KNOWLEDGE MANAGEMENT OF LOCAL WISDOM:
CLOTH WEAVING OF SURAT THANI PROVINCE

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Abstract

Woven textiles are considered a Thai cultural asset, an inherited knowledge passed down from the past to the present that is a science and a creative art form that stands out. That being said, it is also an art form that has been dying out over time. Thus the purpose of this research is to gather and manage the knowledge and local wisdom of the Tha Krajai Housewife Weaving Community Enterprise Group of Surat Thani. The sample group includes the chairman and members of the group and other related agencies, totaling 17 cases, using the specific sampling method. Tools used to gather information include interviews and various websites. Data was analyzed by analyzing information and website development. Research results show that 1) Knowledge Acquisition (Socialization): In passing on the knowledge of weaving, there aren't clear records, but the practice has been passed down from generation to generation since the reign of King Rama V. 2) Knowledge Exchange (Externalization): The weaving of this group has two different types, i.e. silk weaving and cotton weaving. The royal lantern pattern used is an important motif that is used only for auspicious ceremonies. 3) Knowledge Storage (Combination): Collecting and classifying the knowledge based on the weaving processes and production. 4) Knowledge Transfer (Internalization): Developing useful online media to help develop commercialization for the community in the future.

Introduction

Weaving is considered a cultural asset of society that comes from learning. It is a valuable treasure that comes from knowledge cultivated from our ancestors who maintained the traditional way of life. We have preserved local weaving from its beginnings until the present as an art form that requires special ability and creativity in order to create something so beautiful and unique, it's uniqueness most likely being a product of combining traditional patterns inherited from past generations with freshly invented styles and patterns (Saisingha et al., 2011, p. 89; Virojrut, 2020, p. 135). Nowadays however, embedded knowledge passed down has decreased as society has changed. Whatever

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the case may be, knowledge management must be used to preserve and organize this embedded knowledge of the community, which is local wisdom derived from tangible works and from individuals which is intangible, both of which will deteriorate over time (Setsuwan et al., 2020, p. 45). Technology can be used to develop knowledge that is deeply embedded in individuals (Tacit) and then develop it into concrete knowledge (Explicit) which comes from the way of life and knowledge passed down from ancestors to their offspring becoming traditional customs. Therefore, culture differs region to region (Chantang, 2021, pp. 74-75).

In Southern Thailand, the abundant folk wisdom that reflects the local identity and way of life can be found in the weaving and in the many areas that are famous for weaving in the past to the present day in the provinces of Nakhon Sri Thammarat, Songkhla, and Surat Thani. Other than Amphoe Phumriang, which is well known for weaving, there is Amphoe Tha Chana which has a similar style of weaving from the gathering of people in the community, creating the Tha Krajai Housewife Weaving Community Enterprise Group which has been around since the reign of King Rama V until the present. The patterns reflect the way of life and culture of Thai Muslims, who have their own symbols. For example the Rajawat pattern has the characteristic of a lantern with a large Rajawat flower at the center with smaller Rajawat flowers around. What makes this fabric different is the use of both large and small lanterns used together

in the same design and only has one primary pattern with no secondary patterns. This silk textile is woven incorporating silver and gold ornamental threads according to the pattern used in the Malay Royal Court. This pattern is specifically used for auspicious ceremonies only (Kachasawat, 2017). But at present, there is only one group in the community that is using this passed down weaving style, due to a number of external circumstances and rapidly changing environments, such as a fast paced lifestyle or a shift to higher income occupations, like working an orchard or fishing (Iamsaard et al., 2019). Thus the embedded knowledge is lost. Without the inheritance of this embedded knowledge, which is the cultural heritage of the community that has been passed down and accumulated since ancient days, this knowledge will be lost with the passing of time.

It is for this reason that the research team set the objective to knowledge management of local wisdom concerning weaving, using the SECI model, which is most suitable. Because of the process that changes deeply embedded knowledge into concrete knowledge, for the management of knowledge and local wisdom of the many different woven silk patterns, and technologic systems were introduced to gather and store such knowledge in order to develop a system which would be beneficial for commercial and public usage. This will be the foundation for future economic development of the community.

Literature Review

Knowledge management is the process of organizing knowledge that is within an individual by using information technology as a tool to operate (Waltz, 2003, p. 1). As indicated by the condition of the present, defining needs and the improvement of processes will affect knowledge management for the better. The main objective of which is to increase the operational efficiency at the organizational level and the community level in order to create sustainable development (Kucza, 2001, p. 15). Scholars have proposed the main principles of knowledge management from different perspectives, such as Wheatley (2001, pp. 5-6) who proposes that the organization has to be conscious of the 6 key factors of knowledge management, 1) that knowledge is created by humans, 2) the motivation in the creation of knowledge, 3) the opportunity to learn, 4) the sharing or exchange of knowledge, 5) that the management of knowledge doesn't rely on technology alone, and 6) the time and management processes suitable to building knowledge. Wiig (1993, pp. 54-55) outlines five steps, which are as follows, 1) Obtaining knowledge, 2) Analyzing knowledge, 3) Constructing (synthesizing) knowledge, 4) Codifying a model for the knowledge gathered, and 5) Organizing knowledge. When speaking of the elements of knowledge management, Marquardt (1996, p. 19) classifies them like this, 1) Learning Dynamics, 2) Transformation of the Organization, 3) People Empowerment, and 4) Application of Technology. In conclusion, knowledge management encompasses all the processes of knowledge,

the searching of knowledge, the creation of new knowledge, the categorization of knowledge, the organization and transference of knowledge, and the sharing of knowledge through suitable tools that are beneficial at both the individual level and the organizational level.

Additionally, in the synthesis of related research it was found that many researchers and scholars alike described variables in the process of knowledge management in a form called "SECI Knowledge Conversion Process" presented by Nonaka and Takeuchi (1995, pp. 8-9). It is a dynamic process by which the creation of knowledge is achieved by amplifying knowledge from within a person's mind (Tacit Knowledge), knowledge that comes from experience that cannot at first be described or put into words, transforming it into knowledge that can be developed and shared becoming concrete knowledge (Explicit Knowledge), knowledge of cause and effect, explainable, able to be paraphrased, and theorized, used to solve problems, instruct, and be put into databases or online media sources to used to lead to new knowledge. This is the process of knowledge management that is suitable for managing local wisdom due to the conceptual framework available that transforms embedded knowledge of an individual into clearly conveyable concrete knowledge. The process consists of four steps (Srivarom, 2020). First, searching for knowledge (Socialization) through the exchange of experiences by those communicating, creating a knowledge base by individuals who work with others, observing, copying and practicing what they learn. Second, the

exchange of knowledge (Externalization), which can be done by making comparisons, hypothesizing, and framing concepts through dialoging and storytelling. Third, gathering and organizing the knowledge (Combination), the process that allows the knowledge to become tangible, categorized and documented. The fourth step, the transference of knowledge (Internalization), brings an understanding of a concrete form of knowledge through the reading of text, documents, or practice of the learned knowledge (Setsuwan et al., 2020, p. 47;

Ratchapolsit et al., 2020, p. 59; Aisuwan et al., 2021, p. 30). From these steps, comes such an important process of sharing and transferring knowledge, bringing about the appropriate distribution of existing knowledge, pushing for community development and the preservation of local wisdom (Tanomwong et al., 2020). In line with the current situation where activities related to local wisdom have decreased, it is for this reason that it was chosen to study the aforementioned concept of knowledge management.
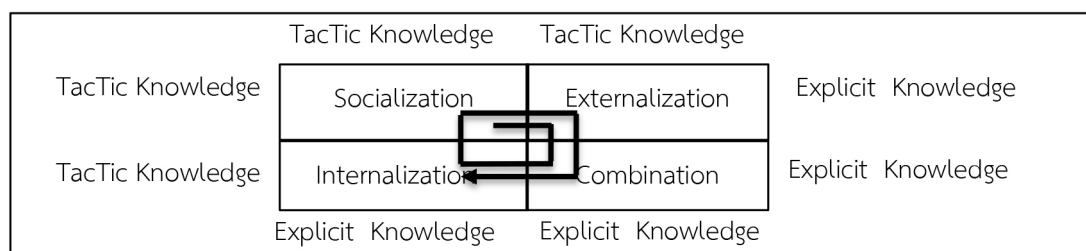
Figure 1 SECI knowledge conversion process of Nonaka and Takeuchi (1995, pp. 8-9)

Methodology

In this research, two methods of research were used. The first being Documentary Research, the process of gathering documents of different scholars, journal publications, and online media resources, dissertations, and other related materials to knowledge management of weaving. The second method used was Field Research, where observations and deeper interviews were conducted in the field.

Sample Group

The subject group consists of villagers or weaving specialists in the community. The subjects interviewed are as follows, from the Tha Chana Sub District in Amphoe Tha Chana of Surat Thani Province (1), the chairperson of

the Tha Krajai Housewife Weaving Community Enterprise Group (1), members of the Tha Krajai Housewife Weaving Community Enterprise Group (8), community members who weave but are not part of the Tha Krajai Housewife Weaving Community Enterprise Group (but bring fabric to sell under the group's name) (4), and other agencies related to the group, namely leaders of the community, representatives from the Administration of the Sub-District and Ministry of Agriculture (3), by using a specific sampling method, a total of 17 cases.

Research Tools

The tools used in this research were designed according the the concept of the SECI model proposed by Nonaka and Takeuchi

(1995, pp. 8-9) as follows, First, knowledge acquisition (Socialization), conducting interviews of the community enterprises mainly focusing on the historical background of the weaving enterprise, the manufacturing process, marketing, finances, and managing problems or obstacles that up. Second, the exchanging of knowledge (Externalization), establishing a meeting with the focus group in order to create an exchange of knowledge. Third, knowledge storage (Combination) by recording the information gathered, merging and analyzing to create a data block that is categorized for review. Fourth, transferring the knowledge (Internalization), through designing and developing a website using WordPress and training the Tha Krajai Housewife Weaving Community Enterprise Group in how to best utilize the website.

Data Collection

Gathering the information following the knowledge management method previously set forth known as the SECI model of Nonaka and Takeuchi (1995) comprised of Knowledge Acquisition (Socialization), which included making a plan to carry out the research and studying various related documents, research articles, and books about woven textiles, and finding villagers and weaving experts within the target community. Then contacting and conducting detailed interviews with the villagers, the chairperson and members of the Tha Krajai Housewife Weaving Community Enterprise Group, as well as those who are not members but partner with the group. From there the information gathered is synthesized, analyzed, and summarized. The Exchange of Knowledge (Externalization) was conducted by organizing a meeting of the focus group to seek the thoughts and opinions concerning the gathered and summarized information and to get any additional information or suggestions. The Storage of knowledge (Combination) was achieved through taking the information gathered and analyzing it to create a database where information can be categorized and reviewed. In order to Transfer Knowledge (Internalization) acquired, the information that was synthesized and analyzed, was then used to design and develop a website presented to the focus groups, after which adjustments were made according to the feedback received. Once completed, the website of the Tha Krajai Housewife Weaving Community Enterprise Group was launched and training in using the new website was provided.

Data Analysis

In order to achieve the objectives according to the concept of the SECI model, content was analyzed and developed into online media, public relations materials, and marketing opportunities.

Results

The results of the research done according to the SECI Model of Nonaka and Takeuchi (1995, pp. 8-9) are detailed as follows:

1. Knowledge Acquisition (Socialization): Gathering information from those knowledgeable and from the community members who set up the Tha Krajai Housewife Weaving Community Enterprise Group through detailed interviews including from the chairwoman of

the group, Mrs. Kachasawat and the eight other members who have been working with the group for over 27 years. The group had won an outstanding achievement award for an outstanding product at the One Tambon One Product Fair in the Upper Southern Region and for the establishment of a community enterprise group starting from Amphoe Tha Chana. A weaving center was set up in 1993 by Mrs. Amporn Saiyid, the first president of the group, leading the group up to the present with Mrs. Kachasawat coming on as chairwoman. The objective of the group being to come together to weave and sell fabrics, finding solutions to problems that arise such as raw materials. For example, the quality of silk threads or lack of availability of silk, leading to having to find other sources which were of poorer quality, or shortage in labor due to the patience and expertise required in weaving. Additionally, people in the community are less and less interested in weaving, leading to a deficit of people who have knowledge or expertise in weaving. As for the transference of knowledge of weaving there aren't clear records, but it is thought to have begun in the era of King Rama V, who had visited the Southern Region, by passing down from generation to generation until the present. Whatever the case may be, at present there are those who have inherited the knowledge and processes of weaving. The present group is considered to be the third generation.

2. Exchange of Knowledge (Externalization): Is the exchange of deeply embedded knowledge that has been transformed into concrete knowledge through conversation and storytelling. Information from interviewing the chairwoman and the members of the group showed that they have two types of weaving, silk weaving and cotton weaving. The characteristics of the woven fabric can be further divided into plain weaving and patterned weaving. The plain weaving doesn't not incorporate detailed patterns so can be done the most quickly. Materials used included silk threads made by leading fabric makers that are exhibited at various OTOP shows where the group's woven fabrics are also processed for sale. Weaving the two different types (Cotton and Silk) takes about the same amount of time. For weaving floral patterns, such as the Ratchwat Pattern, most of the threads used are silk threads with two colors, whatever color matches the fabric. To create the flower design, silk thread that matches the foundational color, black for example, is used. A different color is then woven in, such as green. In order to develop and improve weaving patterns, members of the group have designed and invented new weaving patterns themselves. Sales are made to order due to the natural dye used requires great care and therefore made especially for each order. Consumers can use the fabric for both auspicious ceremonies as well as more solemn ceremonies according to the colors appropriate for each ceremony. An auspicious ceremony, for example, it is popular to wear fabric with bright colors while for solemn ceremonies black fabric is mostly used. Most people will buy fabric with the Pikul flower

(Spanish Cherry) pattern as it is neat, polite, and can be used in many situations. For most weaving done with cotton, many designs can be woven using the cotton threads and most are woven into shawls and cloth used to cover when bathing.
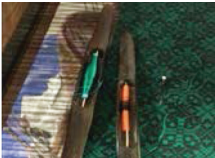
3. Knowledge Storage (Combination): Is the exchange of explicit knowledge, which has been organized into a database created through this research team. The knowledge is categorized by production process consisting of production factors, production processes, and products woven. The details are as follows:

3.1 Factors of Production

3.1.1 Equipment used to prepare the silk threads as found in Table 1.

Table 1 Equipment used in preparing silk thread

Picture	Equipment	Characteristic
	Shuttle	One of the devices used in weaving, the shuttle is made of wood with two rounded ends hollowed out in the middle to contain spools of weft with a suitable weight and size to be used by hand. The shuttle is used in between lifting and lowering the yarn.
	Spool of Weft	A tube used to wrap the silk, made of bamboo the size of a ballpoint pen when needed to load the shuttle.
	Spindle	A plastic tube used to hold silk threads. The spindle is hollowed out in order to attach it to the trough when winding the silk thread onto it.
	Spinning Wheel	Used to wind the silk thread onto the spool. It looks like a bicycle tire that had the tire removed, leaving only the rim and spokes. It is then set on a wooden foundation block. A rope connects the wheel to the loaded spindle allowing it to spin to wind the thread.
	Reel	A spinning device used to spin the silk that looks like two windmills, each made of 3 pieces of flattened bamboo. It is used with the spinning wheel.
	Trough	Rod used to keep spools of silk. It is characterized as a four sided wooden frame with built-in spools as the axis.

3.1.2 Silk weaving tools are found in many sizes and type, but are used in the same basic principle, the interlocking between the weft and the ARP thread that is tight creating a fabric similar to weaving a basket, but much more meticulous because the thread used is much smaller and fine.
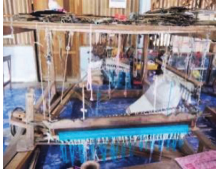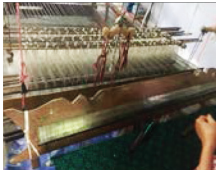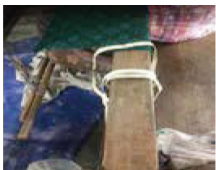
Table 2 Equipment used in Silk Weaving
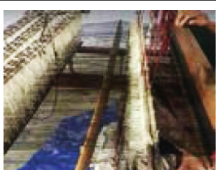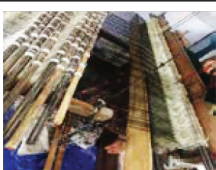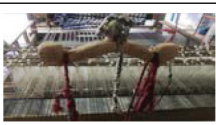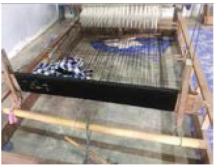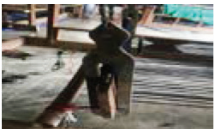
Picture	Equipment	Characteristic
	Loom	This wooden tool comprises a resting beam that when pressing the pedal pulls the silk thread or yarn and releases the heddle, separating the warp from the weft, and allowing the wooden axis to rotate the silk thread that is on the spindle; a shuttle, a crossbeam, an embroidery hoop to pull the fabric taught which is usually underneath and anchored into the poles of the frame to allow for stability.
	Reed	This piece of equipment has many fine teeth. It is sometimes called a comb as it has similar characteristics. It is used by inserting and arranging the threads around it, separating the threads from each other. It is then used to strike against the taught weft silk and intersect with the warp silk. The characteristic of the fabric, whether it is thick or thin, will depend on the comb used.
	Cloth Roller	This is used to roll up the fabric that has been woven, it is sharply squared in order to hold the fabric ensuring it doesn't slip.
	Pedal	The pedals consist of two bamboo linked together used for stepping on to push the threads up or down alternatively, opening the channel for the shuttle to pass through allowing the two types of silk to be woven together creating a fabric.
	Heddles	A heddle is a wire with a hole or eye in its center through which a warp yarn is threaded. There are as many heddles as there are warp yarns in the cloth, and the heddles are held in two or more harness.
	Harness or Shed Stick	A harness is a frame to hold the heddles. The harness position, the number of harnesses, and the warp yarns that are controlled by each harness determine the weave pattern or interlacing.
	Warp Beam	The warp beam, which holds the warp yarns, is located at the back of the machine and is controlled so that it releases warp yarns to the weaving area of the loom as needed. This beam is produced by warping.
	Sley Race	Also the shuttle travels from one side to another on the surface of sley race.

Table 2 Equipment used in Silk Weaving (Con.)

Picture	Equipment	Characteristic
	Sley Mechanism	The sley is responsible for beat-up motion during the weaving process. Sley moves forward and backward to form the beat up.
	Back Beam	This is also known as the backrest. It is placed above the weaver's beam. It may be of the fixed or floating type. In the first case the back rest merely acts as a guide to the warp sheet coming from the weaver's beam. In the second case it acts both as a guide and as a sensor for sensing the warp tension.
	Breast Beam	It is also known as the front rest. It is placed above the cloth roller at the front of the loom and acts as a guide for the cloth being wound onto the cloth roller. The front rest together with the backrest helps to keep the warp yarn and cloth in a horizontal position and also maintain proper tension to facilitate weaving.
	Top Cross Beam	The wood that crosses the upper lobe frame is made of whole bamboo used for hanging the pendulum.
	Heald Shaft	It is a plank that is used to roll one end of the silk threads, which are coiled and arranged in an orderly manner. It also allows the threads to stand in a taut loop, with the other end tied or wrapped to the cloth roll.
	Pendulum	Wooden board laid across lengthwise about 25 cm that has two balls attached by rope pulled tight.
	Lams	Wooden beams connect to the treadle by rope to control the lifting of the threads.

3.1.3 Dying silk thread the raw material used in weaving fabric that is most important is the silk thread, therefore the dying process must be natural in order to achieve the quality silk yarn desired. The silk yarn is made of 6 to 8 threads. The appearance must be smooth and without lumps. The dying method begins with washing the plants of the desired color in clean water twice. The plants used must produce long lasting dyes and are boiled for about 30 minutes until the color dye is saturated enough and then filtered through a thin white cloth to remove any unwanted particles. Then the silk that needs to be dyed is introduced and soaked in an alum mixture for about 10 minutes to help open the pores of the threads to maximize the saturation of the dye. Then the mixture is squeezed out of

the threads and they are transferred to the dye. The temperature of the dye is raised to a low heat in order to dye the silk threads. If the dyes are properly sticking to the silk threads, the water can be observed becoming clearer. After dying, the silk threads must be hung up to dry out and can then be used to begin the weaving process.

3.2 The Weaving Process

The weaving process can be divided by the weaving procedure and the produced pattern of the fabric, as follows:

3.2.1 Weaving the fabric in weaving fabric with no pattern, the procedure is as follows 1) Striking by using the first the foot pedal or treadle to hold the first rod down lowering the first group of silk threads followed by striking the second treadle to lift the second group of silk threads creating a space between the two groups. 2) Sending the shuttle through the gap created from the right to the left will interlock the weft with the warp threads. 3) Hitting the silk thread by using the flute to hit the silk threads 1-2 times to compress the silk threads together. 4) Cutting the heddle by using the foot to step on the second pedal holding up the harness, which will hold the second group of threads down, while the first group of threads are pulled up. This creates a gap between the two silk threads, with the warp thread alternating. 5) Thrust the shuttle into the silk channel from the left side to the right side of the thread the

weft silk will fit together with the warp silk. 6) Hitting the reed or comb teeth to compress the silk into a straight line again, cutting the heddle, thrusting the shuttle back and forth, and multiple hits will create the fabric.

3.2.2 Flower weaving is a patterned weaving that occurs on the fabric base. It adds to the beauty created by following the steps above (1)-(6) by interweaving the threads through the first heddle and then through the second and so on, repeating the procedure to create the pattern. To complete the pattern or flower, the original heddle must be lifted and brought back from the end to the end. When weaving, you will be able to get the full or full pattern as needed.

3.3 Patterns that Occur within the Fabric Base

The pattern obtained from weaving is done by the technique in using the heddle. In each pattern, there will be a different way to use the heddle. The research team simulated the weaving pattern by using color as a classification between the descent and the ascent of the heddle. By weaving, the fabric pattern is gathered from the center of the pattern. When it is made into a pattern, the heddle must be lifted back again. By using the symbol down 1, it illustrates to hold the silk thread down one comb tooth, while up 1 means to lift the silk thread up one comb tooth. This can be seen in the following patterns.
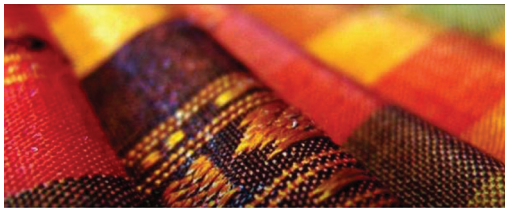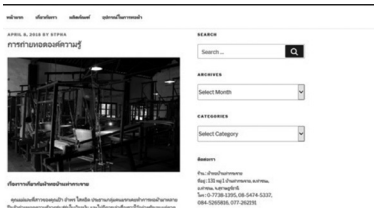
Table 3 Fabric Pattern Models
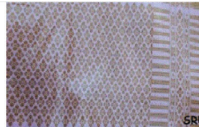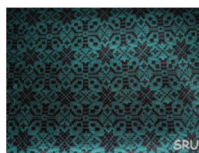
Pattern's Name	Model	Symbol	Pattern
Rajawat Pattern		Uses a collection of 4 heddles ▢ Downward 1: Pulling the silk thread down through one tooth of the comb ▮ Upward 1: Lifting the silk thread up through one tooth of the comb	
Pikul Flower or Spanish Cherry Pattern		Uses a collection of 8 heddles ▮ Downward 1: Pulling the silk thread down through one tooth of the comb ▮ Upward 1: Lifting the silk thread up through one tooth of the comb	
Dok Kaew or Orange Jasmine		Uses a collection of 11 heddles ▮ Downward 1: Pulling the silk thread down through one tooth of the comb ▮ Upward 1: Lifting the silk thread up through one tooth of the comb	
Kruawan Pattern		Uses a collection of 10 heddles ▮ Downward 1: Pulling the silk thread down through one tooth of the comb ▮ Upward 1: Lifting the silk thread up through one tooth of the comb	

4. Transferring Knowledge (Internalization)

An exchange of knowledge from concrete knowledge to deep embedded knowledge comes from understanding the individual's explicit knowledge. Therefore a meeting of the focus group was held in order to allow the community to participate in designing and developing a website through suggestions and opinions of the features of the website which cover the equipment used in ancient weaving, the patterns of fabric, products made, and news dealing with knowledge of weaving.

Table 4 Example of knowledge transference through using a website

Components	Website
Home Page	
Knowledge Database	
Fabric Patterns	

ลายราชวัตรใหญ่   ลายดอกพิกุลเล็ก   ผ้าไหมลายดอกแก้ว

ลายดอกเครือวัลย์   ลายดอกพิกุลเล็กลายในผืนผ้า   ลายลาวล้อมเดือน

Discussion

1. Knowledge Acquisition (Socialization) occurred through the collection of information from experts and community members by creating the Tha Krajai Housewife Weaving Community Enterprise Group that includes the chairwoman and members who have been operating for over 27 years. The transfer of weaving knowledge has not been clearly documented, but it is expected that it started to be transmitted from generation to generation through practice since the reign of King Rama V, who designated the royal pattern called the Ratchawat pattern that was different from other patterns. It is a historically important pattern that must be preserved, which is why the knowledge of the pattern and the process to make it has been passed down, to what is now considered the 3rd generation of weavers. This is consistent with the findings of Songtaveesin and Udomrat (2017, p. 303) who says that provincial handweaving is knowledge inherited by ancestors and from accumulated knowledge and experience. Problems that surface in weaving include the quality of silk yarn and having to produce the yarn from other sources that are unable to produce the quality silk needed. This is the same problem

noted by Damsisuk et al. (2020, p. 6) and Suasoongnen (2020, p. 17) who also reported on the problem concerning raw materials such as the cost inflation of production and silk that cannot meet the necessary standards due to having to source a portion of silk from other places lowering the quality. This caused problems in handmade woven textiles being of lower quality than what is expected in the market. Another problem found is the lack of labor needed to produce such woven textiles due to the expertise and patience needed. This caused a decreased interest in the community to continue the tradition of weaving due to the lack of interest among the new generation of youth and ultimately loss of inheritance of local wisdom and culture.

2. Knowledge Exchange (Externalization): The method of transferring knowledge of weaving was passed down by imitation of teachers. It was practiced until it became a habit, which can be seen by Aunt Amporn who invented new patterns and passed on knowledge to members of the community's weaving group. This is consistent with the assertion of Upata (2016, p. 155) who says discussing the exchange of knowledge will be informal through discussions between members and hands-on practice. Knowledge is transferred by demonstrating and explaining the process of weaving to descendants and those interested in storing the knowledge and who remembers it from their ancestors. It was also discovered that in addition to the patterns that have been passed down from generation to generation, the current group's chairman has also invented and developed creative patterns, namely the Moon and Star Pattern. This pattern was invented from her imagination to mimic nature through the moon and stars.

3. Knowledge Storage (Combination): The storage of knowledge of woven textiles is not yet systematic as it is contained mostly within individuals without written records, this is consistent with Sooknit and Sakda (2020, p. 107) who says that knowledge of woven textile is inherited from generation to generation and is found mostly among the elderly that are working to preserve this part of culture, which means that there isn't any gathering or transferring of this knowledge occuring and will be lost in the end.

4. Knowledge Transference (Internalization): Is the publishing of knowledge from the creation of a system of information that provides benefits from being distributed. Specifically, the knowledge of handmade weaving being able to spread because of access to the website created. This affects the fabric market and motivates the community to turn back to weaving to provide income for the family. This is consistent with the findings of Sanso and Nantasri (2020, p. 87) who speak to the management of the cultural knowledge of the Tai Leu community of Baan Kluai in the Province of Lampang in a website format as a source of knowledge for those interested in the written preservation of culture to pass down their descendant's in the future. It is also in accordance with Sooknit and Sakda (2020, p. 108) who speak to the development of a system to store knowledge of Elders in

weaving. They accumulated the knowledge and experience of the elderly into an integrated database making the valuable knowledge transferable through technology, accessible for every generation to follow for all ages to enjoy, an information system that will be useful for national information policies.

Conclusion

The way the research team applied to SECI Model concept introduced by Nonaka and Takeuchi (1995, pp. 8-9) can be summarized as follows: 1) Knowledge Acquisition (Socialization): The transfer of knowledge concerning weaving was not being recorded in a clear way but came from practicing generation to generation, the group present being the third generation. The purpose of the group is to create and market woven textiles. Problems and obstacles encountered in the weaving industry include the quality standards of raw materials used and labor deficit due to the fact that weaving requires expertise and patience and interest in the practice has declined in the community and among the younger generation. 2) Knowledge Exchange (Externalization): There are two forms of weaving being done by the group, silk and cotton weaving. Both of which have plain and patterned designs and used silk threads in the weaving. Both types are equally time-consuming when weaving patterns designed after flowers by using two colors of silk threads according to the pattern chosen. The first base color is interwoven with the second color to cut a flower pattern.

In order to develop the industry of weaving and fabric patterns, members have invented new patterns by thinking up and designing the new weaving patterns themselves. Customer sales are made to order only. When finished, the woven fabric can be used in both auspicious and solemn events, depending on the color of the fabric used in each product. The most popular pattern is the Pikul flower (Spanish Cherry) pattern fabric because it looks neat and polite and can be used for any occasion. The weaving of cotton is used mostly for shawls and bathing cloths. 3) Knowledge Storage (Combination): This is the creation of a system and database of knowledge of the production process consisting of 3.1) Production factors such as equipment used to prepare the silk yarn, tools used the weave the silk fabric and the silk dyeing process. 3.2) The weaving process which includes plain and patterned fabrics. 3.3) products with patterns within the fabric such as the Rajawat, the Pikul Flower (Spanish Cherry), the Dok Kaew (Orange Jasmine), and the Kruawan, and moon and star pattern. 4) Knowledge Transference (Internalization): Made possible through the creation and development of a website that is organized by tools used in the ancient art of weaving, the methods used to make and weave patterns and a place for updated knowledge in order to preserve local wisdom that will be have commercial and public use. This is the basis of economic development of the community for the future.

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