarding SKKNI and other library material preservation standards.

Based on various existing conditions, this research recommends the following strategies: facilitating conservationists to gain conservation knowledge formally and informally at home and abroad, facilitating conservationists to obtain national and international conservation certification; development of competency in the managerial field at the appropriate level, as well as socio-cultural, especially for Kapokja, Subkapokja and conservationists who also double as facilitators/teachers of conservation; the leadership immediately determines various preservation SOPs that can be applied at the National Library of Indonesia or outside the National Library of Indonesia; collaborating with the National Library of Indonesia Education and Training Center to accommodate the needs of conservationists in terms of specific training; create a well-structured competency improvement and development plan, along with a budget plan and funding sources; sharing knowledge among conservationists independently; Massive outreach regarding conservation Performance Competency Standards (SKKNI) to conservationists.



Competency improvement and development is needed by the preservationists of the Center for Preservation and Media Transfer of National Library of Indonesia Library Materials, so that preservation activities at the National Library of Indonesia can run better, so that they can be more beneficial to the community. Good planning for this is very necessary, involving various components that support each other. The strategies resulting from this research are useful for implementing the improvement and development of conservationist competency at the Indonesian National Library.

For the purposes of competency development, it is necessary to specifically study the competency development needs of conservationists. This study or analysis is carried out every year, to serve as a basis for consideration of the preparation of planning and evaluation of the competency development program.

Considering the importance of the functions of conservators, one of which is conservator, it is necessary to carry out further research regarding the possibility of creating a functional position of conservator, especially conservator of library materials.

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Authors' Contributions

All authors have contributed to the final manuscript. The contribution of all authors: conceptualization, methodology, formal analysis, writing original draft preparation, writing review and editing. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

All authors have no conflict of interest related to this study.

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