

# Directory and Inventory the Database of Silk Weaving Ornaments ‘Sabbe’ Sengkang as a Creativity Enhancement Equipment

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## ABSTRACT

This study aims to arouse creative efforts to support the diversification of Sengkang silk weaving products using the innovation strategy approach. Indexing motif data is a referential directory or method to document all the motifs of the work of the weavers intended for; (1) identify, classify, and curate the various motifs that have been produced; and (2) is used as the basis for the development of innovations in weaving motifs which are expected to penetrate local and global markets.

**Keywords:** *Directory, inventory, base data, creativity, sabbe industry*

## 1. INTRODUCTION

The Wajo community has been managing silkworm industries for generations on a home industry to the middle industry scale for hundreds of years as a side activity. The industries start from upstream to downstream processing activities, and even maintenance activities. The activities include the spinning process becomes a thread and woven it into a piece of silk cloth.

The use of synthetic materials, product diversification, and development motif/ornament is a concern of government in Wajo. The issue of indexing various data currently is partially available to identify the common threads of various problems and become the most significant opportunity for the development of silk-based Sabbe Sengkang. Below are some data that may be put into the develop database to enhance creativity as an output product: 1) Intangible Heritage Problem; 2) Intellectual Property Protection Problem; 3) the Development of Creativity Design.

The purpose of this study is to encourage the creation of distinctive South Sulawesi silk to enrich the archipelago's silk weaving repertoire. The database of motif data is a referential directory method to document all the motifs of the weavers work intended to; (1) identify, classify, and curate the various motives that have been produced; and (2) be used as the basis for the development of innovations in weaving motifs which are expected to penetrate local and global markets.

## 2. RESEARCH METHOD

Several research in design have been done using various method. The categorization of research in design has primarily based on Christopher Frayling's categorization. He made a distinct line between what he called 'research into (or about) design,' 'research through (or by) design' and 'research for design'. These terms have similar meaning with the ones that defined by Organization of Economic Cooperation and Development (OECD) in their manual. [1]. Based on the definition, this study attempts to use experimental design method which has similar purpose as the research for design term. The other reason is the fact that there are lack necessary development efforts in the field of silk motif design. They indicates the number of missing link of the various efforts that had been undertaken. Thus, the proper method to do that is by using research methods of design. A variety of methods is used as a technical step in the phase of analysis, synthesis, and the phase of evaluation.

## 3. RESULT AND DISCUSSION

The various literature reviews related to Sengkang silk are generally explained through many approaches such as the historical, traditional, cultural, social, humanitarian, religious, technical production, and economical approaches. The primary thing as an initial

step to compile the Sengkang silk ornament and its directory is by collecting various literature data, both archived and not archived.

Sengkang silk weaving industry is one of Indonesia's mainstays that can be projected as one of the export commodities with various derivative products (diversified). Some directions from the development of this creative economic business, namely development that focuses more on industries based on (1) the field of creative and culture (2) creative industrial business fields, or (3) Intellectual Property Rights such as copyright (copyright industry). Therefore, efforts to develop the Sengkang silk industry should also be focused on the three bases mentioned above.

The transformation of silk industry transformation in Wajo illustrates the cultural dynamism practiced by people of Wajo following the development of civilization. It is shown that Wajo people is critical openness to the change. As a cultural and economic activity, the weave in Wajo has undergone a transformation process that is long enough since the 13th century until today. The weavers Wajo was continually innovating their products to fit the existing development or market tastes. This situation is supported by the culture power of weaving that is adaptable to the different periods [3].

### **3.1. The Transformation**

The transformation process of shades started from vertical and horizontal pattern era (*balo mattetong and makkalu*) (years 1400-1600) and style plaid/palekat (1600-1900). Nowadays, the local people have started to combine these two motif which is known better as half display patterns (1900-present). The new motif which occurs in the weaving activity in Wajo is not eliminating pre-existing pattern. Similarly, this is also happens in the use of a loom to produce silks. In the beginning of 13th century, people use the loom 'Gedogan'. They changed the loom into handloom in early 1950 and started to use Semi Machine Looms at the beginning of 2004.

### **3.2. Local Wisdom**

Indeed, the silk weaving industry in Sengkang is protected by the due based on identity and consciousness's integrity. Wajo community is an heirloom culture that has lasted for generations. The weaving activities in Wajo conducted based on the cultural consensus 'Siri' as 'Wija To Wajo.' which means the dignity as a Wajo people. The local wisdom contained in the woven fabric has some functions in the Bugis community, namely: woven as the everyday

clothing or as a means to cover the body in resisting the influence of the natural surroundings; woven fabric as a gift; woven cloth as a symbol of status and prestige that are considered sacred; and woven fabrics as objects used in traditional ceremonies.

### **3.3. Existence Inheritance of Cultural Objects**

Moreover, the weaving activities which is generally done by Bugis Wajo women is based on hard work ethics (*reso/pajjama*), perseverance (*tinulu*), and precision. Therefore, a woman who can complete one piece of woven fabric are considered worthy of marriage because she already has the qualities needed in married life. Hard work ethics (*reso/pajjama*), perseverance (*tinulu*) are not only owned by men who have responsibility for meeting family needs. Women are also required to have these qualities as part of their responsibility in helping their husbands to fulfil their family's economic needs. At this position, the meaning of the Bugis' local wisdom, who say that women who have been able to produce one sheet of woven cloth are considered to be eligible for marriage.

### **3.4. Directory and Inventory the DataBase**

Building and collecting data into a directory system are very fundamental thing that must be done by a stake-holder or the government as an institution that is closely linked with this effort. By considering the natural systems and environmental quality in the business analysis certainly support the continuation of a business (sustainability) [2].

#### **3.4.1. The Range of the Basic Data**

Social and cultural aspects consisted of forms, elements, function, and value. All results in the form of ideas, actions, and social works in the context of human life. They are used as human property for learning and become forms of culture. This means that all human action is a culture.

#### **3.4.2. Human Aspects as Actors**

It is necessary to invest human capital in education and training and then expand it into scientific research and development. Education and training will enhance the knowledge and skills to improve productivity, added value, and competitiveness [3]. Therefore, to generate creativity and the positive impact, it would require four capitals, namely (a) human capital, (b) social capital, (c) the cultural capital, and (d) the institutional structure of the capital.

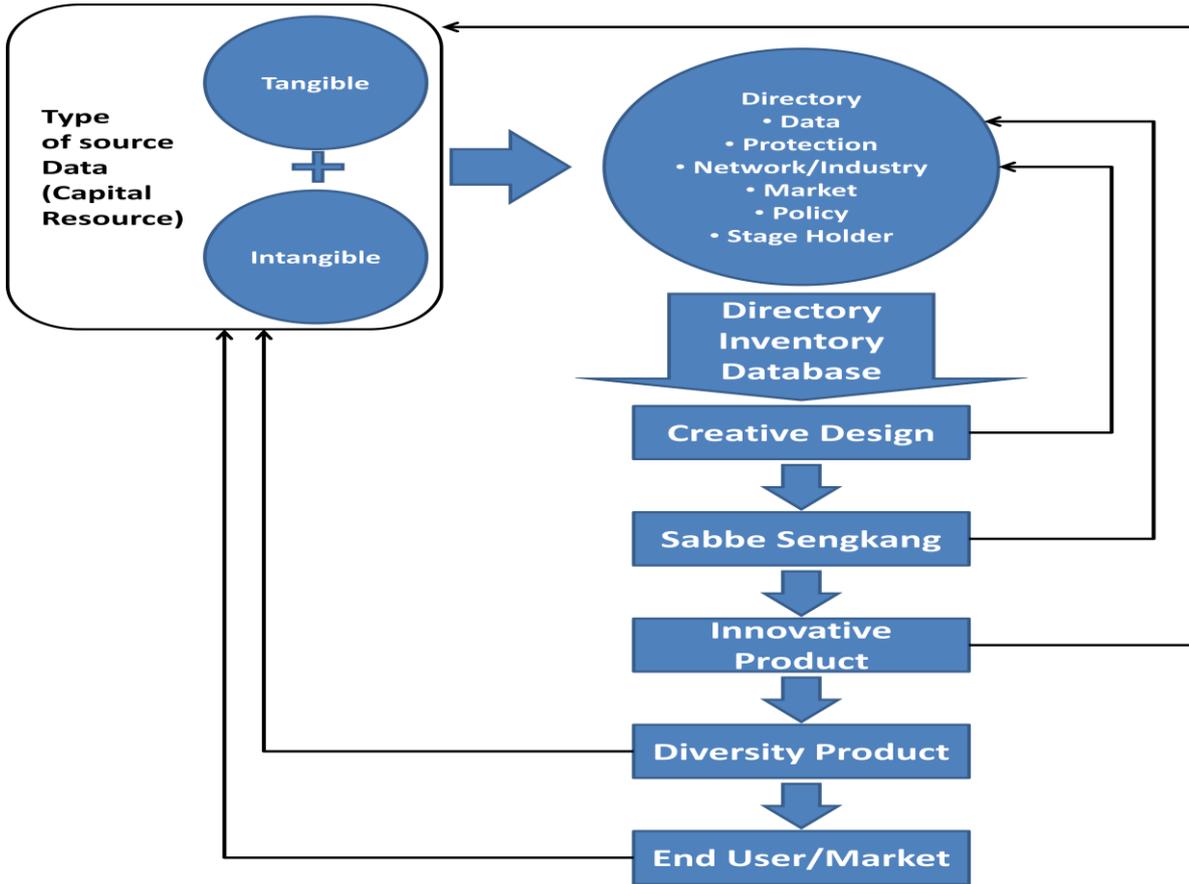


Figure 1 Operational flow

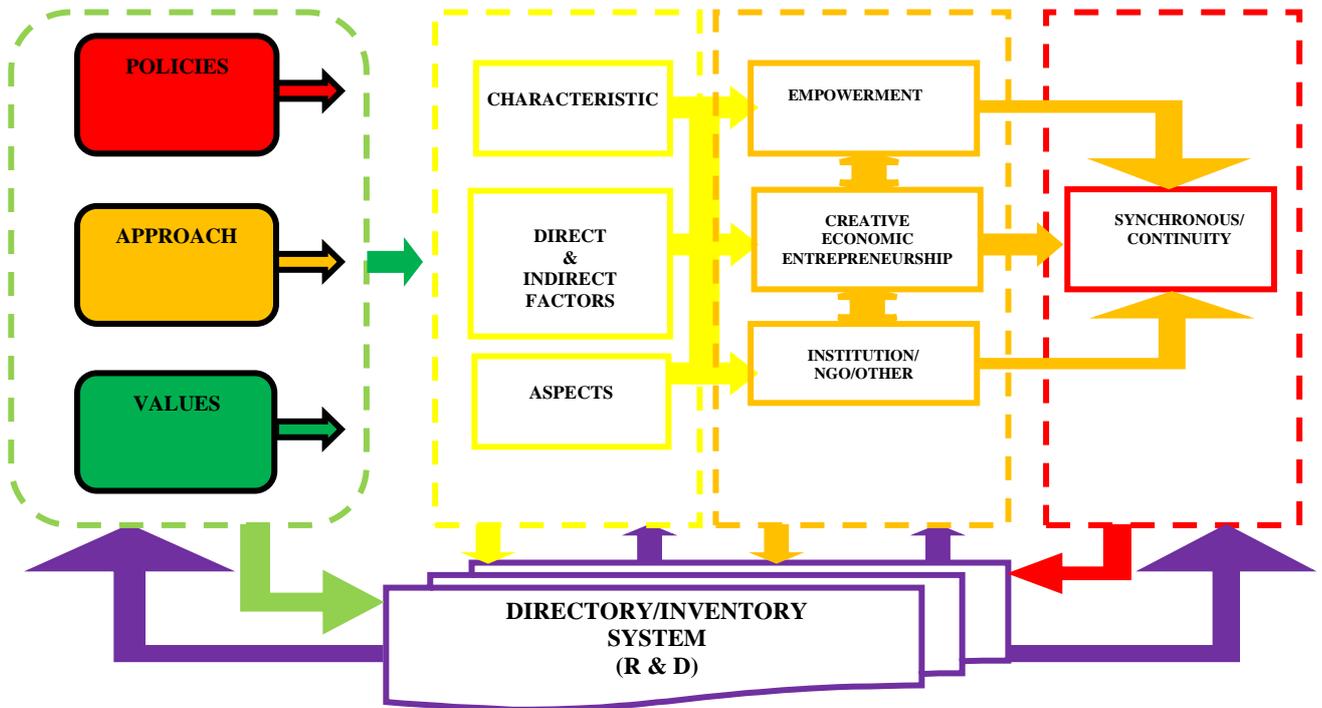


Figure 2 Directory Management System

### **3.4.3 Knowledge Aspects (Technical Skills)**

People can renew their existing ability through education and training. Fulfillment of ability is done to have functional knowledge and skills which also supported by technical abilities.

## **3.5. Various Data**

### **3.5.1. Intangible Data**

Intangible assets have no form of value and are not physical. The example of the assets are policies, brand rights, copyrights, and other intellectual property. Intangible assets can also be in the form of ownership of land, vehicles, equipment, and other inventory items. These definitions indicate that the silk weaving processing knowledge from upstream to downstream in a comprehensive manner is a precious asset for the community of Wajo.

### **3.5.2. Tangible Data**

Tangible assets are physical assets and have limited value or price. It can be used as capital to be transacted through different market liquidity, including current assets or long-term assets. Tangible assets have a theoretical value rather than transactional value [4].

## **3.6. Creativity**

The creativity of scientific knowledge related to the curiosity feeling to continue solving the problems which can lead to form the economic creativity. The processes are very dynamic activity and lead to models of technology innovation, business, marketing, and other business. These will then result in achieving competitive advantage in the economy, including cultural creativity in the form of products of art, design, and other related activities [5]

## **3.7. Protection Property Rights**

Intellectual property is the principal capital of creative industries that creates individual activities, skills, and talents, which have the potential to create jobs and wealth through generations through intellectual property[6]

## **3.8. The Concepts Database Application in The System Directory**

A directory is a file system consisting of several components, which can be divided into several subdirectory. Each of these sub-directories can have more than one subdivisions containing sub-directories. On the other word, the storage method is based on large to smallest groupings in the directory system. This large

grouping is called the parent directory. The parents can have small directories which called the child directory, and so on. Directory structures like this are commonly referred to as hierarchical directory structures. It is generally known as directory of trees.

## **3.9. Management of R & D and Innovation**

Some references that can be used are as important term; (1) Invention; (2) Innovation; (3) Discovery; (4) Creativity; (5) Patents; (6) Trademarks; (7) Copyrights;(8) Science; (9) Engineering; (10) Technology; (11) Design.

## **3.10. Mechanism That Affects Invention and Innovation**

Every company and market wants the birth of innovation that does not arise from other ideas (modification). As the innovation acts a basis for the creation of products and services in the future, its presence is essential for every business's survival in the long run. Research shows [7]. prioritizing assumptions in business is fragile. The actual product potential must continue to be explored based on new data and various changes to the plan and its development. Christensen called this a technology-agnostic marketing breakthrough, in which the product at the start of its development was considered radical. Its development was previously unknown, as was the initial process of an innovative product [8].

## **4. CONCLUSION**

- a. Efforts to develop the potential of available local resources, both in the form of woven products and other various aspects of local ethnic culture, by starting the application of the 'Database Directory System Management Method' related to all detailed data from upstream to downstream are the key in finding out various problem constraints. They no longer see the problem partially, but comprehensively and with various methodological steps accompanied by strategic formulations to solve the problem.
- b. It is necessary to develop and preserve Sengkang Silk Weaving as a national cultural asset, by encouraging efforts to build a 'Research Data Center and Technical Data of Weaving Pattern Design Data' accompanied by efforts to protect their intellectual property.
- c. It is important to make efforts to encourage the creation of a variety of decorations, patterns, and ornaments typical of South Sulawesi. These efforts are needed to enrich the treasures of the archipelago silk weaving with the conception of creative economic approaches. The involvement in efforts

include building psychological power to continue to create, collaborate, and competence.

- d. The directory is made with the aim to develop derivative products in the form of a diversified conception of products based on a woven fabric produced by silk weaving craftsmen in Sengkang into end-products (design products) as potential alternative products that can be directly addressed to end-users.
- e. Output products become the strength of diversification of products made from woven Sabbe Sengkang in the form of Tangible Products and Intangible Products. Both have visible and invisible values.
- f. Some model recommendations and development methods are feasible to be implemented and enriched again.

- [8] C. M. Christensen, *The innovator's dilemma: when new technologies cause great firms to fail*. Harvard Business Review Press, 2013.

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## **REFERENCES**

- [1] I. Engholm, "Reflecting Contemporary Design Research," *FormAkademisk-forskningstidsskrift Des. og Des.*, vol. 10, no. 3, 2017.
- [2] A. M. Omer, "Energy, environment and sustainable development," *Renew. Sustain. Energy Rev.*, vol. 12, no. 9, pp. 2265–2300, 2008.
- [3] R. W. Schwartz and C. Pogge, "Physician leadership: essential skills in a changing environment," *Am. J. Surg.*, vol. 180, no. 3, pp. 187–192, 2000.
- [4] B. H. Hall, G. Thoma, and S. Torrisi, "THE MARKET VALUE OF PATENTS AND R&D: EVIDENCE FROM EUROPEAN FIRMS.," in *Academy of Management Proceedings*, 2007, vol. 2007, no. 1, pp. 1–6.
- [5] M. Driver, "Fostering creativity in business education: Developing creative classroom environments to provide students with critical workplace competencies," *J. Educ. Bus.*, vol. 77, no. 1, pp. 28–33, 2001.
- [6] L. Pang, *Creativity and its discontents: China's creative industries and intellectual property rights offenses*. Duke University Press, 2012.
- [7] P. K. Chaney, T. M. Devinney, and R. S. Winer, "The impact of new product introductions on the market value of firms," *J. Bus.*, pp. 573–610, 1991.