

## ICT feasibility study to empower ethnic craftswomen to transit to intangible heritage under digital technology disruption and SDG's: "Leave no one behind"

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**Abstract:** This study is qualitative research employing e-interviews, focus group discussions, and observations among the selected 15 key informants of craftswomen from three main ethnic tribes in Chiangmai province, North of Thailand named Karen, Akha, and Hmong together with the relevant stakeholders. Objectives are to study: 1) the socio-economic contexts of the three main ethnic craftswomen; 2) challenges and needs in terms of ICT and entrepreneurship skills; and 3) ICT and entrepreneurship skills needed to support the ethnic craftswomen to transit their intangible heritage. Findings found 1) similar demographic and socio-economic contexts among most of the three main ethnic craftswomen groups in their marginalized with least of formal education, less opportunities than male, but having a very important role to transit most of their tribal heritages both tangible and intangible heritages; 2) least of ICT knowledge and skills because of their misperceptions about ICT i.e. ICT is difficult, ICT is only designed for males and for the educated ones, and ICT is expensive. They need more ICT's knowledge and skills to manage their own e- shops especially in e-banking, e-financial management, and e- orders respectively; 3) ICT needs found three main issues respectively : (1) ICT for documenting all crafts heritages; (2) ICT to transmit all the heritages through the new generations; and (3) more functional ICT for their better life and better entrepreneurship i.e. e-marketing, e-PR aims to be more visible and more functional in a better living, inclusion, and heritages' pride.

**Keywords:** *Craftswomen, Ethnic group, ICT, Intangible heritage, SDG.*

### 1. Introduction

*"Empowerment means that people—both women and men—can take control over their lives: set their own agendas, gain skills (or have their own skills and knowledge recognized), increase self-confidence, solve problems, and develop self-reliance."*

*UN Women, Women's Empowerment Principles, 2011*

Even of this current rapid digital disruption, it is not just only digital technologies alone, it also needs human's eco-system which all human beings and other environment are also the key players.

*"Success must be centered on 'people's eco-system with "Leave No One Behind"*

UNESCO, Thailand has initiated the newly initiated "Women e-nspire Culture" project in 2019 in partnership with CCDKM by merging the expertise of its ICT in Education and Culture teams to empower ethnic minority craftswomen to safeguard their intangible cultural heritage through the development of digital and entrepreneurship skills.

According to ITU, Thailand's Digital Economy prioritizes digital inclusion, which aims "to ensure that everyone can access to the benefits of digital technology". One of the strategies to operationalize

Digital Economy includes a focus on digital entrepreneurship and innovation to promote commercial innovation. Moreover, the Smart Thailand 2020 policy framework aims to make ICT accessible throughout the country. Specifically Chiang Mai province's Karen, Akha and Hmong ethnic group women are identified as the target groups who are engaged in crafts-making and selling activities which are in need of preservation and safeguarding. (UNESCO. 2019. Report of Women e-nspire Culture Project, 2019, Chiang Mai, Thailand)

As of the SDG Goal 5 : gender equality among the 17 SDGs established by the United Nations in 2015 to "Achieve gender equality and empower all women and girls" with 9 targets and 14 indicators. Some among the key goals are "ending all forms of discrimination against all women and girls everywhere"; ending violence and exploitation of women and girls; increasing value of unpaid care and promoting shared domestic responsibilities; ensuring full participation of women in leadership and decision-making; and ensuring access to universal reproductive rights and health. All those goals are driving with some key priorities such as economic and entrepreneurship empowerment, access to any financial services for women; promoting empowerment of women through technology and education which all aims for gender equality to achieve the pledge "Leave No One Behind"

With all those reasons, this research explores the feasibility of using ICT to empower the ethnic minority craftswomen aims to transit their intangible heritage with pride, confidence and sustainability under this digital technology disruption currently.

## 2. Literature Review

### 2.1. Scenario of Sustainable Development Goal 5: Gender Equality

*"Women's Digital Inclusion is key to Sustainable Economic Growth"*

Doreen Bogdan-Martin, 2017

Gender equality is fundamental to the achievement of human rights and is an aspiration that benefits all of society, including girls and women. To achieve gender equality requires the concerted efforts of all stakeholders, including business, policy engagement and partnerships. The Beijing Declaration adopted by 189 countries in 1995 and still the strongest global consensus for advancing and protecting girls' and women's equality. It has provided a tremendous opportunity for companies to further align their strategies and operations with global priorities by mainstreaming gender equality into all areas of corporate sustainability and systematically and strategically scaling up actions which support the development and livelihoods of women and girls.

The UN has defined 9 *Targets* and 14 *Indicators* for SDG 5. Its' goal is "By 2030 end all forms of discrimination against all women and girls everywhere". The official wording of SDG 5 is "Achieve gender equality and empower all women and girls". Ending all forms of discrimination against all women and girls everywhere. The three means of achieving these targets are fostering equal rights to economic resources, property ownership and financial services for women (Shang & Wang, 2024); promoting empowerment of women through technology (Bhandari et al., 2024); and adopting, strengthening policies and enforcing legislation for gender equality to the pledge of "Leave No One Behind".

Providing women and girls with equal access to economic opportunity and all relevant resources by all forms of education (life-long education, self- education, functional education for life), digital technology and any appropriate innovation. Empowering women and girls through digital technology and innovation relevant to their real needs and life is an urgent issue (Kamolrat Intaratat, CCDKM, 2020).

### 2.2. SDG 5 Main Targets

Target 5.1: End discrimination against women and girls : "End all forms of discrimination against all females everywhere".

Target 5.2: End all violence against and exploitation of women and girls : "Eliminate all forms of violence against all females in the public and private spheres including trafficking, sexual and other types of exploitation".

Target 5.3: Eliminate forced marriages and genital mutilation : "Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation (FGM)".

Target 5.4: Value unpaid care and promote shared domestic responsibilities : "Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate".

Target 5.5: Ensure full participation in leadership and decision-making : "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life".

Target 5.6: Universal access to reproductive rights and health : "Ensuring universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences."

Target 5.a: Equal rights to economic resources, property ownership and financial services: "Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws."

Target 5.b: Promote empowerment of women through technology: "Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women".

Technology is an important tool for learning, sharing and engaging that should include more gender specific policies that enhance equality.

Empowering women with mobile telephones has been shown to accelerate social and economic development. However, in the 66 countries with data for the 2016–2018 period, the rate of mobile telephone ownership among men was on average 6.8 percentage points higher than the rate among women.

Target 5.c: Adopt and strengthen policies and enforceable legislation for gender equality: "Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels." (<https://sdgs.un.org/publications/women-and-sustainable-development-goals-18031>)

### 2.3. *Relevant Studies*

From the study of Kamolrat Intaratat, 2016 and 2019 on "Women Homeworkers in Thailand's Digital Economy" to examine issues of gender relations and the use of ICTs for economic activities among women homeworkers in Thailand's digital economy. Key areas are explored 1) the enabling environment or the contexts, structures and mechanisms supporting women homeworkers and their use of ICTs for home-base work; and 2) ICT relevant policy, activities or efforts to empower women homeworkers in this current Thailand's Digital Economy. Three main frames have been used;

1. Marginalization of women in the labor market. Although labor force participation of women in Thailand is high, the issues related to women's status in employment and the recognition of the contribution of women in reproductive and productive work is still a concern. The participation in economic activities increases the burden of women as they still bear most of the responsibilities for the domestic work. Household division of labor is still engendered and the introduction of ICT usage may add instead of reduce homeworkers' burden and responsibilities;

2. Invisibility of Women. Many women remain 'invisible' in the production process especially those homeworkers who are subcontractors or waged-homeworkers. They produce parts of end products.

They are also not regarded as the main users of technology;

3. Masculine culture of technology. In some cultures, there are inherent factors which hinder women from using technology. These factors promote and facilitate the control and mastery of technology by men. In Thailand, this situation has improved somewhat as women have to some extent

gained accessibility since ICT has become affordable, widened its coverage, and became user-friendly. ICT tools have become commonly used to promote gender equity, particularly the use of smartphones. Findings are 1) Home-based work (subcontracted work to be done at home) is widespread in all regions of Thailand. Most homeworkers use their houses as the workplace for producing textiles and garments, wood products, basketry, artificial flower making, food processing, leather goods and plastics, metal products and jewelry, and then deliver them to the employers or business mediators. This is not the same as production for direct sale. In 2007, the National Statistical Office (NSO) reported that out of the 249,290 households, there were 440,251 people earning their livelihoods through homeworking. Of this number, 337,526 or slightly more than three quarters of them were women and 102,725 were men. This study builds on previous research conducted in 2006 on the status of women homeworkers in Thailand and their use of ICT to promote economic empowerment and generate new income opportunities. Since 2006, Thailand has undergone numerous social, economic, and political changes. Acknowledging the problems homeworkers face, in 2010, the Thai Parliament passed the Homeworkers Protection Act B.E. 2553 and a social protection policy came into force in May 2011. The law mandates fair wages, including equal pay for men and women doing the same job. Even though this Act is in effect, most homeworkers are still not aware of their legal rights and keep working under unfair conditions. This research study will present the enabling and disabling environments, for the material wellbeing of women homeworkers, their level of awareness and ability to improve their situation, and their access to and control of resources to use ICT to develop their businesses in Thailand's fast growing digital economy. It will also examine the activities related to gender equality issues in women's use of ICT and the effects of these efforts for gender governance and women's economic empowerment.

#### *2.4. Main ethnic groups with Crafts (Intangible Heritage) in Thailand*

Three main ethnic groups or craftwomen group with potential crafts as their intangible heritage in North of Thailand are; Karen, Akha, and Hmong as follow;

##### *2.4.1. Karen group at Chomthong District, Chiangmai Province*

Karen is a tribe that has many races, languages, and religions, in general they respect the spirits, believe in big forest and trees then afterward becoming to be Buddhist and Christian, etc., Karen divided into 4 categories : the largest number is "Sagor Karen" or "Pakayor" means "human being". They have their own written language invented by missionary group by applied from Burmese and Roman alphabet.

##### *2.4.2. Akha group at Chiangdao District, Chiangmai Province*

Akha currently spreading in various countries of Southeast Asia: Laos, Myanmar, Vietnam and Thailand with its total population around eight hundred thousand. Akha in Thailand scattered in 7 northern provinces: Chiang Rai, Chiang Mai, Phayao, Lampang, Phrae, Tak and Phetchabun with their eight groups : "Uq Lor", "Law Mir", "Uq byaq", "Naq Kar", "Ar Ker", "Ar Jawr", "Uq Pi" and "Pi Pyavq". Their current population is around 70,000 people mostly in Chiang Rai. Their family system is men leaded culture. Men are family heads, expected to extend to other families. Therefore, Akha normally named after their ancestors called "Tseevq" with male dominated.

##### *2.4.3. Hmong Group at Maerim District, Chiangmai Province*

Hmong originally immigrated from China and mostly live in mountainous areas of Thailand: Chiang Rai, Payao, Nan, Chiang Mai, Mae Hong Son, Prae, Lampang, Khampang Phet, Loei, Phisanulok, Phetchabun, Sukhothai, and Tak provinces. Their population is second large from Karen tribe. Hmong language is a mixture of many other languages but can be communicated among themselves. Currently, Hmong are able to read and write their own language by using Latin characters (Hmong RPA). Memory and recitation are the only way of their preserving and passing their culture to

other generations. In the past, Hmong were not interested in studying because they mostly work in the fields, living in natural setting with small income to sustain their family.

### 3. Research Objectives

- 1) To study the socio-economic contexts of the three main ethnic craftswomen;
- 2) To study the challenges and needs in terms of ICT and entrepreneurship skills; and
- 3) To propose ICT and entrepreneurship skills needed to support the ethnic craftswomen to transit their intangible heritage.

### 4. Research Method

Qualitative research was used by the in-depth interview, Focus Group Discussion, and observation. Fifteen key informants were studied: In-depth interviewed with six key informants who were the ethnic craftswomen leaders; and Focus Group Discussion among the nine stakeholders' leaders from three main tribes: Karen, Akha, and Hmong from Ban Mae Klang Luang, Ban Luang, and Ban Sobhad Subdistricts, ChomThong District, Chiang Mai province. Descriptive analysis was used.

### 5. Findings and Discussion

Findings follow the objectives respectively as follow;

#### 5.1. Socio-Economic Contexts of the Three Main Ethnic Craftswomen

1. Karen group has their outstanding handicrafts is hand-woven fabric by traditional weaving methods with their unique style of intangible heritage. Queen Sirikit, Her Majesty of the King Rama 9th has promoted by supporting more designs as well as setting up the "Karen Weaving Center" in the village aims for creating a career and inheritance of wisdom from their ancestral generations. After farming works, most of the women joined the group to weave fabrics for their own family uses since birth till die such as mother uses a woven cloth wrapped their baby while working in the forest up hill; some of them use is as a hat, baggage, cradle to store agricultural materials, etc. Cotton yarn, dyed color, even weaving machine are all derived from the forest. The loom weaving tool called "loom waist" has designed to fit with women's waist lengths and lifestyle of Karen women due to its convenience and easy to carry on anywhere. Most of the customers are foreigners, tourists who visit their Weaving Center, and villages. (Ban Luang Subdistrict Municipality,2019).

2. Akha group has their woven cotton fabric dyed with dark blue from their own planting. Currently, they buy raw cotton then compressed into large packed for more convenience in spinning the thread during their weaving. Akha women taught to spin since 6-7 years old because the women have to weave for their whole family So, Akha women of all ages normally spin all the time of their availability such as during a trip to the farm, carrying firewood, finding water and also in the house at night. Akha women often competed each other about their spinning skills as well as their dyeing skills especially via the indigo color which could take around a month to get the desired dark blue. Currently, Akha embroidery fabric also be processed, sewed into various forms of products with more modern design to more marketable while their ancestors' heritages still alive to other generations.

3. Hmong group handicraft textiles' motifs and patterns represent their social life, culture, history and aspirations. They believe costume patterns help them communicate with deities to pray. Their intangible heritage patterns in cross, triangle or lozenge shapes, among others, are made by sewing cloths of different colors, by embroidery, or by encaustic painting reflecting their cultural identity.

#### 5.2. The Challenges and Needs in Terms of ICT and Entrepreneurship Skills

##### 5.2.1. Cases of Karen Craftswomen

**Case 1:** Ms. Pa named in Karen is "Mua Pa". She is 33 years old, graduated grade 3 staying in Mae Klang Luang village with 97 households, Doi Inthanon district. Main occupation of the village is

agriculture. Only 20 households participating as members of the Weaving Group. Many years back till currently, the Royal Project together with the local municipalities trained them more new designs aims to scale up more markets and income. Each weaving process takes 2-3 days with 3-5 hours a day after their daily farm activities. One piece is 250 baht (calculated from time consumption and the design pattern). Currently, most of the materials bought from the city with chemical color dyed instead of their natural dyed from any natural bark colors.

### *1. Challenges in Terms of Crafts (The Intangible Heritage)*

Some of the main challenges the stable quality of their handmade products due to different producers, and quality control process, etc. PR and marketing still very low, tourists still do not know that there is a Weaving Group in this village, many of them accidentally meet the Group once they enter into the village. The younger generation is less interest in weaving because it needs high patience while other works can be paid more and faster. All the intangible heritage has inherited by their natural practices and memory with none of any formal record till currently. Ms. Pa has started to weave since 10 years old from how to tread the cotton, rolling, then pattern it. The original tribal pattern will have millet, with black color for the married person while white color for the un-married ones.

### *2. Challenges in Terms of ICT*

Ms. Pa is the Group's leader, she knows how important of ICT. She wants to use ICT more in PR and marketing about her Weaving Group. For the online selling, herself and her group's members still not dare to sell online because of all fears about being cheated, and the most important is she doesn't know how to sell online as well as all the relevant management.

### *3. Challenges in Terms of Entrepreneurship Skills*

Their mis-perception is ICT, e-shop or e-commerce can be handled only among the graduated or the business people. Entrepreneurs must run a big business not a small shop like them. And the other challenge is their production capacity because all of them produce only for their daily family uses. They produce their crafts only once they have time from their farm and family jobs.

**Case 2:** Ms. Nee, named in Karen is "Kare". She is 36 years old. Main income of the village is to run a community tourism activity such as resort, local guide, coffee shop, employees in the city, farming, and weaving. Family average income is 6,000 baht per month. If from farming, their income is around 100,000-200,000 baht per year. For tourism activities are around 1,000,000 baht per year. And for skilled weaving is around 30,000 baht per year. The average income of the Weaving Center is around 100,000 baht a year with around 20,000 baht as a profit.

### *1. Challenges in terms of crafts (The intangible heritage)*

Passion is their main reason in doing weaving followed by helping preservation and promotion of their own intangible heritages to their younger generations. And most important is every woman in this village needs to weave all kinds of crafts for her family members to be dressed during all important festival of the tribes.

### *2. Challenges in Terms of ICT*

Online sales activities are very difficult for her and her Group's members to understand. They afraid of all kinds of e-transaction because if any error occurs, they cannot consult anyone in time. But they are interested to learn and be trained because their village is very far from the town to run for any banking process. The other challenge is no PR and marketing strategies for their crafts at all, just only "word-of-mouth" by tourists who have entered into the village. They hope that ICT can help more in PR and marketing, new design learning, telling their intangible heritage. Their current ICT is smartphone which is mainly for general communication: Line, Facebook with 4G-5G networks, taking photo and

video with no editing. Some small experiences with the popular marketing platforms such as Lazada, Shopee, Transferring money via Mobile Banking seems increasing.

### 3. Challenges in Terms of Entrepreneurship Skills

“Pricing” is one among their main problems, their standard price is 250 baht per piece of craft. They calculated pricing from time consumption, sizes and design. The initial funds of the Group given from agencies, such as the Royal Agricultural Station, the Municipal with 20,000 baht for all Group. Currently, the Group is quite well equipped, they just want more young generations to join the weaving. Then they can create online market to attract more new customers as well as drawing back young generation to the crafts works.

#### 5.2.2. Cases of Akha Craftswomen

**Case 1 :** Ms Mati named in Akha is “Mei Jue”. She is 50 years old and being Chair of the Akha Mekong River Network in 5 countries (China, Vietnam, Laos, Thailand, Myanmar), also being Committee of the Indigenous Tribal Council of Thailand, Vice President of the Impact Association that works with all tribes and ethnicities and Akha community in Thailand. Her hometown is in Chiangdao district, Chaingmai province.

#### 1. Challenges in Terms of Crafts (The Intangible Heritage)

“All women have a duty to inherit and transmit all intangible heritage such as weaving, embroidery, silverware and wickerwork to their children”, in my times, children with 6-7 years old must start to learn all these crafts because they must do their own clothes. Three main identity of our heritage are: round, pointed and oval, which emphasizing on black, brown and white. Less young generations can sustain all the heritage. Generally our tribe uses 5 color mainly white, red, green, yellow and blue, with yellow in green. Currently imported from Myanmar through Chiang Tung district, sent to sell at Mae Sai and Chiang Mai but the main sales are in Chiang Rai province. These crafts are decreasing because there are more machine made to reduce both time and price. The Akha tribe use their costumes to represent their wealth status such as its heritage design and the silverware. Most of their assets will give to a son, once daughter married she expected to get that assets from her mother-in-law as well as her husband.

#### 2. Challenges in Terms Of ICT

ICT can help a lot because our tribe has only spoken language, no written language. Very least preservation and records. These crafts heritage explained by only the mother tongue which is very limited. ICT can help in any kind of succession especially among all the new generation to let them see more, engage more and contribute more.

#### 3. Challenges in Terms of Entrepreneurship Skills

Main problem is inheritance and less passion in their own tribal crafts, follow by no market, and least or non ICT literacy in entrepreneurship. These crafts can sell only among the nearby people, cannot sell to any distant people. No own shop because if they want to open their own shop, it requires high capital, our community people cannot do it. ICT can help in any Start Up or any MSME (Micro SME).

**Case 2:** Ms. Chan, named in Akha is Kalek. She is 49 years old, Vice Chair of the Weaving Group, their main products are bags, bags, scarves, bedspreads, and others. Weaving is the main occupation of housewives in this village. Among the 30 members of this Weaving Group, ten of them is about 20 years old, studying in the town and doing weaving crafts whenever of their available time. All the 35 households have their own weaving tools, and they normally weave around 4-8 hours daily. Their weaving heritage preserved only remembering which seems to be disappearing because the new

generation is not interested in weaving, but still there are some young people. In the past, black and red were used primarily in weaving, but currently, raw materials are rare as well as time consumption.

### 1. *Challenges in Terms of Crafts (The Intangible Heritage)*

The production standards such as materials, size, quality control, pricing, design are mostly the main challenges. Chemical dyes is more used now due to less cost, less time, and more applicable in designing. Anyhow, many of their original patterns has gone due to none of any systematic preservation, only their remembering process due to illiteracy as well as the limited of their own tribal written language. They can speak their mother tongue language but cannot write even there are some schools of the municipal offer the mother tongue language teaching.

### 2. *Challenges in Terms Of ICT*

PR and marketing are the main challenges, we mostly sell our crafts at our Weaving Centre only among visitors. Also selling in some of the invited exhibition at the province, the Municipal and in Bangkok around 2-3 times a year. The average price is starting from 250 to 2,000 baht calculated from labor cost, raw material cost and design. Two percent will be deducted back to the Group. We used to have our own online page provided by the municipal, but got no interest. So, ICT still needed to help in PR and marketing as well as more young generation members.

### 3. *Challenges in Terms of Entrepreneurship Skills*

Main customers are the tourists, we learned from their comment, their recommendations from them too. Then we keep applying our crafts into others such as applying scarves to be a shirt and a blouse. We observed that our top three tribal designs are more on natural contexts such as flowing, tree, mountain, etc. Anyhow, less young generation can remember all those original patterns.

#### 5.2.3. *Cases of Hmong Craftswomen*

**Case1:** Ms Nida named in Hmong is “Tong Ma” 27 years old. Hmong crafts entrepreneur, used to stay in Maerim district, Chaingmai province, but currently lives in Chaingrai province.

### 1. *Challenges in Terms of Crafts (The Intangible Heritage)*

The inheritance of wisdom from the ancestors is more difficult. Some of the main intangible heritage pattern of Hmong called “Jigmua” keeps disappearing, just only the ones over 50 years old can do it. The other main problems of the Hmong crafts is “market” because hand crafts are quite high price then it is difficult to sell out compared to the machined made : 5,000 baht for one hand craft taken 1 year for its production while the machine made price is only 2,000 baht with 15 days production time.

### 2. *Challenges in Terms of ICT*

ICT should help with marketing especially doing the online sales on their own from their own smartphone such as posting, story, and any e-strategy, etc. because currently, they can sell only among the Hmong people themselves. No PR for any other outsiders.

### 3. *Challenges in Terms of Entrepreneurship Skills*

ICT is very expensive and complicated for most of the ethnic craftswomen, they want to learn, want to be trained as well as want the reliable mentor to help guidance and protect if in case of any error in any e-business transaction.

**Case 2:** Ms. Ladda named in Hmong is “Jao Sue” 33 years old. Hmong Women Group leader, Chaingmai province.

### 1. *Challenges in Terms of Crafts (The Intangible Heritage)*

“At least, our own crafts can save money of our family to buy clothes for our children and our ancestors who only want to wear our own tribal cloths and costume”, “It is also our pride to show our

crafts to all the visitors who visit our community, many of them give us a very high price. We all happy with our crafts and would like to promote it”.

## 2. Challenges in Terms Of ICT

We all accept how important of ICT as well as its power to help and solve all the current challenges because we have more young generations back to the village, then they can help handle all the ICT tools and facilities.

## 3. Challenges in Terms of Entrepreneurship Skills

As myself is the leader of the Women Group which also produce the crafts, we don't have any knowledge and skill to manage our own e- shop especially the confidence in any e-transaction and e-financial management such as e- banking as well as some e- order, etc. We gained some fundamental ICT training, but note relevant much about e- commerce as well as very least or nonreliable mentor nearby if in case of any e-transaction error.

### 5.3. The Propose of ICT And Entrepreneurship Skills Needed to Support the Ethnic Craftswomen to Transit Their Intangible Heritage

Three main consensus issues which ICT can help sustaining their crafts as of their intangible heritage as well as uplifting their income generation and quality of life as follow;

1. ICT for intangible heritage documentation: Women's grouping together to run their own crafts primary from duty as being a women, follow by passion and extra income for the family. The succession of crafts wisdom from generations is only remembered from their own ancestors and re-practices among their peers among the Women crafts group. The consensus problem among all three groups is that the inheritance to their younger generations due to not seeing its importance, its taking time, patience and diligence while its income returns is very least money. Besides with the current competitive between machine and handmade crafts. Its price and production standard are the significant challenges. As for the publicity of the handicrafts of the tribe, it was only limited to the tourists who visited their villages.

2. ICT for intangible heritage transmission: Besides from their generations' transmission through their daily life's practices which seems to be decreasing, ICT seems to be their new hope because their new generations mostly have ICT especially smart phones. But among all the 3 tribal women groups, they still cannot access the online commerce. Almost everyone uses smart phone for their general communication with some Apps: Line and Facebook. Few of them use Instagram, such as the Akha tribe who relocated into the city of Chiang Mai. But still not be able to access to the full range of online sales. Main reasons that made women tribes from ICT usages are: 1) fear of using technology especially their confidence in using ICT. ICT is very expensive and complicated for them, if any problem occurs, nobody can help them to solve it; 2) fear of any money related errors in doing e-commerce, if any error occurs they cannot handle it by themselves.

In case of bringing ICT to help preserve their crafts as their own intangible heritage, they all agreed to do it because they all accept how important of ICT as well as its power to help and solve all the current challenges.

3. ICT for intangible heritage products marketing: Most consensus in marketing is how to use ICT for their crafts marketing due to there is very least or none PR about their crafts, their villages, their people to all the public. Other demands from ICT are pricing, stock taking, design, networking respectively.

## 6. Conclusions

Currently, the general of all pilot ethnicities: Karen, Hmong and Akha have similar challenges in using ICT as follow; 1. Their perception or belief about its difficulty and only fit with the knowledgeable or skilled people especially about e-commerce. They don't have any knowledge and skill to manage their own e- shop especially their confidence about e-financial management such as e- banking as well as

some e- order, etc. Because they only gained some fundamental ICT training, but relevant much about e- commerce as well as very least reliable mentor nearby if in case of any occurred problem. 2. how to use ICT for public relations or for their digital marketing communication. Just seeing many people use it but they have no confidence to do it by themselves. So, this made them to sell their products only among themselves as well as any tourist or visitor whom visit their villages. With very little income from their products resulting in an inherited wisdom that has disappeared. Their young generation do not see the importance of their heritage weaving because of very small income and taking quite long time to make it compared to other works that can gain more and fast incomes. Currently, the general use of ICT among all 3 main ethnic craftswomen: Karen, Hmong and Akha are mostly only for their daily communication. Social media is mainly used like “Line” and “Facebook” as well as some relevant Applications. Other uses of ICT for business still very least due to their lack of confidence, knowledge and skills especially any relevant about e-commerce of their products. So, appropriately designed to fit needs would be the best answer to their holistic development because ICT can offer all the outreach ethnic craftswomen and girls to preserve, conserve, transmit all the pride of their intangible heritage to the other generations.

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Annex: Photos and videos.

- Photo's link: <https://drive.google.com/drive/folders/1LZapy2R0EzcO3spEfN1VpT8KrUQ2vdWD>



- Video's link: <https://drive.google.com/drive/folders/11IB9FzCFPAgfQunWnYRsR87ZZUA7w8XL>

