# Development of Metadata Scheme for Intangible Cultural Heritage Management: A Case Study of Folk Gajasastra Inherited Wisdom of the Kui in Surin Province

#### **Supasinee Wichien**

PhD. Student in Information Studies Program
Faculty of Humanities and Social Sciences, Khon Kaen University, Thailand
onlyaon@gmail.com

#### **Lampang Manmart**

Information and Communication Department
Faculty of Humanities and Social Sciences, Khon Kaen University, Thailand
lamman@kku.ac.th

#### **Abstract**

Intangible cultural heritage is a reflection of the system of thought and the potential of man. An important aspect is abstract and express in various forms such as lifestyle, art of performing, artifacts etc. Its can be shown the development of living in a group of human beings. This intangible nature is at risk of being violated or lost. The basic problem is that these intangible cultural heritage is not systematically managed. Legal measures are not effective. This study focus on the development of a metadata schema for standardized management of intangible cultural heritage. This is the basis for the development of the intangible cultural system. And effectively support the protection of intangible cultural heritage.

## **Background and Rationale**

Knowledge is now a valuable resources and can be creative various product or innovation to develop the economy to be competitive in the global market. Creative economy is the concept of knowledge, education, creativity and the use of intellectual property that linked to cultural knowledge, wisdom, technology and innovation to create a unique product or service. There are differences and added value (John Howkins, 2001). This idea emphasized that cultural knowledge create products and services that added economic and social value. This concept makes each country's culture become to resources that can be used as an important mechanism to drive the country's economy. The culture and traditions of Thailand are unique. Through the accumulation and has long been inherited. Thailand has the knowledge to develop into many creative assets, so has a foundation of culture that is ready to be developed. It is the capital to build on innovation and creativity to become intellectual property and stimulate the economy of the country to compete with other countries.

But over the years, intangible cultural heritage has been threatened. It is characterized by concepts, ideas, beliefs, skills, knowledge, way of life, values, traditions, and patterns of relationships between people and nature and with those in society. There is a risk of decay with the previous generation. Reproduction and use for commercial purposes of foreigners. It is distorted in the wrong way. From such a worrisome situation. As a result, international cultural heritage has begun. The relevant international organizations have begun to take legal measures to protect the intangible cultural heritage. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has organized a Convention for the Safeguarding of Intangible Cultural Heritage (Unesco. 2003). This has clearly defined concept and scope of intangible cultural heritage, its refers to the practice of expression, knowledge, skill, as well as tools, objects, artifacts, and cultural areas associated with them, to which a community or in some cases, an individual, be part of their cultural heritage. Intangible cultural heritage is passed on from one generation to another, which is constantly rebuilt by the community and people. Their interaction with nature and history, and they make pride in their identity and sense of continuity, cultivating respect for cultural diversity and human creativity and ha also classified five types of intangible cultural heritage: 1) expression and verbal practice 2) Performing Arts, 3) Society's traditions rituals and festivals, 4) Knowledge and expression related to nature and the universe and 5) Craftsmanship. In addition, The World Intellectual Property Organization (WIPO), and governments has enacted a law to protect the intangible cultural heritage of their country. Thailand was aware of the situation, in 2009 National Cultural Commission has prepared a project to protect the intangible cultural heritage, and recently announced the enforcement of the Act to promote and preserve the cultural heritage of 2016. There are six types of intangible cultural heritage: 1) Folk literature and language 2) Performing arts 3) Social practices, rituals, festivals and festivals 4) Knowledge and practice about nature and the universe 5) Traditional craftsmanship 6) Folk play, folk arts and martial arts self protection (Government Gazette. 2016)

However, taking legal measures does not solve the problem of intangible cultural heritage. Because intangible cultural knowledge is scattered by various sources, not storage and systematic access, and there is no agency or caretaker with knowledge of such knowledge management. In the beginning, cultural knowledge management must be systematically managed digitally. By standardizing the storage of digital data, called metadata, metadata can help to set standards for storing knowledge and cultural information in all forms. Both print media, audiovisual media and digital media. The database has a standardized storage, distribution, and sharing infrastructure. Its can exchange or search information or information resources together. Although the cultural database system of the various agencies are different. The researcher has chosen to develop a metadata for the management of folk gajasastra inherited wisdom of the Kui in Surin province. This is an intangible cultural heritage as knowledge and practices concerning nature and the universe. Folk gajasastra is a lifestyle of Kui and elephants, consist of knowledge, skills, traditions and culture. It is abstract and difficult to maintain. There is also a risk of loss, because the Kui people are small group, so when technology advances influenced by foreign culture to new generation of life. The traditional Kui culture became a mixed culture and may eventually be lost.

The preliminary study to the extent that the branch of study dealing with Kui's elephant and analysis knowledge Structure. Using the concept of knowledge organize as aspect classification is a structure that focuses on categorizing knowledge. Classification of knowledge to gain knowledge domain in the field of related science within knowledge content. Classes are divided into sub-categories, sub-classes and division (Broughton, 2006) Then use the conceptual model to define the components and relationships between the metadata elements used to describe each type of information resource, using the FRBR Model (Functional Requirements for Bibliographic Records). Analyzing the composition of the bibliography can serve the purpose of the application. and meet the needs of information search user (IFLA. 2008). Then, it is the process of setting elements (Element set) using the Application Profile concept (APs concept) by comparing metadata and finally evaluate metadata. Concepts and theories in information science, Its helps to manage the knowledge of culture as a system and standard and ready to develop into a powerful knowledge system.

## **Research Objectives**

- 1. To study the knowledge structure of folk gajasastra inherited wisdom of the Kui.
- 2. Study of knowledge management in the field of folk gajasastra inherited wisdom of the Kui.
- 3. To study the behavior of access to knowledge of folk gajasastra inherited wisdom of the Kui.
- 4. Develop a metadata schema standard for folk gajasastra inherited wisdom of the Kui knowledge.

## Literary review

To study the development of metadata schema for intangible cultural heritage management. Researchers have studied literature and research related to the management of intangible cultural heritage both in Thailand and abroad. The concepts and theories involved are as follows.

From the study of management of intangible cultural heritage to the present, there are two types of management: legal protection. and conservation of intangible cultural heritage. International organizations urgently take legal measures for international protection. Resulting in countries accelerate the preparation of laws or regulations for protection the intangible cultural heritage of their own country. For the conservation of intangible cultural heritage. It is the responsibility of organizations that have direct responsibilities, such as museums, archives, repository, data centers, cultural centers, etc. These organizations collect and storage media of historical stories, narratives, wisdom, crafts, traditions, festivals, rituals, and performances, including publications, audiovisual media, digital media, cultural objects and people with cultural knowledge. In foreign countries, metadata developed for manage cultural resources such as the Digital Archive Initiative (DAI) initiative of the Memorial University of Newfoundland, Canada, has developed metadata. It is the standard for storage digital cultural resources from three types of media: audio recordings, online video and photographs (Museum Association of Newfoundland and Labrador. 2016) Espoo City Museum of Finland, metadata has been developed for the storage of video tapes and audio tapes that record the process of footage local Finnish craftsmen (Kettula, Suvi. And

Hyvonen, Eero. 2012) and Japan's cultural heritage online project have developed a metadata standard for storage digitized cultural. It covers both tangible objects such as paintings, buildings and other artefacts, and intangible objects including theatre performances and dance, as well as art that creates artefacts.(Kando, Noriko and Adachi, Jun. 2004) Thailand has developed a system of hand-woven textiles. Using the concept of the American Parliamentary Library System, use roman and arabic numerals as symbols (Wanatrong, Sarapee. 2008).

Therefore, the management of intangible cultural heritage has passed, management of resources involve stories or events of intangible cultural heritage in various types, but it is not inappropriate to manage knowledge of the intangible cultural heritage.

Intangible cultural heritage means the practice of communication, expression, knowledge, skills, tools, objects, artifacts and cultural areas, related to things. As mentioned above, communities, individuals or individuals recognize as part of cultural heritage, and has many successors by community or individual groups have been re-created regularly in a way that interacts with the environment, nature and history and there is an expression of identity and continuity.

It promotes respect for cultural diversity and human creativity. There are five categories of cultural heritage, 1) Oral Traditions and Expressions 2) Performing Arts 3) social practices. Rituals and Festive Events 4) Knowledge and Practices Concerning Nature and the Universe 5) Traditional Craftsmanship (Unesco. 2003).

Knowledge organization systems have a knowledge structure that is created for one purpose. The knowledge structure that shows the knowledge domain in each discipline and the relationship of knowledge in each discipline is clear. Classification structure can be used to display the content of knowledge domain in the subject area and relationship in each subject. Knowledge structures can be categorized as follows: 1) Scientific classification and taxonomies 2) Folk classification 3) aspect classification. In defining the structure of knowledge in the field of folk gajasastra inherited wisdom of the Kui, the aspect classification is based on knowledge based model of classification, which is used as a basis for grouping knowledge of important disciplines (Broughton, 2006).

Metadata is structured information. for description, location, or gives other information. This will allow easy retrieval and manage the information resources (NISO. 2004). Metadata is information that is in the form of digital media. It has two properties: structured data and metadata generated from the information generated to describe the information resources. There are 3 components: 1) content 2) context and 3) Structure. For literature studies the metadata development process show that a number of organizations and academics have studied and proposed metadata development. The researcher synthesizes the major metadata development steps into 3 main stages: phase 1 is a baseline study to develop metadata requirements, phase 2 is develop metadata schema. By using physical and content characteristics of information resources to analyze the properties of the metadata required, and phase 3 is test and evaluate the metadata schema developed.

Functional Requirements for Bibliographic Records (FRBR) are conceptual models, and focus on the search of user information. User tasks are tasks that involve the use of large

amounts of information to find and obtain required information resources, including find, identify, and select information that meets the needs, then access or gain information by means of obtain, shows the relationship of bibliographic items of various information resources and have a clear link. Its can be shown bibliographic relationships between works and creators. This will help the user know the difference of the work in case there is a difference in the volume or physical characteristics are different. It is a new way to store information. This helps to develop a way to search and access bibliographic entries that are appropriate for user behavior (IFLA 2008).

## **Conceptual framework**

Metadata concept and metadata schema development are used base concepts to develop a conceptual framework for the development of metadata schema for managing intangible cultural heritage. Metadata concept and folk gajasastra inherited wisdom of the Kui knowledge structure are used to define the metadata element layout features for the management of intangible cultural heritage. Metadata schema development. The current study apply the metadata lifecycle as a development step for metadata analysis, and apply of FRBR and application concepts Profile (APs) to set the metadata element set. The conceptual framework is as follows.

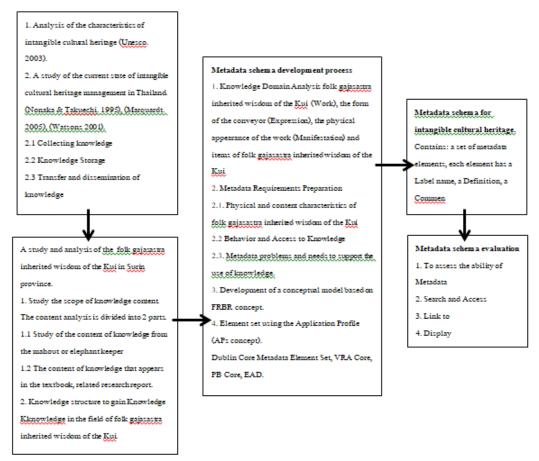


Figure 1 Research conceptual framework

# **Research Methodology**

Research and development was used to develop metadata schema and has divided into step:

1) Research step is use qualitative research to study the basics of metadata requirements. Metadata requirement is the study of the use behavior of folk gajasastra inherited wisdom of the Kui, content analysis knowledge structure and the domain analysis of folk gajasastra inherited wisdom of the Kui based on the concept of FRBR are then developed into the knowledge-based domain. 2) Development step is the use data from the study of the first step to set the elements of the metadata schema. Then apply the metadata schema and evaluate the metadata schema.

# **Expected outcomes**

The current study develops a metadata schema for management intangible cultural heritage. Although the intangible cultural heritage, the type of knowledge and practices concerning nature and the universe has chosen to develop, but it is expected that can be applied to the storage of knowledge of other types of intangible cultural heritage. The same is important as knowledge, the idea of human accumulation. Therefore, intangible cultural knowledge is stored in a standardized and systematic. It will help to ensure that intangible heritage protection measures are truly effective.

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