



Management of local knowledge to develop silverware products into a contemporary identity of the Mien Ethnic Group in Kamphaeng Phet, Thailand

Ogama Jakae

Lecturer of Social Development Program of Faculty of Humanities and Social Sciences, Kamphaeng Phet Rajabhat University, Kamphaeng Phet 62000, Thailand

Article Info

Article history:

Received 18 May 2021

Revised 24 Jul 2021

Accepted 2 August 2021

Available online 30 April 2022

Keywords:

ethnic group,
hill tribe silverware,
knowledge management,
local knowledge,
product development

Abstract

This study was conducted with the aim of exploring local knowledge of silverware, management of local silverware knowledge and to develop silverware products into a contemporary identity of the Mien ethnic group in Kamphaeng Phet. This qualitative research adheres to interpretation view processes and had 30 key informants consisting of members of hill tribe silverware groups. Data were collected using interviews, focus groups and participatory observations. Data analysis and presentation using ethnographic research principles found the Mien ethnic group in Kamphaeng Phet to be the largest production site for silverware in Thailand with conservation of ancient patterns and designs in silver handicraft centers, use of modern technology for processing silver handicraft products and items, human and natural dimensions, pattern designs that imitate nature, human dimensions and sacred items in silverware during New Year's Day events, and human dimension in weddings with expressions of family status. Management of local hill tribe silverware knowledge involved the following four steps; (1) Build inherited local knowledge by observing, memorizing and experimenting through trial and error; (2) Store knowledge by memorizing and storing knowledge in documents, photograph albums and video clips; (3) Disseminate knowledge in families, exchange knowledge in the community and kpru.ac.th; and (4) Use knowledge by processing it into processes for improving hill tribe silverware products into a contemporary identity and produce hill tribe silverware brands consistent with the Mien ethnic group's identity, develop packages, design and develop new product brands and improve products along with increasing competitive capacity during the COVID-19 era.

© 2022 Kasetsart University.

E-mail address: okama24@hotmail.co.th.

<https://doi.org/10.34044/j.kjss.2022.43.2.30>

2452–3151/© 2022 Kasetsart University.

This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

Social and cultural changes have led to the acquisition of correct and suitable knowledge for different eras, helping individuals exchange data and information when working with an aim to systematically improve organization and community work (Davenport & Prusak, 1998). Situations have changed quickly. Thailand is a middle-income country. Therefore, knowledge management concepts are highly important for national economic and social stability. Organization must be made to recognize that the foundation for competitive advantage is innovation, which is use of knowledge to create new knowledge (Wuttirong, 2019). Local knowledge is an expression of cultural identity of people and communities threatened by loss or change as a result of conflict. Therefore, cultural heritage must be protected according to the Convention for the Safeguard of the Intangible Cultural Heritage (Wisuttiluck, 2017). Cultural heritage is an important factor in creating and inheriting cultural traditions and community identity. Cultural heritage is important for social equality. Cultural heritage enables society to inherit values, norms and create expectations related to the community and cultural identity in the community (United National Educational, 2017).

The Mien ethnic group in Kamphaeng Phet is a Mongoloid group (Chinese-Tibetan) that migrated south from Yunnan, China, into Laos and Vietnam. Upon arriving in Thailand, the Mien ethnic group had to move to many provinces until the ethnic group became marginalized because the government sector's ethnic bias prevented the ethnic group from living in forest areas. The Mien ethnic groups in Kamphaeng Phet make up a total of 3,646 persons with approximately 2579 persons scattered in Khlong Lan District, 54 persons in Khlong Khlung District, 440 persons in Mueang District and 574 persons in Pangsilathong District, all of which have settled as clan, family or tribal groups. When the Mien ethnic group migrated to plain areas, the Mien ethnic group was not prepared for large numbers of refugees, had no agricultural land, lacked the four basic necessities and lost human dignity. However, the ethnic group used social and cultural capital as a tool for adapting to new areas. The ethnic group developed communities and transferred hill tribe silverware knowledge unofficially. Currently, community businesses have to adapt to global trends because the community's past success in trading silverware cannot confirm future success. When searching for problems in the area, the community was

found to have no transfer of silverware knowledge and no systematic information storage in addition to lacking development of silverware innovations into a contemporary identity. The ethnic group was unable to develop silverware for full economic use and did not have diverse customers. Despite rising unemployment problems and rates and climate change problems, the Thai government aimed at national development to improve living conditions. Ethnic groups, however, have no land for agriculture, so they try to find new strategies in the search for new hill tribe products meeting global standards. The COVID-19 pandemic caused the Mien ethnic group to be faced with major socioeconomic changes and less income from inability to distribute craft products as in the past. Therefore, the researcher and the community need to find methods for developing hill tribe silverware products into a contemporary identity for the Mien ethnic group, use knowledge management instruments to drive and build research on the ethnic group into innovations and solutions for the aforementioned problem under conservation of the ethnic groups identity and craft knowledge in order to enable the ethnic group to live based on self-sufficiency, knowledge and immunity to current changes. The objectives of this study were to: (1) study local silverware knowledge of the Mien ethnic group; (2) study management of local silverware knowledge of the Mien ethnic group; and (3) develop silverware products into a contemporary identity in Kamphaeng Phet, Thailand.

Literature Review

Knowledge Management Concept

Social development and knowledge management is important to communities, organizations and personnel because knowledge management creates problem-solving guidelines through learning exchanges in the community and the organization. In the area of social development. Vichianpanya, Natakatoong, and Bungbua (2020) found the development of a research knowledge management system for use in social development to consist of the following: (1) People from research agencies, research agencies, or research users; (2) Information technology; and (3) Communication. The system has the following six steps: (1) Preparation of appropriate knowledge to meet needs; (2) Communication with researchers and target groups; (3) In-depth transfers for use; (4) Learning exchanges between the researcher and users; (5) Support, encouragement and drive for use of

research; and (6) Review and assessment of results from the use of knowledge. Frank, Ribeiro, and Echeveste (2015) further provided a systematic review of the extant literature on influencing factors of knowledge transfer among new product development teams and found three sociotechnical subsystems consisting of personnel work, technological design, and external environment. Ghobadi (2015) also reviewed important knowledge-sharing drivers in software development context and proposed a classification framework. The framework categorizes the knowledge-sharing drivers into people, task, structure, and technology-related drivers. These studies have provided useful yet broader perspectives on the general influencing factors for various aspects of organizational KM activities and processes (Maravilhas & Martins, 2019).

Local Wisdom Concept

Local wisdom concept is everything that villagers can use to solve problems. It is a technique; it is villagers' knowledge thought and done by villagers broadly and deeply. The problems of local life are suitably solved by the local wisdom. The wisdom is knowledge and belief. The system of thinking is from experiences accumulated in systematization of relationships between people, people and nature, and people and supernatural elements supporting them in life in different ways and always enabling them to stay in normal equilibrium (Na Thalung, 2020). The wisdom of each place is different in physical aspect, in thought, in belief and in community way. The development of wisdom and villagers' learning process in every region is a result from learning natural and environmental things then adjusting themselves and creating the traditions which conform to life style in the environment. The value of local wisdom is its usefulness and importance, that ancestors have created and inherited from the past to the present continuously (Niwes & Knachanosotha, 2007).

Product Development Concept

Product development has numerous objectives and covers a broad range of characteristics with the same purpose of needing a new product that generates profit and enables the company's survival. New products include the following: (1) Products created from expanding production lines by using line extensions; (2) Repositioned existing products by modifying existing products in terms of use without changing main properties, which are sometimes consistent with consumer proposals; (3) New

types of existing products; (4) Reformulation of existing products; (5) New packaging of existing products; (6) Innovative products/changes in existing products to create new products that are different from existing products; and (7) Creative products/products brought into existence/the rare never-before-seen products (Fuller, 1994).

Methodology

This research employed a qualitative research methodology as follows:

Key Informants

Key informants met the following selection criteria: members of the Mien ethnic group composed of 30 members of the hill tribe silverware group divided into 8 hill tribe silverware masters and 22 members of the Mien ethnic group with experience and ability in making hill tribe silverware in Kamphaeng Phet.

Data Collection

The research was conducted in the following two phases;

Phase 1 – Research to collect data and analyze management of local silverware knowledge of the Mien ethnic group in Kamphaeng Phet involved the following two steps;

1. Collection of data on the local silverware knowledge of the Mien ethnic group, key informants and hill tribe silverware masters. The instruments in this study consisted of interview forms and field notes. Data were collected by conducting interviews on local hill tribe silverware knowledge. Data were analyzed by content analysis with consideration given to consistency and related data according to the concept of local knowledge (8 of the informants were interviewed from August 2018 to November 2019).

2. Collection and analysis of data on local silverware knowledge management of the Mien ethnic group. The key informants were members of the hill tribe silverware group. Research instruments consisted of interview forms and focus group questions. Data were collected by the researcher. After the researcher obtained data from interviews, the researcher summarized data analysis to test data accuracy and completeness by triangulation. Data analysis used content analysis with consideration given to consistency of opinions and possibility of data from focus

group participants based on the knowledge management concept (30 of the informants were interviewed from December 2019 to March 2020).

Phase 2 – Development of Silverware Products into a Contemporary Identity of the Mien Ethnic Group

The main data came from members of the hill tribe silverware group. Research instruments consisted of focus group questions, surveys of community product standards, practical training to improve silverware product standards and practical training on creating packaging models (30 informants in group discussions from April 2020 to July 2020).

Data Analysis

The present research used descriptive analysis for data analysis by describing data and raising examples of statements made by informants alongside empirical evidence in the form of tables, maps and illustrations and presentation of data in a descriptive format. For protection of the rights of informants, the researcher tightened procedures and processes to prevent violations of the participants' rights to privacy.

Results

The discussion of the results of this study is divided into three parts: (1) silverware knowledge of the Mien ethnic group; (2) management of local silverware knowledge of the Mien ethnic group; and (3) development of silverware products into a contemporary identity of the Mien ethnic group in Kamphaeng Phet.

Local Silverware Knowledge of the Mien Ethnic Group in Kamphaeng Phet

The Mien ethnic group migrated to settle in Kamphaeng Phet from 1974 because the area is fertile and suitable for agriculture. In 1986, the government moved the Mien ethnic group from a forest area to a plain area, causing the ethnic group to have no land, face poverty and have no shelter. In 1994, Her Majesty Queen Sirikit visited the people and found the hill tribe people to be in poverty without land. Therefore, Her Majesty Queen Sirikit supported grouping Thai people in the mountains by the people's occupational specialty in the Ban Lek Nai Pa Yai Royal Development Project. The ethnic group adapted to a different environment from high areas, causing the ethnic group to have a new lifestyle while preserving an ethnic identity.

The hill people accumulated knowledge from the past to the present and formed groups to build a silverware learning center to conserve traditional models of ancient-patterned hill tribe silverware production model in the present day and use modern equipment and technology for processing accessories and items. Most of the ethnic group's customers are ethnic Thai hill people from every tribe in the northern region and Thai civil servants from the plains. When the knowledge relationship was analyzed in the human and natural dimensions, silverware designers experienced living with nature in high-altitude areas. Therefore, silverware designers designed specific local patterns that imitate nature, leaves and flowers. In the dimension of humans and sacred objects, silverware was used in traditional events such as New Year's Day and ancestor worship. In the human and human dimension, wedding traditions expressed families' good status.

Management of Local Silverware Knowledge of the Mien Ethnic Group

Hill tribe silverware knowledge was inherited by the Mien ethnic group living in the area, reflecting knowledge, experience and beliefs of the ethnic group toward hill tribe silverware. Management of local hill tribe silverware knowledge had the following four steps:

(1) Knowledge Creation – This is internal hill tribe silverware knowledge transferred from family members, ancestors, from grandfathers to fathers and from fathers to sons. Knowledge was created by creating silverware patterns portraying nature and using patterns in silverware products such as leaf patterns, flower patterns, cucumber patterns, sesame seed patterns, cylinder patterns, pomelo flower patterns, fish patterns and silver flower patterns; (2) Knowledge Storage – Knowledge memorization and storage in document form, photo albums and video clips is knowledge in the person told to household members and shown as examples with a focus on each person's memorizing method. The Mien ethnic group had no systematic storage of hill tribe silverware knowledge and no written records. Some silverware identity knowledge was lost from lack of records; (3) Knowledge Dissemination – Knowledge dissemination is unofficial dissemination of hill tribe silverware knowledge in daily life based on learning from the old generation's experience and passed on by telling, showing examples and practicing along with natural transfer of knowledge without an officially planned course; and (4) Use of Knowledge – Use of knowledge in daily life to produce silverware caused other ethnic groups to have attractive

tribal dress because clothing decorated with silverware creates identity for each ethnic group with unique tribal dress for New Year’s Day traditions, weddings and ordinations.

Development of Silverware Products into a Contemporary Identity of the Mien Ethnic Group in Kamphaeng Phet

Currently, hill tribe silverware products have original models and were sold to ethnic Thai hill tribe groups in northern Thailand. Thai people from the plains see silverware as large, heavy, not modern, high-priced and difficult to resell because consumers have more interest in diamonds and gold. The researcher’s analysis found that silverware has value, traditional patterns and identity. Therefore, the researcher jointly developed hill tribe silverware products into a contemporary identity using the following factors; (1) Input – The hill tribe silverware group uses KM as one of the methods or strategies for developing products with cooperation between agencies in the area of knowledge management such as researchers, silverware groups and development centers for people living in high-altitudes by supporting learning exchanges of product development guidelines; (2) Process – Pattern development from the environment, equipment development, modern production technologies and instruments such as replacing refining machines

with blowing machines and using blowing machines to melt silver in order to soften silver for convenience in shaping and silver pressing machines; (3) Output – Experimentation with use of innovations to develop hill tribe silverware products into a contemporary identity by designing products, selecting product models, hill tribe silverware package boxes and by using practical training on product designs. Results of the experiment were new product models with patterns similar to overlapping figure-eight patterns, silver flower patterns, auspicious numeral patterns, packaging boxes for 5-star OTOP selection, higher income and product advertisement via the website at <https://www.kpru.ac.th/>. The factors leading to success in product development were integration of social development with product designs, leadership and sincerity to the community. The key success factor in developing the products clearly was understanding the target. Participation by all parties was found to be useful in allocation and rapid target population-solving. Teamwork organization was flexible and faster in dealing with social and cultural changes, while effective conversation and cultural identity conversation were understood easily because the researcher is a member of one of the ethnic groups. Useful research reports and innovation were widely applied at the Highland People Development Center and Department of Local Administration as shown in Figure 1.

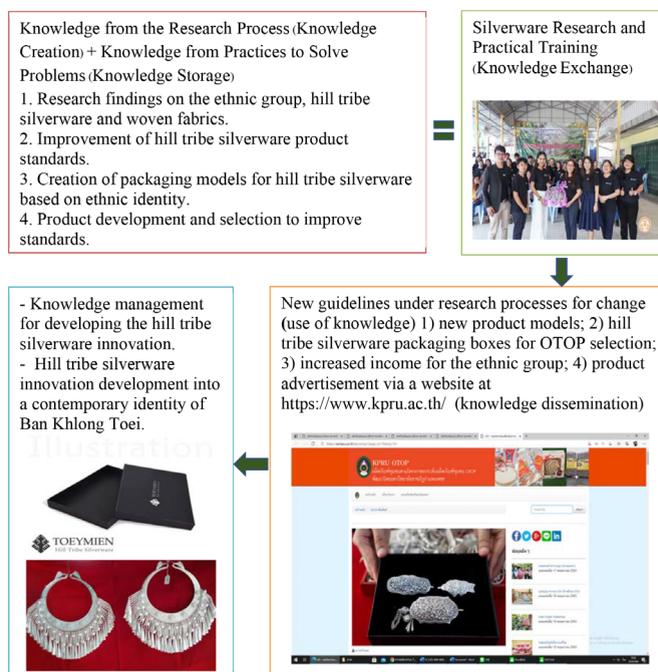


Figure 1 Management of Local Knowledge to Develop Silverware Products into a Contemporary Identity of the Mien Ethnic Group in Kamphaeng Phet

Discussion

Local Silverware Knowledge of the Mien Ethnic Group

The Mien ethnic group has preserved ancient patterns and used modern technology for processing silver accessory products and items with designs and patterns that imitate nature. Most of the ethnic group wore silver at New Year's Day events and weddings to show the family's good status. This was consistent with Jai-aree (2014). Local knowledge on bamboo shoot processing included traditional knowledge and new knowledge combining traditional knowledge with modern science supported by government agencies. This was consistent with Ngwese, Saito, Sato, Boafo, and Jasaw (2018). While often depicted as static and hermetically sealed, recent study results have emphasised that local knowledge systems are complex, porous, dynamic, and constantly updated. (Matti & Ögmundardóttir, 2021).

Local Silverware Knowledge Management of the Mien Ethnic Group

During the New Year's Day festival, every member of the ethnic group wore tribal dress obtained from using cultural identity to create attractive fabric products and hill tribe silverware with patterns that imitate nature. Therefore, knowledge management had four steps consisting of the following: (1) Knowledge Creation – Knowledge came from parents and grandparents through observation, memory, experimenting, holding discussions to exchange experience in the group, trial and error and knowledge from supporting government agencies. This was consistent with Chanawut (2017); (2) Knowledge Storage – Knowledge was stored in memory, photograph albums and video clips; (3) Knowledge Dissemination – Knowledge was handed down in families, exchanged in the community, and community products were disseminated on a website (kpru.ac.th). This was consistent with Inprasit (2017). The ancient Sukhothai silverware identity is a meticulous local family of silverware with every piece being handcrafted and inherited from generation to generation. The silverware had patterns and local methods that weave threads into a frame before bending and attaching silver to create patterns and make ellipses to decorate the piece; and (4) Use of Knowledge – Use of knowledge is processing of knowledge into the step of developing hill tribe silverware products into a contemporary

identity. Knowledge management can create added value to build sustainable competitive advantage through innovation (Plessis, 2007) This study indicates that KM resources and capabilities have differential impacts on firm performance over time. KMS generates short-term payoffs only, but KM capabilities yield long-term returns. Interestingly, our data point to indirect as opposed to direct influence of knowledge stock; that is the quality of codified knowledge does not directly influence firm performance but indirectly mediates performance through KM capability (Lee, Choi, & Lee, 2020).

Development of Silverware Products into a Contemporary Identity of the Mien Ethnic Group

Development of hill tribe silverware to meet international standards was done until innovations were acquired and innovations were submitted to experimentation. Development of hill tribe silverware products into a contemporary identity of the Mien ethnic group focused on product design, selection of hill tribe silverware product models and packaging boxes for OTOP, acquisition of product brands consistent with the Mien ethnic group's identity, development of packaging boxes, design and development of new products and product improvement to increase competitive capacity in the digital age consistent with Jarungjitsuntorn (2005). Design was a problem-solving activity to achieve goals and a human action to create new things by designing new creations to be different (Moonsawad, 2013). After the implementation of design was complete, the next step was the evaluation process, followed by setting clear rules and covering the contents considered the jewelry designs for decoration. The contemporary designs placed importance on ideas and expressions of artists and designers through the jewelry works offering new views, concepts and social aspects, which is consistent with the findings of Wichaikun (2017). Early modern accessory designs mentioned reducing shapes and details. High class traditional accessories have been separated and possessed by people with social status. The main content of modern accessories has creations through concepts to communicate meanings or symbols that trigger imaginations or memory of times in daily life and individuality.

Conclusion and Recommendation

The Mien ethnic group has continued to preserve hill tribe silverware knowledge with ancient-patterned silverware production models that imitate the environment in the present day. Local knowledge management was used to develop hill tribe silverware products into a contemporary identity of the Mien ethnic group. Local knowledge management consisted of creation of knowledge transferred from ancestors through observation, memory and trial and error with a focus on knowledge creation from research processes. Knowledge creation from researching the ethnic group, traditions, culture, silverware and hill tribe embroidery emphasized building ethnic group research findings, improving hill tribe silverware product standards, creating model packaging for hill tribe silverware, product selection and disseminating knowledge in the family along with exchanging knowledge in the community while focusing on research, practice and dissemination of knowledge on development of hill tribe silverware products into a contemporary identity. Use of knowledge processed knowledge from government sources into steps with a focus on new guidelines under research processes for change while emphasizing use of knowledge and new product models, hill tribe silverware product packaging boxes for OTOP selection and product advertisement via websites. Results from knowledge management to develop hill tribe silverware products in 2020 were selected for verbal presentation in the area of integration on the topic of development of hill tribe silverware products into a contemporary identity of Ban Khlong Toei in the 1st National Innovation/Good Practice Event at Rajabhat Kamphaeng Phet University.

Recommendation

Research should be conducted to improve products and international marketing strategies for hill tribe silverware. In addition, research should be conducted on model management innovations and added value for community cultural capital to promote grassroots economy and improve quality of life of people living in high-altitude areas.

Conflicts of Interest

There are no conflicts of interest.

Acknowledgments

This research was funded by Kamphaeng Phet Rajabhat University, Thailand.

References

- Chanawut, C. (2017). Studies of identity value of roadside art to build value for the creative economy. *Academic Journal of Anthropology and Social Studies*, 25(49), 247–267. Retrieved from <http://arcs.bsru.ac.th/journal/File68164.pdf> [in Thai]
- Davenport, T., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Boston, MA: Harvard Business School Press.
- Fuller, G. W. (1994). *New product development from concept to marketplace*. Boca Raton, FL: CRC Press.
- Frank, A. G., Ribeiro, J. L. D., & Echeveste, M. E. (2015). Factors influencing knowledge transfer between NPD teams: a taxonomic analysis based on a sociotechnical approach. *R&D Management*, 45(1), 1–22. doi: 10.1111/radm.12046
- Ghobadi, S. (2015). What drives knowledge sharing in software development teams: A literature review and classification framework. *Information & Management*, 52(1), 82–97. doi: 10.1016/j.im.2014.10.008
- Inprasit, U. (2017). Development of silverware identity by applying local knowledge, Sri Satchanalai, Sukhothai. *The 13th Naresuan Research National Academic Conference Under the Topic of Research and Innovations Driving the Economy and Society: 1495–1515*. Phitsanulok, Thailand: Naresuan University. [in Thai]
- Jai-aree, A. (2014). Local bamboo shoot processing knowledge management model of the Ban Pu Toei Community, Kanchanaburi. *Politics and Administration Journal*, 4(2), 241–158. Retrieved from <http://copag.msu.ac.th/journal/filesjournal/4-2/1801201711480314.pdf> [in Thai]
- Jarungjitsuntorn, W. (2005). *Product design principles and concepts*. Bangkok, Thailand: Appa Printing Group. [in Thai]
- Lee, O. D., Choi, B., & Lee, H. (2020). How do knowledge management resources and capabilities pay off in short term and long term?. *Information & Management*, 57(2), 103166. doi: 10.1016/j.im.2019.05.001
- Maravilhas, S., & Martins, J. (2019). Strategic knowledge management in a digital environment: Tacit and explicit knowledge in Fab Labs. *Journal of Business Research*, 94(1), 353–359. doi: 10.1016/j.jbusres.2018.01.061.
- Matti, S., & Ögmundardóttir, H. (2021). Local knowledge of emerging hazards: Instability above an Icelandic glacier. *International Journal of Disaster Risk Reduction*, 58(1), 102187. doi: 10.1016/j.ijdrr.2021.102187
- Moonsawad, T. (2013). Contemporary Thai accessory designers. *I-Design*, 133, 20–25. Retrieved from http://tnrr.in.th/index.php?page=result_search&record_id=10460961 [in Thai]
- Na Thalang, E. (2002). *Over all Thai local wisdom*. Bangkok, Thailand: Amarin Printing and Publishing. [in Thai]
- Ngwese, N. M., Saito, O., Sato, A., Bofo, Y. A., & Jasaw, G. (2018). Traditional and local knowledge practices for disaster risk reduction in northern Ghana. *Sustainability*, 10(3), 825. doi: 10.3390/su10030825
- Niwes, A., & Kanchanosotha, J. (2007). *Local wisdom*. Bangkok, Thailand: Jitrat Publishing. [in Thai]

- Plessis, M. du. (2007). The role of knowledge management in innovation. *Journal of Knowledge Management*, 11(4), 20–29. doi: 10.1108/13673270710762684 [in Thai]
- Vichianpanya, J., Natakuatoong, O., & Bungbua, P. (2020). The Development of knowledge management system for research utilization. *Journal of the Association of Researchers*, 25(1), 501–518. Retrieved from <https://so04.tci-thaijo.org/index.php/jar/article/view/241621> [in Thai]
- Wichaikun, O. (2017). Development of contemporary and post-modern accessories. *Veridian E-Journal, Silpakorn University*, 10(2), 2506–2520. Retrieved from <https://he02.tci-thaijo.org/index.php/Veridian-E-Journal/article/view/104708> [in Thai]
- Wisuttikuluck, S. (2017). *National cultural heritage: Lessons from neighbors*. Bangkok, Thailand: Princess Maha Chakri Sirindhorn Anthropology Center. [in Thai]
- Wuttirong, P. (2019). *Innovation management concept & best practice*. Bangkok, Thailand: Chulalongkorn University. [in Thai]