Challenges in Managing Local Knowledge Transfer (LKT) Among the Minangkabau Community in Agam District, Indonesia

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Abstract. Local knowledge (LK) is unique knowledge that is confined to a specific culture or society. LK is transferred to the community to preserve a community's cultural knowledge and practices. The purpose of this paper is to investigate the challenges in managing Local Knowledge Transfer (LKT) among the Minangkabau Community (MC) in the Agam district of Indonesia. The study employs a quantitative survey design of open ended questions from 384 respondents. The data were analysed using the thematic analysis approach. The thematic analysis reveals four primary themes that depict the challenges of managing LKT (1) society itself (person, family, and leaders), (2) education, (3) modernization, and (4) and information storage media. Recommendations from respondents regarding the challenges in the transfer of LK are (1) the development of education-based customary areas, (2) making the younger generation agents of change in civilization, (3) creating a model transfer for LK, (4) LK is conveyed through social activities, traditional ceremonies, and various other activities, and (4) utilizing technology in the process of transferring LK.

Keywords: Challenges · Knowledge Transfer · Local Knowledge · Minangkabau Community

1 Introduction

LK is the knowledge found in local communities that consists of a set of experiences that have been accumulated and provides information that shows the local community or local culture's behavioral characteristics. Cultural awareness is generated and preserved by community leaders and is part of the community's heritage. There is a lot of LK awareness in the community's but it is all in the context of tacit knowledge that is not well known. This tacit knowledge is also recognised as tribal knowledge, knowledge of the people, awareness of traditional knowledge, or traditional research. According to several experts, LK is a dynamic and complex body of information, traditions, and

skills that are developed and maintained by communities with histories and common experiences [1][2][3].

An endeavor to preserve cultural values that have developed into habits or customs in a community group or region is made by studying and learning about local knowledge. It is important to preserve these cultural assets so that future generations can benefit from and enjoy the current LK. But the challenge that must be faced is how the LK-owned remains in the community.

This LK is developed through oral traditions or informal education and the like and is added from new experiences, but this knowledge can also be lost or reduced. Usually, LK is not relevant to change is often loss or abandoned. Meanwhile, LK is also very dynamic, hidden, and only owned by certain people or groups, and the transfer process is carried out orally. This makes it possible for deviations to occur, reduces the value of information, and even loss of knowledge in the transfer process [4]. This greatly affects the continuity of the group in the future and has an impact on the identity of the group, including Minangkabau Community (MC), especially in the Agam district of Indonesia.

2   Background

LK is a legacy from the previous community which is an accumulation of experiences and norms that have been agreed upon by society. LK is specialised information that is restricted to a particular culture or society. This is also recognised as tribal knowledge, knowledge of the people, awareness of traditional knowledge, or traditional research. In Indonesia, the richness of awareness of local populations has evolved together with the growth of human society. The cycle of creation has given birth to other common awareness and principles emerging from the adaptation phase. Indonesia is made up of different ethnic and multicultural groups (religious systems, customs, procedures, language, arts, crafts, regional skills, etc.) and this is a characteristic that enriches the Indonesian people's values of life.

Nevertheless, most of this LK is still stored in tacit form almost all over the world, including in Indonesia, especially in the MC, of West Sumatra. The MC is the socio-cultural component that lives in the community itself, this condition is supported by the existence of customary rules that are framed in such a way based on the guidelines of Islam as *"adat basandi syarak, syarak basandi kitabbulah"* [5].

Regional knowledge is a custom transmitted, firmly connected to the lives of men, which may be in the shape of customs, petitions, wise phrases, the slogan of existence, and others. The plurality must therefore also be maintained and established thus preserving the worthy ideals of the society of the country. The real Minangkabau identity has influenced national culture in several ways, including through language, art, and other parts of tradition [6]. The concern about the loss of LK that occurs in the current social structure of society is quite large because once the knowledge owner dies or leaves the community, LK is lost.

There is an increasing awareness of the importance of preserving LK that lives in local communities and the values contained in them. This knowledge should be passed on to the next generation. The two steps of the knowledge transfer process are knowledge transmission to a potential receiver and knowledge absorption by that recipient to support

behavior adjustments or the creation of new information [7]. The existence of knowledge transfer is one form of the process of communicating knowledge [8]. Transfer of LK tends to be done orally and continues from generation to generation. These transfers raise new questions about how knowledge is created and shared, what safeguards are in place to preserve the integrity of these knowledge interactions, and how those interactions may be assessed [9].

Every person in society has information unique to the various and specific circumstances in which they work and necessarily learn, and this particular knowledge can occasionally be quite crucial [10]. One's LK becomes an important tool in ensuring the sustainability of social development in local communities. These hierarchies will help to show how crucial LK is to the knowledge sector as a whole and how we can develop it more effectively in the future. In numerous fields, LK is important [11]. Community members frequently have implicit or tacit knowledge of the surrounding region. In other words, people pick it up through experience or by watching others. Rarely are documentation or discussions about it written in the local community. The fact that LK is frequently transmitted orally and has not been codified makes it difficult to use and share with other communities. Making it available for usage and transmission from generation to generation includes codifying it.

3   Method

Quantitative data was collected through open-ended questions contained in the questionnaire distributed to respondents. The open-ended questions were designed to gather information about the challenges and recommendations for LKT in the MC in Agam District, Indonesia. Open-ended questions permit participants to answer on their terms without being constrained by predetermined response options [12]. Open-ended questions were analyzed using thematic analysis. Thematic analysis was applied in this study with the aim of identifying the pattern of respondents' answers to the questionnaire [13][14]. Thematic analysis is a good research approach in which the researcher tries to find something about people's views, opinions, knowledge, experiences, or values from questionnaire data. In total, 384 respondents (129 men, 255 women) from 16 sub-districts in Indonesia's Agam district was collected.

4   Result and Discussion

This section discusses the findings according to the challenges of managing LKT among the MC in Indonesia.

4.1   Challenges of Managing Local Knowledge Transfer

Four main themes were found through thematic analysis to represent the challenges in managing LKT. The sections below offer a thorough explanation and discussion of each theme.

4.1.1 Communities

Respondents believe that the challenge in transferring LK comes from the communities with sub theme from a person, family, and its leaders.

4.1.1.1 Person

Respondents think that the challenge comes from themselves, among others, they say: (1) generally, local knowledge is understood and practiced by parents, and most of the younger generation is less concerned about local knowledge, (2) lack of public curiosity, especially the younger generation, towards LK, and (3) lack of public interest, especially the younger generation, to learn local knowledge passed down by previous generations. People feel embarrassed if they still maintain and use local or regional culture [15].

Due to the tremendous challenges they face in sustaining local cultural practices and values rooted in local knowledge systems, youth in particular will forge their pathways [16]. The experiences, values, and insights a person has felt and experienced in his life are part of that knowledge.

4.1.1.2 Family

Respondents think that the challenge comes from the family as follows: (1) some families do not introduce LK to their children, (2) lack of good socialisation from the family to their children because now in the modern era, many people leave behind some customs and go against existing customs, and (3) changes in the function and role of the family about the life of society as a whole.

A husband lives with his wife's family, and the education process for children is under the control of the mother and her relatives, especially her brother (*mamak*) [17]. *Mamak* will teach the children how to maintain the culture because he gets the task directly from his ancestors. Children, in this term are called "*kamanakan",* will be trained by their mother on how to be good leaders among the community.

Adolescents born in to the Minangkabau community tend to prefer learning about Minangkabau culture from their parents [18]. On the other hand, the habits of oral traditions in the family affect the knowledge transfer model that occurs both between parents and their children or family members as well as between one family and another family in a community group. Implicit knowledge is created in the experiences of their parents and makes them knowledge givers (experts). The regeneration process in the family certainly also causes the transfer of LK from one generation to the next. They will inherit local knowledge related to livelihoods and traditions that is among community.

4.1.1.3 Leader

Respondents think the challenge that comes from the leader is due to, (1) lack of human resources who understand LK itself, (2) lack of socialisation about the custom to the younger generation who consider custom issues to be something ancient and they prefer modernization to ancestral culture, (3) lack of role of *"mamak"* in socialising customary cases, and (4) lack of role of *"ninik mamak",* and traditional stakeholders.

Leadership in Minangkabau society consists of traditional leaders (*ninik mamak*), religious leaders *(alim ulama)* and community leaders *(cadiak pandai).* Traditional leaders, who create policies, make sure that values and norms are consistent with their roles

as well as several other regulations that act as benchmarks for the community in how to manage the local knowledge they gather [19].

4.1.2 Education

Respondents think that the challenge that comes from education is due to the, (1) lack of special education regarding local knowledge both formally and informally, (2) *Budaya Alam Minangkabau (BAM)* natural culture learning is not taught at all levels of education currently, and (3) the educational background of the community is varied.

The world of education is the right place to preserve traditional arts, especially for the younger generation [20]. Based on the execution of education's guiding principles, LK values can be incorporated into a variety of joints [21]. LK can function as controls and signs in behavior so that students are not only educated in the field of knowledge and skills but also in attitudes and behavior. It is expected that schools adopt the values that exist in LK such as religious values, cooperation, arts and literature, and local skills to be integrated into subjects and self-development programs for school students.

4.1.3 Modernisation

Respondents think that the challenge comes from modernisation; they say (1) the era of modernization eroded LK in Minangkabau society, (2) the entry of foreign cultures and technological developments into people's lives affect LK that exists in society, and (3) changes in globalisation, and the occurrence of modernisation, so that there is a bad influence on society.

It is undeniable that technological advancement has a good impact on the development of the digital technology trend, but this phenomenon also lowers our society's enthusiasm for traditional art [22]. This is why innovation and adaptation are essential and have always been a component of Indigenous and LK, responding to the altered characteristics of a situation and its unique social, technological, and economic problems [2]. In addition, a strong introduction to cultural heritage for the next generation can help the country maintain its traditions in the face of difficulties that will arise in this period of globalization [6]. The Minangkabau people believe that some of their customs cannot change, although others can change because they adapt to the times [18]. It is impossible to separate culture from people's lives since culture is closely related to the beliefs, norms, attitudes, and behaviors that are accepted by members of community groups and then engrained in daily behavior [23].

4.1.4 Managing and Storage Information

Respondents think that the challenge that comes from managing and storage information is (1) very few sources of LK are stored in printed form, so the transfer of this information is mostly direct or verbal to oral, and (2) the limited media that stores information about Minangkabau customs, (3) the utilization of new technology and media has not been fully carried out so people who want to learn about Minangkabau customs must come to the right experts, (4) LK is not packaged in an attractive form, and (5) Minangkabau people generally create, produce, and disseminate information generally by word of mouth. I

think communication or delivery methods can also be a challenge. The Minangkabau people prefer to tell stories by word of mouth, so this causes a limited number of owners of this knowledge.

In relation to the challenges of exploring LK, we have highlighted the need for a more informed and critical approach to LK [24]. It is difficult to transfer tacit and socially complex information because the integration process creates a distinctive, transitional, and hybrid organisational structure that exacerbates sociocultural barriers to knowledge transfer [25]. Bruchac (2014) states that this LK can be conveyed formally and informally among groups of relatives and communities through various social gatherings, oral traditions, traditional rituals, and other activities [26]. This documentation is done right away so that future generations will know and cultural assets will not merely vanish [20]. Directly entering the field and delivering it to primary schools as instructional materials in the *BAM* field is one way to record LK. This documentation reveals that young people had a rekindled interest in printing or replicating forms for LK documentation as a cultural asset for use in the field of education.

It is hoped that the strategic role of local institutions in preserving awareness of various social changes that occur in the community will lead to an analysis of library science, especially regarding the management of local wisdom in the management of relevant information services that can be accessed by the community.

Libraries are educational centers that act as sources of information, and as intellectual property, librarians are responsible for maintaining awareness of traditional culture. In this case, the role of the librarian is (1) capturing traditional knowledge with the characteristics of traditional knowledge that exists in the community through friendly documentation methods, (2) being a communicator, and (3) the value of the intellectual property [27]. This is a momentum for literacy and cultural empowerment activists, to educate the literate community about local information sources. To be able to investigate the knowledge contained in various cultural elements, information literacy is needed, especially cultural literacy [28].

4.2 Recommendation to Improve the Local Knowledge Transfer

Recommendations from respondents regarding the challenges in the transfer of LK are (1) making the development of education-based customary areas can be used for the process of transferring LK to the general public especially in managing and storing the information. National Library, Universities or any other related agencies should offer Information Literacy Education for the communities as a basic for them to know on how to manage their local knowledge as part of their culture heritage for future references and for communities knowledge development, (2) making the younger generation agents of change in civilization and leadership plan, (3) creating a model transfer of LK, (4) LK is conveyed in social activities, traditional ceremonies, and various other activities, and (4) utilizing technology in the process of transferring LK.

5   Conclusion

LK includes a variety of cultural, social, religious, spiritual, and environmental components. This information has been practiced and incorporated into people's knowledge

systems throughout history by succeeding generations. Because of this, community institutional structures play a crucial role in assisting the incorporation of regional knowledge into the larger world. It is anticipated that LK would grow and become more integrated into the global economy. Information and communication technology to improve abilities to expand access to LK. The role of the library becomes very important as a form of effort to maintain and preserve the values of local knowledge through activities to manage and store information. This is where the results of the nation's culture are collected, recorded, grouped, preserved, and served to the community for further development.

The MC, particularly in the Agam Regency, has a type of LK that is part of tacit knowledge (implicit knowledge), which has a cognitive dimension and a technical dimension. As a result, it needs to be developed and preserved to ensure the continuity of knowledge production in the community. Maintaining LK is very important for the indigenous people and local communities despite the many challenges faced in the process of transferring LK. This study is anticipated to be a starting point for further discussion of the difficulties faced by Indonesia's LK transfer process.

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