

# Knowledge Management Approach in the Non-Profit Sector



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## INTRODUCTION

Non-profit organizations (NPOs) defined as “a high propensity to innovate the supply of social services from several points of view such as in the types of services provided, in the target groups and the organization of services provision” (OECD, 2003). The NPOs have also been encountered challenges that the ability to supply better benefits packages for the staffs. Slatten et al. (2020) noted that the NPOs are often insufficiencies this ability; subsequently, these organization can result in a high percentage of turnover rate. The United Nations categorized NPOs into three groups on local, national, and international levels, which aim to overcome social issues in support of the public good. It also can be called as not-for-profit or third sector organizations. NPOs present as “important actors” to the national economy (Lyons & Passey, 2006). Overall, the critical purpose of the NPOs is to create social value for the community or society. Thailand has considered as a success case study for developing countries. Since 2011, The World Bank grouped Thailand’s income from a lower-middle-income economy to an upper-middle-income economy (World Bank, 2020). In the situation of emerging and developing markets, for instance in Thailand, the non-profit sector plays a vital role in order to contribute to economic growth, develop civic infrastructure, share and create social values, and mitigate adverse spillover effects through its program or activities (Anheier & Salamon, 1998). Culturally, Thai NPOs remark as “embracing associations and foundation, engaged philanthropy, economic and social development, health and social services, advocacy, and cultural and recreational activities” (Amara & Nitaya, 1997; Pongsapich, 1993). From the 1970s, it was traced to the flourished development of the Thai non-profit sector. In recent years, many international organizations have registered in Thailand as “a popular relay location,” which emphasized regional development as in Southeast Asia (Pongsapich, 1998). Remarkably, the significant impact of these organizations has been recognized, with more than 80,000 NPOs in Thailand, earning around USD 4,1 billion and recruiting more than 26 million members in 2017 (NSO, 2018). Although many practical proofs indicated that these organizations have actively contributed to the communities and society in Thailand, there is still a lack of empirical evidence on how NPOs operation, perform, and utilization the knowledge assets. Therefore, it is emerging a need increasingly for more research and empirical studies to discover and investigate different processes on knowledge management (KM) to maximize their social impacts.

Vast of investigations on the KM model and implementation of KM systems have been conducted in for-profit-organizations and large firms, where existing resources and competitive conditions can enable leverage the utilizing and using of KM capabilities. Authors agree with other scholars that other sectors

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or types of sizes and organizations could also come up KM systems to improve the organizational impacts and outcomes, for instance in social enterprise, small and medium-sized enterprises, local service organizations, voluntary or charitable organizations, and international non-profit organizations (Huck et al., 2011; Ragsdell et al., 2014; Downes & Marchant, 2016; Granados et al., 2017). However, the KM approach among non-profit landscape is still limited because this research trend has recently been recognized (Lettieri et al., 2004). There is a paucity of study on KM practices in the NPOs, including several contributors with different perspectives related to KM, for example, knowledge needs (Rathi et al., 2016), knowledge sharing (Stauss, 2007; Bloice & Burnett, 2016; Curado et al., 2021; Fullwood & Rowley, 2021), the effectiveness of KM (Downes & Marchant, 2016a), and organizational culture for KM activities (Chang et al., 2021). Consequently, in order to explore the potential for the NPOs to gain the benefits from KM activities and how the knowledge-creating process can be implemented in the non-profit landscape. The study indicated KM approach by four critical components of the KM-NPOs domain: knowledge sharing (KS), knowledge resources (KRs), knowledge creation (KC), and knowledge needs of international non-profit-based organizations that have a branch in Thailand. The chapter adopted a mixed research method approach that used deploying semi-structured interviews with senior managers and national survey with 213 respondents from the NPOs in Thailand.

The overall purpose of this chapter attempts to deeply understand how the KM implementation among the NPOs, which characterize the KC process, type of knowledge needs, barriers of KS, and KRs. The study also seeks to apply KC theory in non-profit rather than for-profit in previous literature. In order to achieve the proposed objectives, this research is structured in the following manner: it begins with a brief theoretical foundation regarding KM-NPO domain. The further section provides an approach of KM in the non-profit perspective, including the KS, knowledge needs, KRs, and KC. Finally, conclusions and limitations of the research are provided.

## **BACKGROUND**

### **KM-NPO Domain of Industrialized Countries**

The studies on KM of for-profit institutions are well-known and established background and foundation in order to investigate examinations on KM-NPO domains with many perspectives (see. e.g. Lilleoere & Holme Hansen, 2011; Ode & Ayavoo, 2020). However, less attention has been given to the non-profit sector. Recently, some KM studies have researched the NPOs context from several perspectives.

Ragsdell et al. (2014) presented that there are many inherent differences regarding organizational structures (Ragsdell et al., 2014), legal requirements, infrastructure, operational guidelines of NPOs, and for-profit organizations; thus, the studies on KM for these organizations are divergent. These differences significantly influence on KM practices in the non-profit sector (Hume et al., 2012). Unlike for-profit organizations, NPOs are, however, not maximizing financial value but create value for the community and society (Lettieri et al., 2004). Recently, the number of research emphases on knowledge activities with common issues, for instance, knowledge sharing, management, and capture, are emerging in the non-profit sector, especially in the European context (Ragsdell et al., 2014). From the beginning stage, Lettieri et al. (2004) mainly contributed to conceptualizing a model concerning KM and performance improvement in Italian NPOs. The model describes a KM cycle with seven steps on how NPOs effectively manage all resources their knowledge in order to maximize the benefits in the non-profit environment. This cycle shortly includes: knowledge acquisition; knowledge codification; knowledge retrieval; knowledge

storage; knowledge diffusion and presentation; knowledge application; and knowledge creation. From this model, the KC process allows NPOs to accumulate new experiences and generate new ideas so as to trigger and create new knowledge. Beside, Lettieri et al. (2004) showed that there was a tendency of NPOs to maintain tacit knowledge (experiences and ideas) at a level of individual even though the knowledge has been codified. KC activity critically nourishes and restarts the whole process (Lettieri et al., 2004). An analysis of an NPO in Australia context by Fenwick (2005) indicated that the KM perspective is severely limited for sharing and transfer of the knowledge, which acquired in foreign countries. Moreover, the level of KM awareness is low or medium in the non-profit sector.

Regarding using tools and technologies in NPOs, Rathi and Given (2017) noted that the size of NPOs influenced practicing their tools and technologies for KM activities. This study also revealed that non-computer-based solutions, for example, print and physical documents, are popularly utilized concerning KM-related activities in the non-profit sector. In line with using tools and technologies in NPOs, Christina et al. (2012) shared that Web 2.0 was a toolbox in order to develop a KM strategy and lead to successful KM in the non-profit environment. Another perspective of studies on KM for NPOs is knowledge needs and its taxonomies. A comparative analysis conducted in NPOs operating in Canada and Australia by Rathi et al. (2016). The study has developed a model of knowledge needs with five major categories and multiple sub-categories in NPOs. Five major categories identified, including “management and organizational practices, resources, community, sectoral knowledge, and situated knowledge.” Interestingly, the main contribution of this study is to grow the body of the literature of KM-NPO domains regarding the knowledge needs and experiences of these organizations. Next, KM scholars also interestingly investigated and evaluated KM and its effectiveness. Downes and Marchant (2016) concluded that the extent and effectiveness of KM activities were moderate in Australian NPOs. The study demonstrated that face-to-face exchange is a significant method to exchange knowledge among NPO staff. Moreover, in order to enhance KM effectively in NPOs, recognition, and incentive systems needed to improve the process of learning and disseminate new knowledge within these organizations. In terms of knowledge application, Bersisa and Rory (2020) explored that the integration of knowledge could improve the capabilities and strategic effectiveness of the NPOs.

According to the KS in the non-profit sector, this topic investigated some perspectives in the non-profit environment. For instance, a list of knowledge sharing barriers (KSBs) updated to reflect non-profit contexts beyond the for-profit sector (Bloice & Burnett, 2016). In detail, a new list of KSBs mainly reinforced, which consisted of ten potential individual barriers, eleven potential organizational barriers, and four potential technical barriers. Interorganizational partnership is a vital factor in maintaining advantage competitive, create resources that aim to carry out goals and objectives in NPOs. Rathi et al. (2014) identified eight partnership categories influenced on knowledge sharing in NPOs. These partnerships include business, sector, community, government, expert, endorsement, charter, and hybrid. Recently, Alexandra et al. (2019) noted the importance of the human factor in KM activities in a non-profit environment, illustrating that the adoption of these activities builds upon the beliefs from the employees in NPOs. Recently, Curado et al. (2021) added that organizational culture was a antecedents, which positively impacts to the KS in the non-profit environment. In short, although many studies examined in the non-profit environment, most of these studies conducted in developed countries contexts. There is, however, a lack of attention from KM scholars investigating in third world countries, especially in Asian countries.

## **KM-NPO Domain of Third World Countries**

Initially, industrialized countries have a long tradition in operating and developing the non-profit sector. Furthermore, the political background created a difference in development sectors between industrialized countries and developing countries. For example, the European Union has a policy that supports the development of NPOs and contributes in order to build up standards for good management practices. Meanwhile, developing countries are entirely different. They faced with a limitation of social development tradition, financial supports, or political commitment for NPOs (Sébastien Matzkin, 2008).

There are not many investigations that concentrated on the KM-NPOs domain in developing countries. As the first study of the KM-NPO domain in these countries, Sébastien (2008) examined Peruvian NPOs and revealed the notion of KM awareness is from medium to the low level. The study also concluded that implicit KM-NPO practices still were existence in third world countries. Another study conducted in Mexico, Zapata and Mondragon (2016) showed that courses and seminars, which based on personal motivation and organizational culture, are strongly impacted by the process of knowledge generation. In contrast with NPOs in developed countries, this study also presented that trust with colleagues and personal commitment to the organizational mission was essential to knowledge transfer.

In the Asia context, Hidayana et al. (2017) noted that knowledge sharing presented a mediate role in the relationship between customer accountability and voluntary organizations' effectiveness in Malaysian NPOs. The study also recommended that these NPOs need to trigger knowledge sharing behavior so as to impact of customer accountability in the context of developing countries. As previously mentioned, there was a lack of attention emphasizing KM studies for NPOs. However, Sébastien (2008) reported that many academic scholars conducted their works in NPOs associate KM in developing countries with some concepts such as "social learning", "social development", "cognitive dimension of development", and "organizational learning," for example, a study by Prugsamatz (2010). As a result, these studies added confusion in order to identify and understand KM practices in the environment of third world countries. Recently, Caballero et al. (2020) initially examined KM practices in humanitarian organizations. This study illustrated that KM is embryonic stage in organizational practices in non-profit sector of Asia Pacific countries. Therefore, it is clear to note that majority of the KM-NPO research domain has been originated from northern countries. The studies of KM-related in NPOs are emerging, which is right in Asian countries, especially in Thailand.

## **RESEARCH METHOD**

A mixed research method was used in this study. The explorative stage of this study was conducted from April 2020 to May 2021. The procedures were divided into three phases, as below:

*Phase 1: Examining of motivational factors that promoted KS activities and affected the organizational successes.* In this phase, data were collected by using the online questionnaire survey with 213 staffs of NPOs in Thailand. The respondents were from diverse backgrounds. The critical research variables for this process were intrinsic and extrinsic factor, which triggered knowledge sharing activities in the nonprofit sector.

*Phase 2: Investigating knowledge needs, KRs, and KC processes of selected NPOs in Thailand.* The data of this phase were collected by semi-structured interviews, which were conducted with key informants from the NPOs. Each interview was 60 to 90 minutes. The key informants requested to set

up interview places, including offline and online options. The issues of data collection were categories of knowledge needs, KRs and the KC processes among examined NPOs.

*Phase 3: Data analysis and synthesis.* All collected data were analyzed and synthesized into both quantitative and qualitative formats. In detail, quantitative data were analyzed by SPSS 18.0. Furthermore, the values of the Cronbach alpha reliability coefficient were determined. Qualitatively, the data were analyzed and synthesized by Atlas.ti 7.5. The data structured into table format as following steps; firstly, the researchers were extracted and listed the contents into themes found in the data collection processes; moreover, these items were grouped into similar components to reduce duplication and redundancy. Secondly, the researchers re-organized these items found in each examined NPOs to identify the most and most minor themes in all NPOs. Finally, the research results were summarized on the frequencies of data found in knowledge needs, KRs, and the KC processes in the NPOs.

## KNOWLEDGE MANAGEMENT APPROACH TO THE NPOS

### Knowledge Sharing

The study findings showed that the knowledge sharing intentions were the most important motivational factor promoting knowledge sharing practices in the non-profit environment ( $\bar{x}=4.03$ ). Moreover, this factor has the highest factor loading value ( $\beta=0.834$ ). The results also revealed that followed factors, including organizational knowledge sharing culture ( $\bar{x}=3.81$ ;  $\beta=0.777$ ), intrinsic motivational factors ( $\bar{x}=3.81$ ;  $\beta=0.655$ ), knowledge sharing process ( $\bar{x}=3.67$ ;  $\beta=0.833$ ), and extrinsic motivational factors ( $\bar{x}=2.91$ ;  $\beta=0.783$ ). The research findings of a detailed analysis showed in table 1 with all dimension items.

### Organizational Knowledge Sharing Culture

Of the six sub-factors, sharing of information and knowledge with colleagues in the organization is beneficial, as it was ranked at the highest level ( $\bar{x}=4.31$ ). Furthermore, this sub-factor reached the highest factor loading value ( $\beta=0.836$ ). The study results present that benefit of knowledge sharing activities and their value are necessary to promote a sharing culture in the NPOs. Broadly, the findings reveal that organizational culture or general attitude is promoting knowledge sharing in the NPOs ( $\bar{x}\geq 3.34$ ;  $\beta\geq 0.727$ ). Knowledge sharing culture within the exemplified organizations was considered to be benefited and supported by the organization. To promote sharing the knowledge effectively, the NPOs required an organizational culture that motivates the staff members to search for new methods or ideas of doing things. These findings are aligned with a study of Vuori and Okkonen (2012), which stated that organizational culture did not set any challenges for knowledge sharing activities. It is interesting to present that the finding contradicted previous literature of the KM-NPOs domain. Zapata and Mondragon (2016, p.81) mentioned that the collaborators of knowledge sharing “are committed to sharing their expertise among their colleagues; neither organizational culture nor top management support is relevant for this process.”

### Knowledge Sharing Intentions

Overall, the respondents were noted that they have solid comments and intentions conducting the knowledge sharing with their colleagues. The results of this research note that the most decisive intention of

knowledge sharing in the non-profit context is “sharing the knowledge with the colleagues who ask/need” ( $\bar{x}=4.14$ ). The respondents were less concentrated on sharing the knowledge with their workmate more frequently in the future with  $\bar{x}=3.95$ . Meanwhile, the sub-factor of trying to share the knowledge with the colleagues had the highest factor loading value with  $\beta=0.871$ .

This study finding has consolidated the perspective of Lin (2007) in terms of examining the effects of the motivational factor on employee knowledge sharing intentions in for-profit contexts. Lin (2007) revealed that employee intentions regarding knowledge sharing were strongly linked with the intrinsic motivational factor to sharing the knowledge. In the non-profit contexts, it is interesting to note from this study that the people regarding the NPOs are intrinsically motivated to share the knowledge due to intrinsic factors rather than financial support or rewards (Natalia et al., 2009). The results support the study conducted by (Downes & Marchant, 2016b).

### Knowledge Sharing Process

Overall, most of the respondents agreed that existing processes of knowledge distribution is promoting the knowledge sharing process at their organization at the highest level ( $\bar{x}=3.76$ ) and the most substantial factor loading value ( $\beta=0.865$ ). Moreover, the statistical data indicated that the forms of exchanging the knowledge, both internal and external processes, are prioritized within the exemplified organizations with the followed highest level,  $\bar{x}=3.75$  and  $\bar{x}=3.71$ , respectively. The results also presented the lowest factor loading value ( $\beta=0.810$ ): availability of organizational knowledge to all who need it among these organizations.

Interestingly, the study confirms the previous works (e.g. Dong, Gia Liem, et al., 2010; Lin, 2007; El Harbi et al., 2011), indicating organizational processes as a critical role in knowledge sharing. In the context of for-profit-organizations, El Harbi et al. (2011) found that information and knowledge are key components to the success of organizational processes at investigated firms. Moreover, this study of knowledge sharing, and its application are critical for organizational competitive advantage.

### Intrinsic Motivational Factors

Overall, intrinsic factors have obtained the third-highest position in factors promoting knowledge sharing at the exemplified organization with  $\bar{x}=3.81$ . In detail, the participants revealed that they felt enjoyable sharing the knowledge with their colleagues ( $\bar{x}=4.00$ ); followed by helping their colleagues via sharing of knowledge and information ( $\bar{x}=3.96$ ); confident in their ability to provide the knowledge and information which consider valuable to others (colleagues) ( $\bar{x}=3.64$ ); expertise required to provide valuable knowledge and information for their organization ( $\bar{x}=3.63$ ). In term of the factor loading, the results noted that the highest position of factor loading with  $\beta=0.824$ , in which the respondents enjoyed helping their colleagues by sharing knowledge and information. Nonetheless, the lowest factor loading factor is  $\beta=0.497$  meaning that the NPOs' professionals are confident in their ability to provide knowledge and information to others in their organization consider valuable.

Regarding intrinsic motivational factors, the statistical result consolidated Vuori and Okkonen (2012) perspectives in terms of sharing knowledge and information to colleagues is valuable and beneficial. Moreover, Downes and Marchant (2016) found that the NPOs' mission-oriented environment was exceptional, where the staffs have intrinsically motivated to share their knowledge and information with others. By case study analysis, Natalia et al. (2009) also supported the findings that knowledge sharing improved through intrinsic motivational factors. However, the study results demonstrated the contrast



in terms of promoting factors in the contexts of for-profit and not-for-profit organization. The for-profit employee may hoard the knowledge and information in order to maintain their competitive internal environment (Downes & Marchant, 2016). While the NPOs' individuals were interesting to share voluntary the knowledge but still ensure a job well-done (Ragsdell et al., 2014).

### Extrinsic Motivational Factors

Interestingly, extrinsic factors had the lowest position of all the factors that promoted knowledge sharing activities in the NPOs in Thailand ( $\bar{x}=2.91$ ). Eight sub-factors examined these factors. The highest level of mean scores with  $\bar{x}=3.58$ , when the respondents believed that their requests for knowledge would be answered in the future; followed by strengthening ties between existing members of the organization and themselves ( $\bar{x}=3.56$ ); the respondent's expectation of receiving knowledge and information in return when necessary ( $\bar{x}=3.54$ ); and expanding the scope of their association with other organization members ( $\bar{x}=3.41$ ). The research findings also noted that four sub-factors had mean scores under 3.00. In detail, most of the participants revealed that knowledge sharing would not be increased job security in return for their knowledge and information sharing with  $\bar{x}=2.70$ ; followed by increasing promotion opportunities in return for their knowledge and information sharing ( $\bar{x}=2.30$ ); gaining a higher salary in return for their knowledge and information sharing ( $\bar{x}=2.10$ ); and the lowest position of the sub-factors enhancing knowledge sharing with  $\bar{x}=2.09$ , which presented that the participant will have a higher bonus in return for their knowledge and information sharing. Meanwhile, receiving a higher salary via knowledge sharing activities among the NPOs had the highest position of factor loading in terms of extrinsic indicators ( $\beta=0.919$ ). The lowest score of factor loading is  $\beta=0.592$ , which mentioned that knowledge sharing would increase job security.

The research results critically aligned with the study of Natalia et al. (2009). It is interesting to share that extrinsic motivation is not significant in knowledge sharing in the non-profit environment. These results also noted that promoting knowledge sharing concentrated intrinsic reasons rather than extrinsic motivations or financial rewards. The study revealed a low incidence in knowledge sharing practices compared to the NPOs and for-profit organization, which contradicted previous research that reward and recognition systems enhance knowledge sharing (Vitari et al., 2007; Vuori & Okkonen, 2012).

### Knowledge Needs: An Update of Evidence-Based Categorization

The findings revealed broad categories and sub-categories of knowledge needs in a nonprofit context. This knowledge needs to be clarified specific, which is generated from different types of organizations in Thailand. The findings were aligned with the study of Rathi et al. (2016); however, some sub-categories were updated or not appeared in the paper. The research was adopted the clarification of knowledge needs by Rathi et al. (2016). In summary, knowledge needs in exemplified organizations fell under five main categories, namely: (1) Knowledge needs about organizational practices and management knowledge, (2) Knowledge needs about the resource (resource knowledge), (3) Knowledge needs about the community (community knowledge), (4) Knowledge needs about the sector, and (5) Situated knowledge

Table 2 indicated in detail these categories of knowledge needs within the NPOs. The updated sub-categories for Thailand context also presented table findings below. As seen in Table 2, multiple overlaps among these sub-categories were found in the findings and the list of Rathi et al. (2016). However, there were some unique sub-categories, which were updated or not presented in previous studies.

*Table 1. Factors promoting knowledge sharing at the non-profit sector*

	Sub-factors	N=213		Cronbach's alpha
		Mean	Factor loading	
	<b>Extrinsic motivational factors</b>			
EMF1	I will receive a higher salary in return for my knowledge/information sharing	2.10	0.919	0.817
EMF2	I will receive a higher bonus in return for my knowledge/information sharing	2.09	0.913	
EMF3	I will receive increased promotion opportunities in return for my knowledge/information sharing	2.30	0.890	
EMF4	I will receive increased job security in return for my knowledge/information sharing	2.70	0.592	
EMF5	I strengthen ties between existing members of the organization and myself	3.56	0.681	
EMF6	I expand the scope of my association with other organization members	3.41	0.707	
EMF7	I expect to receive knowledge/information in return when necessary	3.54	0.815	
EMF8	I believe that my future requests for knowledge will be answered	3.58	0.750	
	<b>Intrinsic motivational factors</b>			0.835
IMF1	I am confident in my ability to provide knowledge/information that others in my organization consider valuable	3.64	0.497	
IMF2	I have the expertise required to provide valuable knowledge/information for my organization	3.63	0.507	
IMF3	I enjoy sharing my knowledge/information with colleagues	4.00	0.790	
IMF4	I enjoy helping colleagues by sharing my knowledge/information	3.96	0.824	
	<b>Knowledge sharing intentions</b>			0.919
KSI1	I intend to share knowledge with my colleagues more frequently in the future	3.95	0.855	
KSI2	I will try to share knowledge with my colleagues	4.02	0.871	
KSI3	I will always make an effort to share knowledge with my colleagues	4.00	0.834	
KSI4	I intend to share knowledge with colleagues who ask	4.14	0.775	
	<b>Organizational knowledge sharing culture</b>			0.761
KSC1	Sharing the knowledge/information with my colleagues in the organization is valuable	4.28	0.785	
KSC2	Sharing the knowledge/information with my colleagues in the organization is beneficial	4.31	0.836	
KSC3	Sharing the knowledge/information with my colleagues in the organization is pleasant	4.17	0.809	
KSC4	It is easy to meet a person who has knowledgeable as I need	3.34	0.727	
KSC5	There are useful channels/processes to promote knowledge/information sharing at different departments/locations	3.34	0.771	
KSC6	Knowledge/information sharing via discussion form referred more than other forms such as in written form	3.44	0.735	
	<b>Knowledge Sharing Process</b>			0.903
KSP1	In my organization, there are processes for exchanging knowledge between individuals	3.75	0.823	
KSP2	In my organization, there are processes for distributing knowledge/information throughout the organization	3.76	0.865	
KSP3	In my organization, there are processes for exchanging knowledge with my business partners/stakeholders	3.54	0.826	
KSP4	In my organization, knowledge is made accessible to all who need it	3.71	0.810	
KSP5	In my organization, interdepartmental knowledge/information sharing occurs as a matter of course	3.59	0.839	



Table 2. The knowledge needs in the NPOs in Thailand

Categories	Sub-categories	Comparing with the study of Rathi et al. (2016)
Organizational practices and management knowledge	Strategic management knowledge	R
	Internal governance knowledge	R
	Process and practical knowledge	R
	Products and services knowledge	NR
	Knowledge about the organizational history	NR
	Intervention knowledge	U
Resource knowledge	Knowledge about sources of finance and funding	R
	Knowledge about tools and technologies	R
	Knowledge about intellectual resources	NR
	Knowledge about human resources	R
	Knowledge of other resources	NR
	Knowledge about information needs	U
	Knowledge about social capital	U
Community knowledge	Knowledge about clients and customers	NR
	Knowledge about volunteers	NR
	Knowledge about donors	R
	Knowledge about experts	R
	Knowledge of other community partners and stakeholders	R
	Cultural knowledge	R
Sectoral knowledge	Domain-specific knowledge	NR
	Knowledge about professional and industry standards	R
	Knowledge of best practices	R
	Knowledge about governing bodies	R
	Knowledge of partners, competitors, and other organization	R
	Knowledge of interorganizational networks and networking	R
	Updating knowledge	U
Situated knowledge	Bureaucratic directives knowledge	R
	Regulatory knowledge	R
	Political knowledge	R
	Geographical knowledge	R
	Economic knowledge	R
	Recorded knowledge	NR
	Current affairs	NR

Key:

- R=Sub-categories were represented in some form within the study of Rathi et al. (2016)
- NR=Sub-categories were not appeared comparing with the study of Rathi et al. (2016)
- U=Sub-categories were updated from this study's findings.

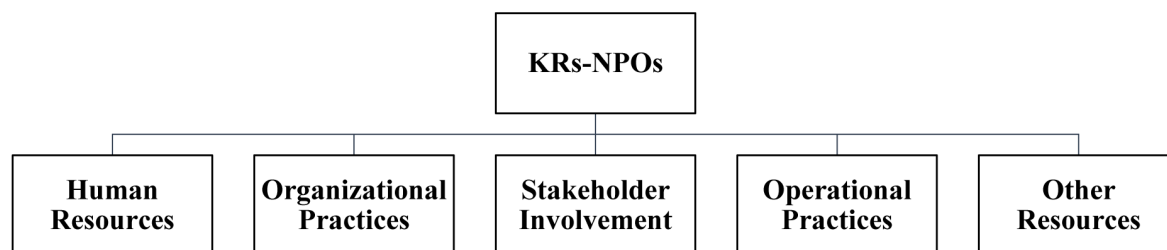
## **Categorization of Knowledge Resources in The NPOs**

The evidence-based findings of KRs illustrated in this investigation transcend existing models given the concentration, particularly in the nonprofit context. This diagram presents five vital components of the KRs discovered by elements that apply among the examined NPOs.

Qualitative data from NPOs in Thailand have been proposed to clarify five critical KR categories (Figure 1). These categories are presented as follows:

1. KRs-NPOs from human resources. This includes all assets of organization-specific human resources within the NPOs, which are characterized mainly by the skills, abilities, and experiences of the NPO's employees.
2. KRs-NPOs from organizational practices. These resources are indicated in various forms in organizations. Many resources exist among organizations related to organizational learning activities, practices, and mechanisms in sample organizations.
3. KRs-NPOs from partnership or stakeholder involvement. This resource captures all relevant information and data related to partnership or stakeholder involvement in organizations. It is contextual as “network KRs” in which knowledge flows internally and externally.
4. KRs-NPOs from operational practices. This presents all organizational knowledge and information related to day-to-day operation, such as processes, practices, procedures, and protocols regarding both administrative and practical components in NPOs.

*Figure 1. Five main categories of the KRs in the NPOs*



KRs-NPOs from other resources. This mainly contains all physical items and resources used for operational implementations in organizations. For instance, these resources include kinds of equipment and property.

Human-oriented resources are defined broadly in the literature. This includes all organization-specific resources relating to the human skills, experiences, and competencies of the volunteers, staff, and workers in the organizations. These resources can be generated throughout a series of activities, such as trainings/workshops, internal learning events, reflection meetings, and direct interaction during work loading. Human resources are a critical group of organizational KRs within NPOs. The staff can attain knowledge internally and externally.

For NPOs, more specifically, KRs encompass many kinds of resources and exist in diverse forms, both formal and informal. However, as one informant revealed, it depended on the NPO's needs in terms of using human resources for organizational purposes.

## KRs-NPOs from Organizational Practices

This category represents resources originating through organizational activities that NPOs are practicing. In the literature, the primary concentration of many studies was undertaken before this investigation. For example, Raphaela and Simone (2016) revealed that “staff meetings” were vital organizational practices promoting knowledge transfer in NPOs. Furthermore, it also noted that frequent informal communication, such as in the kitchen or during lunch, supported collaboration in the NPOs and enhanced staff members' understanding of how they performed their roles. From this study's findings, organizational practices were presented in many ways. For example, a technical learning lab initiated as an internal learning practice allowed the staff to access the KRs. Moreover, one informant mentioned that monitoring, evaluation, and learning feedback is an excellent opportunity for staff to speak out and gain knowledge. In a few cases, particularly with examined NPOs whose essential purpose is organizational review, intangible organizational resources such as performance appraisals or reviews were acknowledged as vital practices to NPOs. Furthermore, the study findings showed other knowledge-based practices in the organizations, including morning coffee, knowledge sharing sessions, informal gatherings, and staff retreats.

## KRs-NPOs from Partnership or Stakeholder Involvement

This category captures all network knowledge-based resources, including accessing external resources of sister or partner organizations and a better understanding of partnership or network knowledge. At a basic level, this consists of knowledge events for sharing expertise, updating information, and related experiences among network organizations. In other words, this category represents the knowledge from interorganizational partnerships in the nonprofit sector. There were two distinguishing attributes, directionality, and formality, that were characteristic of each partnership. By sharing this knowledge, this study demonstrated that KRs would be exchanged in formal and informal ways. According to the research findings, the informants noted that partnerships offered another knowledge-based resource among the NPOs. For example, the category related to the collaboration network between these NPOs and others necessary to share and generate new knowledge among the organization. Stakeholder involvement is a fascinating knowledge-based platform on which to create and share knowledge and information. This involvement moves across and beyond multiple boundaries. It can be linked to local government or agencies, communities, enterprises, governing boards, inter-region committees, and others. The qualitative data also noted that a range of partnerships and their involvement are vital and valuable in identifying the KM practices in NPOs.

## KRs-NPOs from Operational Practices

This category presents all knowledge and information regarding processes, practices, procedures, and protocols regarding both administrative and practical components. All of this knowledge is a vital resource for implementing projects or programs in NPOs. The findings revealed a large amount of information and data stored in knowledge-based resources within the investigated organizations. These resources allow them to retain knowledge through guidelines and manuals, standard operating procedures (SOPs), project/program documents (e.g., project proposal and M&E plans), policy briefs, reports, patterns, and others. Key informants also emphasized that web-based collaborative platforms and their application are well organized; these KRs are for organizational learning and development. These resources are salient for daily operation and might deal with information dissemination internally or externally.

Interestingly, the findings also explored the resources relating to operational practices necessary for organization development sustainability. Furthermore, the sources of knowledge were stored in different ways in the NPOs, such as information sharing platforms, internal SharePoint systems, knowledge-intensive portals/databases, and learning portfolios. In this way, KRs from operational practices are presented in the form of a knowledge combination process in the organization. Additionally, the research findings determined that KRs related to operational practices were necessary to implement organizational tasks even with small-scale NPOs with few staff and volunteers.

## KRs-NPOs from Other Resources

This category represents resources that were organizational equipment and other physical items in the NPOs. These resources are predominantly related to parts of the IT, finance, and logistics units within the organizations.

## Knowledge Creation Process in NPOs: Four Modes of Knowledge Conversion

Knowledge creation activities were aligned toward sharing existing knowledge useful in investigated NPOs. In order to examine KC Process described by the key informants, four modes of knowledge conversion of Nonaka et al. (2000) indicated. The details of finding analysis are presented in the succeeding sections.

### Socialization

Most of the key informants revealed several platforms in which experiences and knowledge sharing take places in the NPOs, including spaces informally and formally. One of these spaces formally, in particular for knowledge exchanges and experience sharing, is the formal meetings within these NPOs made by the staffs internally. The meetings were regularly organized as physical space in these organization, which carried out the ideas for learning of skills from others.

Moreover, there was evidence of the existence of virtual spaces which create and share the knowledge more accessible. “Technical learning lab” is supported the NPO’s staff can identify technical solutions as well as possible improvement of the project management and project concepts that gains which trigger sustainable development for the NPOs. The technical learning lab critically formed as a core-team meeting where knowledge shared and exchanged of these organizations.

Some NPOs also confirmed that knowledge sharing session that called as “Happy Friday” was space-specific where the staff spent time together for sharing the experience in investigated organizations. This

confirmed with previous literature by Nonaka et al. (2000). Furthermore, “webinars” were identified as vital virtual knowledge sharing and creation platform, especially during Covid-19 pandemic. By analysis the knowledge activities among exemplified organizations, it can be observed that these NPOs were familiarized with field visits or “safe-visits” as primary enhancement possibilities of the program circle and knowledge generation throughout direct interaction.

In mainly, “on-the-job-training” is not always reflected by the NPOs. Informally, events such as staff retreats, social gatherings (coffee breaks, lunches, dinners, and welcome or farewell parties) give the NPO’s staff the opportunities to get to know each other, sharing, and exchange their experience and knowledge about the organizational operation and challenges. However, such events cannot be equated to the knowledge brainstorming camps in case of Honda as investigated by Nonaka and Takeuchi (1995). Moreover, the findings also emphasized that the forms of imitation were not common in these NPOs.

## Externalization

Regarding the externalization mode of the knowledge conversion process, within each investigated organization, the key informants shared in a variety of forms in articulating tacit knowledge into explicit knowledge. The findings noted that assemblies were a majority method when articulating the knowledge collectively—the assemblies, which is organized very frequently, including weekly, monthly, quarterly, and annually. Formal assemblies are existing among these NPOs throughout face-to-face interaction such as dialogue and collective thinking in order to share experiences, insights, and ideas (tacit knowledge) to the participants (staffs). And then this tacit knowledge was converted into the forms of explicit knowledge such as concept papers, M&E logical framework or models, and standards. The study results noted that progress meetings or performance review workshops are an opportunity for both the management board and staffs, including field staffs presenting the reflection via the dialogue.

Although face-to-face communication is a critical method for creating and sharing the knowledge, geographic constraints or Covid-19 situation get more attention of the NPOs in changing to use electronic methods, for example, e-mail, Skype, phone, social media or online conferencing for interaction or discussions. Moreover, there was no manual or guideline of best practice for the staff using. Meeting minutes were a vital manifestation of knowledge converting during and after the progress meetings of the NPOs. Nevertheless, there were no centralized databases in which can save or record all minutes systematically.

Externally, the key informant also informed that external experts or consultants were necessary human resources providing strategic and management supports as well as services in operational implementation such as M&E, training, and others. Therefore, there was an existing list of experts or consultant externally in most of the investigated NPOs. Furthermore, one informant emphasized that the list of experts was identified as a knowledge resource within their organization.

The NPOs reported that “newsletter” was articulated and transferred the needs (tacit knowledge) and information from the partners or donors, which cover all expectations and activities into communication publications (explicit knowledge). Also, the research findings illustrated that there was a need assessment that gathered and figured out where the gaps of the community’s needs and turning these into proposal development as well as action plans for the organizations. The finding of community knowledge needs matched with the study by Rathi et al. (2016). Moreover, the NPOs have produced a variety of communication materials such as snapshots, research papers, curriculum design, and others by integrating expertise and insights from both the community and the organizations.

## Combination

According to Nonaka and Takeuchi (1995), the combination mode of knowledge conversion model embraces the combining of different systemizing and applying the process of explicit knowledge and information within the organizations. The findings of this study illustrated that conversion shapes occur in a variety of ways. These shapes included the diversity of documents, which used by investigated NPOs. Most of the key informants revealed that the “report” was as one of prominent display of knowledge combination in the organizations. The report re-configured and combined the data, information, and feedbacks of project or program operational activities, which were done in the routine work into professional language. There was an existing mechanism in the NPOs to synthesis and analysis of the data or information. This included M&E systems as well as reconfiguration databases as electronic spaces in term of knowledge combination. In detail, the findings indicated a “strong linkage” between KM activities and M&E process. This linkage mostly displayed in the form of operational databases. The forms of explicit knowledge were collected in both internal and external NPOs. All this knowledge was combined and modified in ways to create new knowledge. Some key informants described, therefore, that new forms of explicit knowledge can be disseminated within the staff members of these organizations. Other collected modes were illustrations such as field visit sketches, manuals, software and database guidelines, report formats, citation standards, policy briefs, and graphs/charts. Notwithstanding, the form of “breakdown” concepts, referred to study of Nonaka et al. (2000), for instance, product concepts or cooperate vision in the organization has not appeared in exampled NPOs.

## Internalization

Internalization can be understood as the knowledge process of embodying explicit knowledge into tacit knowledge, which related to “learning by doing” (Nonaka et al., 2000). The forms of knowledge which are perceived by key informants to be enriched tacit knowledge among the NPOs. The research findings noted the three distinct types of learning processes, including learning by implementation, learning by doing, and learning from others.

Learning from others indicated in investigated NPOs are existing mostly in training programmes as a vital method for sharing and creating knowledge throughout the direct experience. The training was frequency held by the organizations internally. Interestingly, internalization process by use of guideline or documents has appeared in the organizations. Regarding learning by implementation of program activities, the NPOs acknowledged that learning from mistakes or problems, and best practices are internalized. Further observed, as learning by doing the key informants cited “study tour” or “field trip” is manifested when the individuals joined the groups internally in order to share from each other. Moreover, “learning by doing” activities occurred not only at physical place but also at the virtual place, especially during Covid-19 pandemic. The research findings also revealed that the dialogue in meetings within the organizations built the individual knowledge base. However, there was no specific internalization by using diagrams is existed among these organizations. Three distinct types of learning processes presented that internalized the knowledge to achieve specialized knowledge which related directly to the staff’s mission. The explicit knowledge created, furthermore, is share during learning-based activities and embodied into individual tacit knowledge in the NPOs.



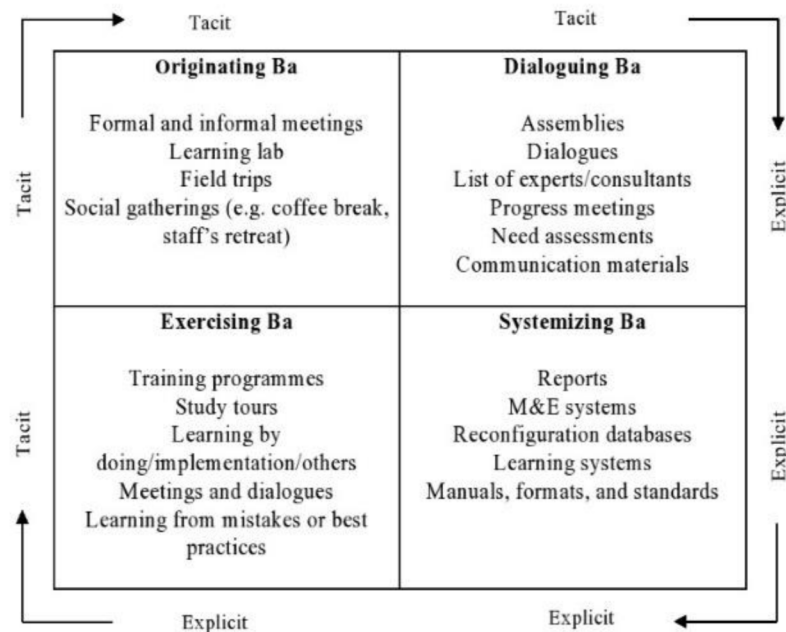
Nonaka & Toyama (2003) noted that the KC process is necessarily context-specific, including time, space, and relationship with others in the organizations. Moreover, knowledge needs a place to be created, where information interpreted into the knowledge through the interaction. The place of knowledge-creating named as “*ba*”, which is a created generative mechanism in order to stimulate knowledge creative activities (Nonaka & Toyama, 2003). By analysing of the knowledge-creating process in investigated NPOs, *ba* observed and identified in these organizations as such (see Figure 2):

Firstly, the originating *ba* takes place at both informal and formal meetings, where the NPO’s staff can directly share the knowledge, expertise, and best practices or mistakes to their colleagues within the organizations. In particular, the learning lab emerges from the interactions and exchange knowledge among technical working groups in the same organization. Furthermore, the study found that field visit trips and social gatherings are also placed in terms of creating the knowledge as well as sharing the experiences and feelings among the staffs informally.

Secondly, the dialoguing *ba* occurs in many forms in the NPOs. It can be observed that the assemblies, for instance, annual performance review workshop is to consolidate organizational strategy. Moreover, the list of experts or consultants recognized as a necessary human resource for the NPO’s operation. The study has shown the forms of tacit knowledge converted into explicit knowledge, for example, communication materials including newsletters, snapshots, research papers, curriculum design, and others.

Thirdly, the systematizing *ba* recognizes mostly in combination forms such as reports, where a re-configured variety of resource inputs including data, information, as well as project feedbacks. The findings confirmed that IT systems (e.g., databases and M&E systems) mostly used in combination and generation of the data and information in investigated NPOs. This finding contrasted with the previous

Figure 2. Types of *ba* in the NPOs



literature in KM-NPO domain, which revealed that lack of use of IT systems as a prominent obstacle for creating and sharing the knowledge in the non-profit sector.

Fourthly, the exercising ba, in which organizational knowledge is internalized of embodying explicit knowledge into tacit knowledge. The study findings demonstrated the learning process, including by doing, implementation, and others led to trigger new knowledge or practices in the NPOs. Additionally, the NPOs used internal training programmes to share direct experiences to enhance the tacit knowledge for the staffs at the organizations.

## CONCLUSION

The research objective of investigating the knowledge needs, KRs, KS, and the KC process in the non-profit context has been completed in the study. Four main research variables have been investigated by following research methods, including quantitative and qualitative approaches. The study noted that an updated list of knowledge needs in the NPOs was re-identified. Several sub-categories of this research variable were also identified from the findings of qualitative data. In terms of KRs, this research was a significant study to propose a framework of organizational resources and their relationship for organization design. Another research variable is knowledge sharing, also investigated. The results have been shown by deploying in-depth interviews with senior managers and national survey with 213 respondents from the NPOs in Thailand. It discovered how organizational design – especially culture, employee intentions, intrinsic and extrinsic motivational factors, and processes – promotes knowledge sharing in the non-profit context. This provided empirical insight into the KM-NPOs research domain, which links knowledge sharing and organizational design in the non-profit environment. It was imperative to seek an understanding of how the dynamic of knowledge creation in the NPOs developing countries. Based on the results from four research variables, it was essential to develop the KM-NPO model in the following research objective.

The research results have indicated types of knowledge managing among exemplified organizations, showing the characteristics of the knowledge process within these organizations. The study also categorized and illustrated the following four groups: experiential knowledge assets, conceptual knowledge assets, systemic knowledge assets, and routine knowledge assets (Nonaka et al., 2000). This knowledge was associated with the NPO's members' expertise, experience, local wisdom, and community understanding. Among others, types of explicit knowledge will help the NPOs to re-configure and retrieve the data and information in the forms of databases or intranet. Nevertheless, the key informant mentioned that the NPOs did not have specific KM strategies among their organizations.

Moreover, the results demonstrated that these organizations were not followed any assessment of knowledge activities. Instead, there were existing informal KM practices in the NPOs. This finding can imply other studies found in KM-NPO domains (Hume & Hume, 2008; Kong & Prior, 2008).

According to the study results, it can be early observed that the social gathering and interaction hosting by the NPOs had a strong influence in terms of knowledge sharing and creation. The existence of both in-office and out of office places so that the NPO's members may share their field experiences, abilities, and know-how in order to promote a knowledge environment in the NPOs. As explained by Balestrin et al. (2008), this can trigger sustainability development, an important resource for competitive advantages for organizations.

Regarding the study's implications, clarification of knowledge types is an essential factor in managing and identifying the flow of information and knowledge within the organizations. Therefore, the

non-profit sector needs to have a holistic KM strategy that is unique for that particular NPOs. This study critically identified the existing knowledge types among investigated NPOs. It is valuable for the NPO's managers or knowledge-intensive employees to be utilized in terms of selecting and referring the KRs. Unlike the for-profit sector, the NPOs have been faced with budget limitations; moreover, these organizations were creating social values for the society or community rather than maximized financial gains (Lettieri et al., 2004). Therefore, creating a “knowledge culture” is to exploit the values of knowledge to fundamentally make organizational innovation, allowing the NPOs to trigger a more conscious spiral in terms of KC. Furthermore, the NPOs should focus on KM strategy and its efforts to make a specific culture supporting the KC process in the non-profit sector.

In terms of the implications to KM theory and future research, this chapter can be investigating human factors and information technology (IT) area to the KC process; and identifying the KC process in organizations of different sizes and operating in different non-profit sectors. Another area of research interest is the evaluation of knowledge and KM activities in this sector. Furthermore, both NPO's practitioners and KM scholars will be benefited from this investigation while it continued proposing the discourse in the segment of KM-NPOs in developing countries. Focusing on the KM process ensures that all organizational knowledge will be generated and maintained sustainability, and critically considered to accept KM broadly as a component of achieving community and social mission.

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## KEY TERMS AND DEFINITIONS

**Knowledge Creation:** An organizational process for knowledge creation by interacting at the micro (individual) and macro (environment) levels with each other.

**Knowledge Management:** Management of knowledge of an organization which includes the following processes: knowledge creation, followed by knowledge sharing and dissemination by identifying knowledge needs and resources.

**Knowledge Needs:** Organizational demands for task implementation, mission, and organizational development. It can be included both internal and external demands.

**Knowledge Resources:** Organizational assets, including tangible and intangible assets.

**Knowledge Sharing:** Sharing of knowledge in an organization, both task information and know-how in order to support and help each other in term of problems solving, developing of new ideas, or implement new policies and procedure.



**Non-Profit Organizations:** The entities that operate with purposes of not-for-profit via fundraising activities or business development from private sector or donors with aiming for promoting the public good or encouraging of community participation and seeking solutions to society development.

K

**Sharing Barriers:** The obstacles including physical and nonphysical aspects that inhibit knowledge sharing activities in the organizations.