



Journal of Knowledge Management

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Article information:

To cite this document:

Laura E Zapata Cantu Carlota Eugenia Mondragon , (2016), "Knowledge management in Mexican NPOs: a comparative study in organizations with a local and national presence", Journal of Knowledge Management, Vol. 20 Iss 1 pp. 69 - 87

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Knowledge management in Mexican NPOs: a comparative study in organizations with a local and national presence

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Abstract

Purpose – The purpose of this paper is to identify those organizational and personal elements that enable not-for-profit organizations (NPOs) to generate and transfer knowledge. NPOs are under pressure to use their financial and human resources efficiently, and to improve their activities and services constantly. Knowledge management as a strategy would ensure NPOs' sustainability and rapid adaptation to dynamic environments.

Design/methodology/approach – A qualitative study based on interviews, documents and questionnaires was conducted in 28 Mexican NPOs.

Findings – Three main findings were identified: First, Mexican NPOs generate knowledge through courses and seminars based on volunteers' personal motivation and organizational culture. Second, informal communication media are widely utilized to transfer organizational knowledge. Third, personal commitment to the organization's mission and trust in their colleagues' social actions are crucial for knowledge transfer effectiveness, rather than organizational elements.

Research limitations/implications – Results scope of this study is limited to the NPOs under study. The findings expose some highlights for knowledge management process in NPOs in Mexico which would be tested in further research.

Practical implications – Contrary to knowledge management in profit organizations, NPOs must recognize that personal motivation, commitment and trust in organization's mission and social actions are crucial rather than organizational culture and top management support.

Social implications – NPOs must convert their tacit knowledge to explicit knowledge, which allows NPOs to be transparent and effective, and to have access to more funding opportunities and to replicate their best practices throughout the organization.

Originality/value – There are only few studies of knowledge management processes in NPOs. Some considerations have to be done with respect to personal motivation, commitment and trust, as well as organizational elements.

Keywords Knowledge creation, Knowledge management, Knowledge transfer, Non profit organizations

Paper type Conceptual paper

Introduction

The competition threats in today's world provide an environment full of opportunities for organizations, and encourage an orderly transformation for those seeking to dynamically reinvent their products and services. If an organization wants to survive in and lead an industry, then it must continuously differentiate itself from its competitors by creating competitive advantages through adaptive capabilities or innovative strategies (Reeves and Deimler, 2011). However, most organizations have limited resources and, in some circumstances, have limited time to develop their strengths; this is often the case for not-for-profit organizations (NPOs). Consequently, some NPOs search for external knowledge to compensate for their weaknesses through alliances, collaborative projects,

Received 1 December 2014
Revised 27 April 2015
20 July 2015
28 September 2015
23 November 2015
Accepted 26 November 2015

consultancy, government training and committed volunteers (Rathi *et al.*, 2014), making it relevant to identify and exploit those resources and capabilities that give them any distinctiveness (Barney, 1991).

Not all organizations have the same capability to absorb external knowledge through their individual abilities and to achieve their organizations' structure and purpose. For example, NPOs need organizational practices that integrate the collaboration of different participants, specifically when these organizations frequently rotate volunteers and have different volunteer profiles (Lettieri *et al.*, 2004; Luo, 2004; Martín-Pérez *et al.*, 2012). Such practices must be easy to implement, familiar and decentralized to enable the organization's primary and secondary stakeholders to become involved (Kotabe *et al.*, 2011), and should optimize the NPO's organizational learning processes to exploit its expertise and achieve business sustainability.

NPOs have been considered informal communities of participation (Choi and Kim, 2010) because of their keen perception of the needs in social, economic and political contexts and their arduous work to reduce these needs by creating strategies with different groups of interest. NPOs become essential for economic development and, more importantly, for the generation of services that provide solutions to social necessities. The growth of NPOs has, in large part, been fueled by the perceived inability of both domestic and international institutions to respond to the social, economic and political consequences of rapid advances in science and technology as well as the growing economic interdependence and political fragmentation. In addition, a growing number of transnational threats, such as pandemic illnesses and global warming, have required a coordinated response and created a need for new partners and approaches to solving global issues (Choi and Kim, 2010).

Thus, NPOs are facing pressure to use their financial and human resources efficiently, and to improve their activities and services constantly. Knowledge management as a strategy would ensure NPOs' sustainability and rapid adaptation to dynamic environments. For NPOs, tacit knowledge is a relevant resource that allows them to act in uncertain and complex situations. This type of knowledge is characterized by collaborators and experienced volunteers, social network ties, motivation and a willingness to contribute to their community. This type of knowledge is complex and, therefore, difficult to share throughout the entire organization. As a result, the challenge for these organizations is to design and formalize mechanisms by converting their tacit knowledge to explicit knowledge to preserve knowledge over time (Gilbert *et al.*, 2010; Ragsdell, 2013), providing more than a competitive advantage and organizational memory to sustain efficiency even if employees retire or an organization is redesigned (Martín-Pérez *et al.*, 2012). However, the empirical research on knowledge management processes in the not-for-profit sector is limited. NPOs must know how to generate and transfer their knowledge, which allows them to be transparent and operationally efficient to be able to seize funding opportunities.

The term NPO has been widely defined, in recent years, with a diverse utilization of the term being the closest definition to our study – namely, an organization that is a formally organized form of citizen action and participation in a society that is institutionalized, non-profit-making, self-governing and voluntary (Crowther and Aras, 2012). These organizations must support their processes with practices that enable them to manage their knowledge in an effective manner (Ragsdell, 2013). This study's objective is to identify how knowledge management practices – specifically, knowledge generation and knowledge transfer – are relevant to the continual benefit of NPOs in a specific context. We present an exploratory study in which the knowledge generation and transfer processes in Mexican NPOs with local and national presence are identified, in addition to those NPOs' organizational supportive elements relevant during these practices.

The idiosyncratic nature of this study aims to identify the relevance of organizational elements that support the effectiveness of both knowledge generation and transfer practices in these particular organizations. In doing so, this research extends prior

empirical studies (Lettieri *et al.*, 2004; Huck *et al.*, 2011; Martín-Pérez *et al.*, 2012; Vuori and Okkonen, 2012; Ragsdell, 2013; Amayah, 2013) by focusing on NPOs, recognizing that knowledge generation and transfer practices would ensure NPOs' sustainability through innovative and efficient organizational processes. Moreover, the identification of the organizational elements that enable both knowledge management practices allows for the allocation of managerial effort to a specific organizational need.

In the first section of this paper, we review the literature on knowledge management in NPOs, which describes generation and transfer practices. We then present NPOs' profile in Mexico, and discuss the qualitative methodology utilized. In the next section, the findings and discussion are presented. In the final section, we expose the conclusions and the implications for practitioners.

Knowledge management in not-for-profit organizations

The studies that present knowledge management and its contribution to organizations' competitive advantage have focused on three main aspects. First, at an individual level, the employee plays a crucial role in the knowledge creation process within the firm (Nonaka and Takeuchi, 1995; Grant, 1996). Second, at the organizational level, the knowledge that has been created within the organization by some of its members should be transferred to other individuals, so that it may be known to all. Third, once transferred and received, the knowledge generated should be integrated into the existing organizational knowledge base (Zágarra and García-Falcón, 2003). These aspects are well known in for-profit organizations (FPOs), but less attention has been given to NPOs (Lettieri *et al.*, 2004; Huck *et al.*, 2011). In this regard, the present section exposes the relevance of knowledge management for NPOs, its tacit knowledge and how knowledge can be generated and transferred to support organizational enablers.

Knowledge management is particularly critical in firms that compete in dynamic environments, and that must show flexibility and administrative skills to effectively coordinate their internal competences. NPOs, whose primary competitors are other NPOs seeking funding, face a highly competitive environment that is complex and uncertain (Ragsdell, 2013), with the crucial base being its strategy for its resources and capabilities (Grant, 1996). Such complexity and uncertainty also allow NPOs to explore and learn different organizational and knowledge management practices.

The literature includes few studies related to knowledge management in NPOs. As previously mentioned, these organizations have an opportunity to continue their existence and offer more benefits if they determine how to manage their tacit knowledge. That tacit knowledge resides in the NPOs' volunteers as personal knowledge, social network ties for funding activities and – in some instances – family tradition or heritage to preserve their *raison d'être*. Because knowledge is a valuable, generally essential, rare and inimitable resource (Barney, 1991), it constitutes a source of competitive advantage (Grant, 1996); therefore, organizations should seek the most efficient and effective means to manage knowledge. To this end, firms need to know which knowledge to manage as well as how to create, transfer and use it. NPOs must also identify tacit knowledge that provides differentiation among their main competitors and, consequently, the expertise to manage such knowledge.

Tacit knowledge: crucial in not-for-profit organizations

Knowledge has been conceptualized in terms of explicit and tacit knowledge (Polanyi, 1962). Explicit knowledge is codified and transferable in formal and systematic language, whereas tacit knowledge is difficult to articulate and communicate (Polanyi, 1962). Considered as personal or practical knowledge (Spender, 1996), tacit knowledge is what every single collaborator generates through his or her behavior and perceptions. Examples include human body skills, cognitive knowledge and organizational practice through

routines installed within organizations in the form of assumptions, norms and beliefs (Argote *et al.*, 2003).

To be transferred, tacit knowledge must first be codified or replicated using organizational communication mechanisms. Tacit knowledge is challenging to transfer to others because it requires articulation and communication, which are performed by observation and reside in the human mind; thus, it is difficult to transfer knowledge without a significant degree of involvement on the part of the knowledge holder. In contrast, explicit knowledge is primarily shared in formats, systems, files and processes established by the organization (Tatham and Spens, 2011).

For NPOs, tacit knowledge resides in the workforce, which is composed mainly of volunteers who often share only their passion to solve social problems. Most often, these individuals have neither met before, nor do they have experience working for a particular NPO. The incredible high rate of turnover among staff is becoming one of NPOs' main problems, making the ability to build institutional memory very challenging; this reduces the contextual knowledge and relationships (Ragsdell and Jepson, 2014). This is one of the reasons why knowledge management has become so relevant for these organizations, when motivation is crucial to generate and transfer knowledge.

Knowledge generation

The knowledge-based view includes a fundamental assumption: Knowledge cannot exist without human subjectivities and the context that surrounds humans (Nonaka *et al.*, 2000). Thus, individuals play a relevant role in each of the knowledge management processes: generation, transfer and utilization.

Knowledge generation is mainly an institutionalized activity; therefore, each organization must be able to establish its own creative routines and human intervention to make this process possible. Knowledge generation is defined as the specific activities and initiatives undertaken by organizations to increase their organizational knowledge involving the external acquisitions of knowledge and the internal creation of this intangible resource (Davenport and Prusak, 2001). NPOs mainly create and utilize knowledge through social interaction (Erden *et al.*, 2012); Nonaka and Takeuchi (1995) explained that socialization is a process of converting new knowledge into tacit knowledge through joint formal and informal activities, such as spending time together, working in the same office and chatting. Walking around inside and outside the organization is another means for creating experiences that can generate new tacit knowledge (Nonaka and Reinmoeller, 2000). According to Grant (2000), knowledge generation involves three main activities:

1. *Creation of internal knowledge*: Knowledge is created through the dynamic interaction between individuals and/or between individuals and their environment, rather than an individual working alone (Nonaka *et al.*, 2000, p. 3). Knowledge is also generated in self-organized informal networks within the organization; when such networks share sufficient knowledge to communicate and collaborate efficiently, their conversations often result in new knowledge in firms (Eisenhardt and Martin, 2000). The knowledge generated within the enterprise is especially valuable because it tends to be unique and specific and, with a large tacit component, makes it more difficult to be imitated by competitors, which is strategic for the organization.
2. *Learning through action*: All learning takes place in the human mind in an individual way. "An organization only learns in two ways: among its members or from new members who have no prior knowledge of the organization" (Grant, 1996, p. 112). Thus, organizations build a knowledge base through the experiences that their employees have learned and applied within the strategic framework of the organization.
3. *Acquisition of external knowledge*: This occurs when tacit knowledge is shared with suppliers and customers and when organizations interact with other firms (Nonaka *et al.*,

2000) due to consultations, alliances and collaborations and employees attending courses and seminars. These interactions are effective – and often necessary – ways for firms to create new knowledge (Inkpen, 1996).

Knowledge generation organizational enablers. The literature review regarding knowledge generation shows that firms need the presence of four key organizational elements as enablers: organizational culture, management style, personal motivation and learning opportunity of each employee (Zapata *et al.*, 2009). Knowledge generation is highly dependent upon the organization's culture and management style; in fact, a culture that promotes intensive communication accepts new ideas, and is prepared to explore new processes and activities that favor the generation of knowledge (Ruggles, 1998; Soo *et al.*, 2002; Amayah, 2013). This may be stimulated through non-hierarchical organizational structures, an active general management and the motivation of employees to innovate and learn lessons that allow them to obtain new and better knowledge (Nonaka *et al.*, 2000).

NPOs' employees place greater emphasis on aspects related to their support, with usefulness of their job to society, sense of belonging and commitment to organizational mission being individually intrinsic and relevant for provoking new knowledge related to how to offer better services to beneficiaries (Martín-Pérez *et al.*, 2012). Commitment, both behavioral and attitudinal, can be even more important to voluntary organizations than to employing organizations because of the implicit contract of services given to the organization without extrinsic compensation (Preston and Brown, 2004). Opportunity to learn and commitment are strongly related: Collaborators are motivated to create new knowledge because they have the opportunity to learn how to apply this knowledge as the social need to which they are committed.

Knowledge transfer

Knowledge transfer can be referred to as the accumulation or assimilation of new knowledge in the receiver unit. However, researchers such as Minbaeva *et al.* (2003, p. 587) have argued that “the pure transmission of knowledge from the source to the recipient has no useful value if the recipient does not see the potential of the new knowledge” and, hence, does not utilize it in his or her own activities. In the knowledge transfer process, understanding as a communication process suggests that the source of an activity that will be transferred often manifests a certain resistance to sharing his or her knowledge. This resistance can result from the source's fear of losing ownership or a position of privileged power in the firm or of not being adequately compensated for sharing the fruits of his or her own work and efforts (Szulanski, 1996). Conversely, when the source of the activity is not perceived to be very reliable, the information he or she can supply will most likely not be considered (Minbaeva, 2005). For successful transfer, trust has been recognized as a fundamental element for developing mutual understanding between the source and the recipient (Davenport and Prusak, 2001).

Informal mechanisms of face-to-face communication such as corridor chats and communication systems that facilitate interaction among colleagues can also improve the knowledge transfer process. For instance, communities of practice provide an opportunity to share organizational knowledge among the members of a group in a bottom-up manner, without any need for intervention by top management (O'Dell and Grayson, 1998). In communities of practice, the knowledge that is shared and learned constitutes social capital. People connect at various levels and across departments, both internally and externally to the organization, without the constraints of a formal company structure (O'Dell and Grayson, 1998; Huck *et al.*, 2011). Meetings are also appropriate means to transmit complete messages, and electronic mail is a tool that has become the dominant support for knowledge work. Electronic mail is successful because it is personal and social at the same time.

Knowledge transfer organizational enablers. There are also several important contextual dimensions of knowledge transfer. First, organizations must seek to operate with an open culture that facilitates knowledge transfer. O'Dell and Grayson (1998) as well as Amayah

(2013) stated that firms with a more flexible culture would be more successful in managing knowledge transfer processes; “if the culture does not support knowledge sharing, it does not matter what media is used for it” (Vuori and Okkonen, 2012, p. 600). For instance, keeping doors open and having discussions in coffee areas promote opportunities to share knowledge (Vuori and Okkonen, 2012). In contrast, a lack of leadership and a lack of support from the general management can be a significant barrier to this process.

Another relevant aspect is related to physical space. Cummings (2004) asserted that a greater physical distance makes communication more difficult because opportunities for informal contact are reduced. In this regard, technology can improve access and help bring the right knowledge to the right person at the right time, but this is not sufficient; collaborators have to be motivated to share their knowledge, and top management must encourage them to do so (Zapata *et al.*, 2009). For NPOs, social media represents an important technology currently being used to support informal and semi-informal knowledge sharing (Rathi *et al.*, 2014) in a strong informal network (Huck *et al.*, 2011).

Several management researchers have affirmed that to achieve superior performance, knowledge generation and its successful transfer must occur (Alavi, 2000). This will produce effectiveness through innovation and collaboration, and maximize their value (Cross *et al.*, 2004). The knowledge management strategy could also be useful for strengthening NPOs' core competences through innovation and the participation of the entire organization.

Methodology

Research setting and data collection

The phenomenon of NPOs in Mexico is very complex to study because these are a recent creation, and it is difficult to differentiate the legitimate voluntary organizations from those created by the government or a political party to strategically justify their actions. The main reason for the creation of NPOs is to respond to the inconformity of the living situation in the country or to promote services that the government cannot provide. López-Zamarripa (2009) investigated the creation, evolution and consolidation of these organizations, discovering that the creation of this segment was in response to the social movements occurring in the 1970s and 1980s. This understanding was further enforced by the economic crisis of 1982, the earthquake at Mexico's center in 1985 and the presidential election in 1988. Thus, the birth of NPOs in Mexico has been considered a mechanism of democratization; NPOs play a relevant role as intermediaries and connectors within the national and local networks of information, achieving a decentralization of resources and covering market failures or the lack of institutions responding to Mexicans' social needs.

Currently, Mexico is experiencing a strong interaction between the Government and NPOs. In 2012, Mexican NPOs represented 2.7 per cent of the national gross domestic product, and were highly supported by government institutions and private firms. The political system has recognized that if they want a better Mexican society, then they must work together with the entire community. In addition, international organizations such as the World Bank have created mechanisms to propel the NPOs' activities in developing countries, particularly in Latin America.

To identify the main sources of knowledge generation and transfer activities in Mexican NPOs and the organizational elements that support these processes, an exploratory study was conducted, fitting well with the maturity stage of the theory involved and with the relative emergence of the phenomenon under study – specifically, NPOs. This allowed us to gather detailed evidence and interpret the data (Yin, 2009). Semi-structured interviews and questionnaires were the main techniques used to collect data from participating NPOs.

Interview. In the first stage, we presented the research project to Sedesol, the Social Development Office of the Mexican Government. One of the main activities of Sedesol is to

provide NPOs with administrative tools, methodologies and techniques to improve their operations. To this end, Sedesol, in collaboration with Mexican higher education institutions, has designed several academic seminars, and at the same time, it provides NPOs with a physical space in which they can interact and be connected to other national NPOs. These spaces offer the opportunity to transfer knowledge that could generate new knowledge in the meantime.

Sedesol introduced us to the general directors of two Mexican NPOs, both of whom were interviewed to provide insights into knowledge management activities in NPOs. The objective of the interviews was to validate and complement a questionnaire designed based on the literature review. The two interviewees are members of top management and participants in key projects of their organizations. A semi-structured interview protocol was designed, and it included open questions to validate constructs identified in previous studies related to knowledge generation and transfer in FPOs (Zeller and Carmines, 1980). The interviews were conducted during November 2014. Each interview lasted an average of 40 min. The interviews were transcribed verbatim, and were circulated among the authors to ensure that a full write-up could be produced. The interview information was complemented by internal documentation provided by the firm. Our interview protocol was designed considering the following issues:

- the interviewee's background;
- the interviewer's access to different NPO processes;
- knowledge generation and transfer processes; and
- organizational elements that support these processes.

Direct observations. Direct observations were informal, as suggested by Yin (2009), and were conducted without protocols to ensure that NPO employees were not aware of being observed. A tour of the facilities enhanced researchers' familiarity with the physical distribution of people within the company and with the relationships between each of the organizational areas.

External publications and internal communications. Documents were used primarily to confirm and augment evidence obtained from other sources. The secondary data were integrated through external sources, such as Mexican newspapers, the firm's annual reports and academic papers. The information gathered from secondary sources primarily facilitated the confirmation of primary data obtained from the interviews.

The analysis of the qualitative data – namely, interviewees' information, direct observations and documents – was conducted based on the categorization and contextualization strategies described by Maxwell (1996). The strategy of categorizing through coding and constant comparison was used to analyze the data. As an analytical technique, this strategy is focused on the generation and suggestion of categories, so that information obtained from interviews can be compared easily.

The first step in the analysis of the data involved typing up the interviews, taking notes during this process, making observations and extracting useful information from the documents that were reviewed. Writing out the information allowed for a wealth of data structures, increased clarity with regard to information analysis and resulted in a comparison of evidence obtained from the different sources (Eisenhardt, 1989). After this step, we built a list of categories and their respective codes to support data consistency for each of the data sources. The category list was established during the data collection stage using theory, research questions and summaries of the interviews.

The coding was open, and all documents were analyzed three times. During the first analysis, codes were assigned to statements. The second analysis implied more in-depth reviews of knowledge generation and transfer practices. The third analysis allowed us to implement a contextualizing strategy instead of fragmenting the data into categories; this

was intended to facilitate understanding of the data within the NPOs' context. In this final revision, specific organizational elements that support the knowledge management processes under study were recognized. The category list and the results of the contextualizing strategy were useful in the subsequent design of the questionnaire.

Questionnaire. In the second stage, a questionnaire was used to collect data from NPOs to identify the knowledge generation and transfer practices as well as organizational enablers. The qualitative data results were essential for designing a questionnaire that conformed to identifying knowledge generation and transfer activities, specifically in NPOs as well as those organizational elements that support them. Each item was adapted from studies by Szulanski (1996), Zapata (2004) and Zapata *et al.* (2009), and modified to explore knowledge generation and transfer activities in NPOs. All items were measured using a dichotomous scale (Table I).

Sample profile and data analysis

The empirical research was conducted in Monterrey, Mexico. The questionnaires were administered to 28 NPOs with operations in Monterrey and other Mexican states to support the structured interviews. Of the 28 participating NPOs, 18 had operations exclusively in Monterrey, while 10 operated in both Monterrey and other Mexican states. Table II lists the profile of the participating organizations. We propose that a national presence is possible due to the formalization of knowledge management practices, providing the efficiency and replication of their managerial activities.

Findings

This section presents the analysis of how Mexican NPOs generate their organizational knowledge internally and through external activities. It identifies formal and informal communication mechanisms through which knowledge is transferred inside the organization, and which organizational enablers support both knowledge management processes.

Knowledge generation

Internal knowledge creation. The present study's results show that for Mexican NPOs, meetings are critical to the creation of internal knowledge (Figure 1). Even when meetings focused on creating knowledge are not held, they allow the socialization of individuals and support the solution of doubts and disputes; these actions produce the development of creativity in individuals. As one of the directors stated:

Success is not deserving of one person; teamwork is the mechanism for this. Each member's opinion or suggestions is essential, and feedback from volunteers provides us with new ideas, giving us a big picture to make better decisions.

Collaborators' self-learning is more relevant for NPOs with a local rather than a national presence to create knowledge (Figure 1). This could be a result of the fact that collaborators in one location have the availability to apply new knowledge faster than those who have to share with other locations. As one of the collaborators stated:

When we have an idea to improve a process, we share it with the rest of the team and, if they consider it relevant, it is easier to implement.

Furthermore, in Mexico, NPOs are starting a process of professionalization in which local universities participate in courses and seminars, supporting these organizations in the formalization of management processes (e.g. recruitment and funding). In this sense, they have not recognized at all that collaborators' academic background is important for creating new knowledge; they believe that collaborators' expertise is essential for improving their processes, including innovation.

External knowledge acquisition. Conversely, the knowledge acquired from an external source essentially occurs through courses and seminars, strategic alliances and

Table I Dimension and items

<i>Dimension</i>	<i>Category</i>	<i>Related studies</i>	<i>Indicators/items</i>
Knowledge generation	Knowledge generation activities	Zapata (2004)	Outsourcing activities are considered to provide better service to our users Expert advice is relevant to improve the activities performed in the organization It has a library or literature to support the development and performance of the priority activities Feedback from our users is important to improve our activities The partnership with other organizations is relevant to provide better services to our users The acquisition of computer systems is relevant to support the activities and processes of the organization The self-learning among volunteers is relevant to teach yourself how to do the activities in our organization The academic training of volunteers is relevant to the performance of activities in our organization Attendance at courses or seminars is relevant to improve our job The meetings to solve problems or seek solutions to improve our activity are important
Knowledge generation organizational elements	Organizational culture	Zapata <i>et al.</i> (2009)	The work environment makes easier to approach senior management as well as the rest of the members of the organization The senior management can be easily approached to give them points of view on an activity and/or process An atmosphere of frankness and trust prevails in the organization
	Management style	Zapata (2004)	Existence of the awareness of the relevance of knowledge generation Facilitation of knowledge generation by holding meetings promoting the creation of new ways of doing things
	Personal commitment	Zapata (2004)	Encouragement of the development of employees' initiative and creativity Collaborators' opinions or suggestions are taken into account The activities carried out in the organization allow employees to seek new ways of doing things Collaborators like what they do
	Learning opportunity	Zapata <i>et al.</i> (2009)	The activities carried out within the organization provide an opportunity for increasing collaborators' knowledge The activities carried out within the organization allow collaborators to learn how to use new tools The activities carried out within the organization allow collaborators to learn new ways of doing things
Knowledge transfer	Knowledge transfer activities	Zapata (2004)	In our organization, it has: Database to access information on a specific activity Documents or manuals for information on how to carry out a specific activity Meetings to share information among collaborators of the organization Workshops scheduled to share an activity or practice with colleagues The face-to-face approach to ask for information on how to carry out a specific activity Email to convey or transfer any specific activity Instant messaging: for example, Whatsapp, Twitter, to convey or transfer any specific activity At any time, the successes are shared with colleagues or mistakes on the development of an activity

(continued)

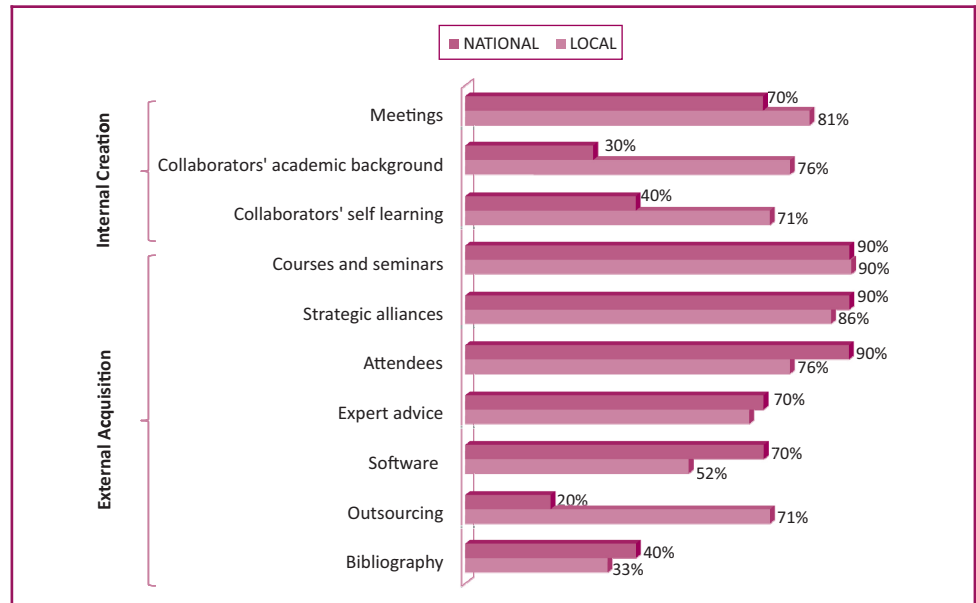
Table I

<i>Dimension</i>	<i>Category</i>	<i>Related studies</i>	<i>Indicators/items</i>
Knowledge transfer organizational elements	Organizational culture	Zapata <i>et al.</i> (2009)	Discussing problems with colleagues is just the way we do things around here Activities to communicate successes and failures among collaborators are vital
	Management style	Zapata (2004)	Awareness of the relevance of knowledge transfer Holding meetings to promote the transfer of new knowledge Encouragement among collaborators to the transfer to new way of do things
	Physical distance	Zapata <i>et al.</i> (2009)	The organization layout allows the easy interaction among its members The firm layout allows a fast and timely interaction among its members
	Time available	Zapata <i>et al.</i> (2009)	We find the time to transfer new knowledge in our organization
	Source reliability	Szulanski (1996), Zapata <i>et al.</i> (2009)	The source is committed with the transfer of his/her knowledge The source helps the receiver to implement support systems to work with the new activity The source is willing to transfer his/her knowledge The source feels comfortable to share of his/her knowledge
	Receiver receptiveness	Szulanski (1996)	The receiver is always willing to adopt new knowledge The receiver is committed to adopt new knowledge for his/her work area The receiver is aware of the benefits to adopt new knowledge

Table II Profile of the respondents

<i>Characteristics</i>	<i>No. of Mexican NPOs</i>
<i>Geographic Presence</i>	
Monterrey	18
Monterrey and other Mexican states	10
<i>Social Need Area</i>	
Education	7
Health	5
Feeding	3
Disability	3
Community development	10
<i>Year of foundation (seniority)</i>	
1950s	2
1960s	3
1980s	8
1990s	7
2000s	6
2010s	2

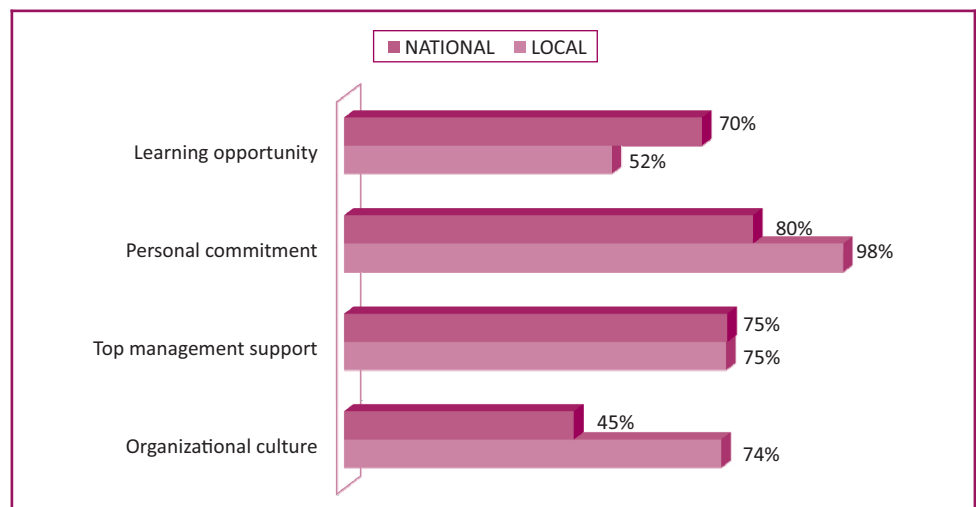
feedback from attendees (Figure 1). Courses and seminars are relevant to generating knowledge for NPOs with both local and national operations. The NPOs under study have developed several strategic alliances with governmental institutions such as Sedesol and, on some occasions, with other NPOs to advertise their services or promote social events. The feedback from beneficiaries is essential for improving their services. For these organizations, the professionalization of their activities is crucial for transparency and the ability to fund economic resources. In addition, external knowledge acquisition provides NPOs with the ability to continuously improve their specific needs. As one national NPO director stated:

Figure 1 Knowledge generation: internal creation and external acquisition

The complexity of care work performed by our medical technicians and specialists is so big that it requires continuous training and updating in specific rescue techniques.

Expert advice related to an executive council is also relevant (70 per cent). In some of these organizations, an executive council is formed by CEOs and/or directors of private firms, who provide their expertise or resources to hire external consultants to improve their operations. Those NPOs with a national presence require software enabling them to connect to other offices and, more importantly, provide information to their attendees in a timely manner. Meanwhile, the outsourcing of managerial practices (e.g. information technology) is required by NPOs with locations only in Monterrey.

Organizational enablers. Contrary to the results of studies on FPOs, in the Mexican NPOs under study, personal commitment is more fundamental than organizational culture and/or top management support (Zapata, 2004; Zapata *et al.*, 2009) (Figure 2). All knowledge

Figure 2 Knowledge generation organizational enablers

generation activities are strongly supported by personal commitment. Specifically, personal commitment and organizational culture are relevant organizational enablers for generating knowledge for NPOs with local operations, unlike those with a national presence. As one of the collaborators commented related to personal commitment:

The feeling that one can influence decision-making processes is apparent in participants' accounts of their sustained participation.

This analysis also enabled us to appreciate that Mexican NPOs are more able to generate knowledge through external knowledge than via their own internal resources. Strategic alliances, courses and seminars and expert advice are more useful for changing how to do things or improve processes for those NPOs with a national presence. NPOs with a local presence prefer to generate knowledge through their collaborators' own knowledge and self-learning.

Knowledge transfer

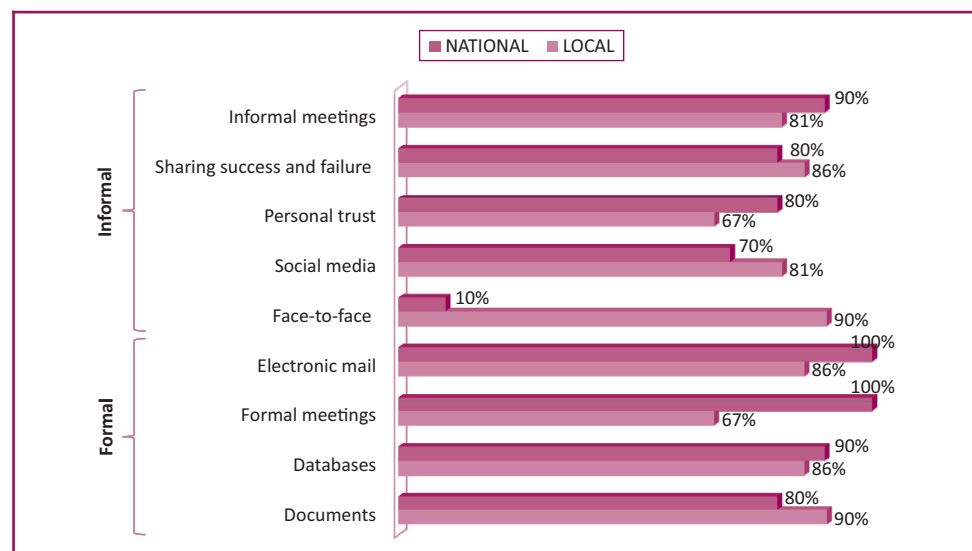
Informal communication mechanisms. For NPOs with a local presence, informal communication mechanisms are more useful. Face-to-face talks as well as meetings are excellent activities for sharing knowledge among collaborators. Particular attention should be focused on designing programs and activities to promote a sense of community among collaborators.

Technology-based communication media is predominantly used when the NPOs have a national presence. These organizations use electronic mail to share new knowledge that does not involve all of their employees or that does not entail a radical change in operations. As one of the directors explained:

We need to keep up with technological resources in order for our volunteers to be aware of the best way to contribute to our social need. We maintain a constant analysis of the needs not only of those we help, but also for those who help us to serve: volunteers.

Social media is used more in NPOs with a local rather than a national presence (Figure 3). This could be related to the fact that NPOs with a national presence have more formalized processes considering that social media represents a technology currently being used to support informal and semi-informal knowledge sharing. The main motive for NPOs to share knowledge through an intra-organizational social media platform is the desire to help the organizations reach their goals and help colleagues. This result is related to personal trust

Figure 3 Communication mechanisms of knowledge transfer



as an enabler to transfer knowledge. The collaborators want to help their colleagues; they also strongly trust them so that knowledge transfer occurs.

Formal communication mechanisms. Formal communication mechanisms are utilized more by NPOs with a national presence than those with local operations (Figure 3). This could be explained because these NPOs have more formalized processes to increase their funding opportunities. As one of the directors stated:

We have made a great effort to document all our processes to operate all of our delegations in a similar way. This has given us efficiency and transparency for our current donors.

In local NPOs, documents are the main formal communication media used to transfer knowledge throughout the organization. Documents that present processes, activities and organizational missions are very useful for introducing new collaborators or volunteers in the philosophy of the NPO. Narration could be an effective tool for NPOs to build a common understanding of a central idea or activity (Suzuki, 1998).

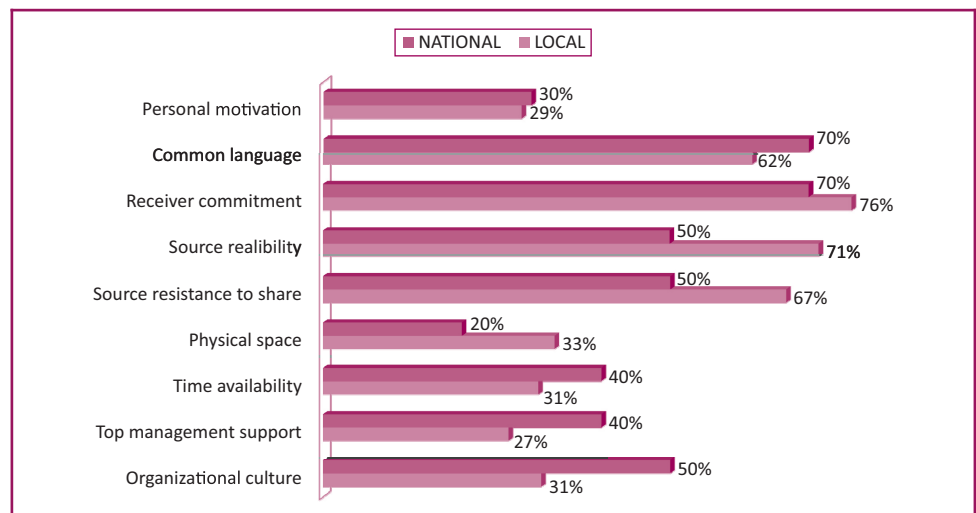
Organizational enablers. Effective knowledge transfer requires an organizational culture that motivates the organization's members to search for new ways of doing things. The literature on knowledge transfer notes that organizational culture is a relevant factor in the knowledge transfer process, particularly when trying to create a sharing atmosphere. In the Mexican NPOs under study, the collaborators are committed to share their expertise among their colleagues; neither organizational culture nor top management support is relevant for this process (Figure 4).

Individual aspects. In the literature, another important aspect to consider is that people, as a source of knowledge, are often afraid to share their knowledge (Szulanski, 1996). They believe that they will lose the advantage that their expertise provides them among their peers and within the organization. For the Mexican NPOs participating in this study, their collaborators and volunteers are open and willing to sharing their knowledge. As one of the directors stated:

They always are open to sharing everything they know, with the certainty that they are doing well beyond the organization, and they are impacting the society.

Additional significant individual enablers are commitment and reliability. In the Mexican NPOs under study, the receiver's commitment to adopt the new knowledge is relevant. Mexican NPO collaborators are committed to assimilating different knowledge, doing new things and seeking the common good while being efficient. Reliability in the source allows for adapting new knowledge to improve activities.

Figure 4 Knowledge transfer organizational and individual enablers



In Mexican NPOs, knowledge transfer is mainly realized through informal means that are supported by individual enablers. For this type of organization, collaborators' and volunteers' tacit knowledge is crucial for effective operations. Social media is becoming increasingly relevant for transferring knowledge in these organizations, making motivation and organizational culture necessary for supporting its use.

Discussion

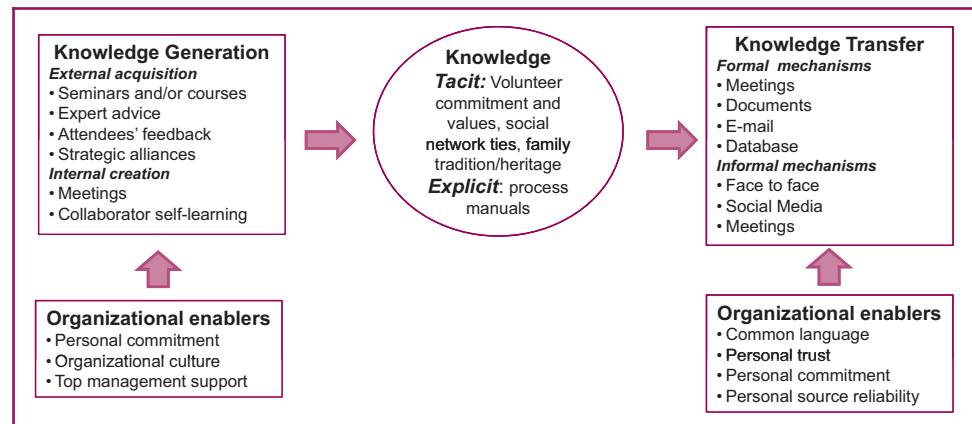
If NPOs want to survive in the globalized economy, then they must build new strategies to generate knowledge through external sources or internal activities, and strengthen those that have been very helpful, such as outsourcing, seminars, courses, meetings and feedback from their attendees. The knowledge that NPOs can obtain from these sources will be of high quality, and will provide the organizations with the opportunity to be more accessible, attracting new donors while retaining current ones. The main challenge is to recognize which activities are more helpful, relevant and easy to manage.

A conceptual model of knowledge generation and transfer is presented in Figure 5. Knowledge generation activities are supported by organizational elements, such as organizational culture, institutional philosophy and top management and executive council support. For instance, some of these organizations form an executive council composed of CEOs and/or directors of private firms who provide their expertise or resources to hire external consultants to improve their operations. *Rathi et al. (2014)* pointed out that NPOs frequently rely on experts who might be paid as staff or employed on a contract basis, serve as volunteers or have fewer official ties to the organization, merely volunteering their knowledge or research for the benefit of the organization.

At the same time, NPOs must find new ways to retain motivated and committed volunteers – a key yet rare, scarce and inimitable resource. As noted in the literature, for NPOs, a volunteer's personal motivation is an intangible resource that significantly contributes to organizational goal achievement (*Ragsdell and Jepson, 2014*). Mexican NPOs must be aware of the volunteers' impact and differentiation, including how their personal commitment – both behavioral and attitudinal – strongly supports knowledge generation activities. Volunteers and collaborators with a strong affective commitment continue their relationship with the organization because they want to do so; they have an emotional attachment to the organization's goals (*Preston and Brown, 2004*). The literature on knowledge management in FPOs also shows that collaborator commitment is essential for creating new organizational knowledge (*Zagarra and Garcia-Falcon, 2003; Zapata et al., 2009*).

Knowledge transfer activities are widely supported by personal volunteers' philosophy (values) – namely, their commitment to the organization's mission, trust in their colleagues'

Figure 5 Knowledge generation and transfer conceptual model



social actions, reliability of the source of knowledge and motivation to acquire new knowledge to contribute to the NPO's improvement. This is a significant result that differs from the literature reviewed, which indicated that knowledge transfer is influenced by organizational culture in addition to personal motivation. Even if an individual is motivated to share knowledge, the organizational culture establishes barriers to doing so (Vuori and Okkonen, 2012).

In NPOs – more than organizational enablers' transfer of knowledge – collaborators' and volunteers' personal trust and commitment highly support the organization's efforts to reach its goals, as these individuals want to help their colleagues and strongly trust them; as a result, knowledge transfer occurs. Unlike in FPOs, Mexican NPO collaborators are committed to assimilating different knowledge, doing new things and seeking the common good while being efficient. There is a lack of resistance to sharing their own knowledge, and collaborators are open to receiving new knowledge to improve their activities and processes.

Cummings (2004) concluded that the transfer of knowledge among group members is strongly related to group performance in terms of structural diversity, specifically regarding their functional tasks. For Mexican NPOs, the collaborators' and volunteers' diversity in terms of their academic backgrounds provides NPOs with new ideas and ways to manage and improve their performance.

In terms of knowledge characteristics, tacit knowledge appears to be more relevant in Mexican NPOs than explicit knowledge. Volunteer commitment, social network ties and family traditions have a strong impact in NPOs' organizational activities. Social network ties and family traditions refer to the executive council, which is the main driver for NPOs' survival. One director explained:

Our executive board is always aware of our activities, looking for the best way to do our job and to deliver the best to the society. They provide us with their knowledge and their social capital to potentiate our resources for fundraising.

In Mexican NPOs, as in other NPOs around the world (Lettieri *et al.*, 2014), tacit knowledge is diverse, heterogeneous and necessary for formalizing the way it is created and transferred.

Summary

The present study findings reveal that knowledge management can be a useful and relevant strategy for Mexican NPOs, providing with new strategies to legitimize the organization, strengthen communications between the NPOs and their stakeholders and allow transparency in their operations to funding resources.

Mexican NPOs with a national presence are more able to generate knowledge through external knowledge than via their own internal resources. Strategic alliances and collaborations with the government, business schools and other society stakeholders, even combining knowledge and expertise with national and international associations and organizations that serve similar social needs, are good examples of external activities that provide new knowledge. Additionally, knowledge transfer is mainly realized through informal means that are supported by individual enablers. For instance, social media is becoming increasingly relevant for transferring knowledge in these organizations as long as documents that present processes, activities and organizational mission are very useful for introducing new collaborators or volunteers in the philosophy and the NPO's operation. Organizational and human elements influence the generation as well as transfer of knowledge in Mexican NPOs. For the former, personal commitment, social network ties, family traditions and organizational culture are relevant enablers. For the latter, personal volunteers' philosophy (values) – specifically, their commitment to the organization's mission, trust in their colleagues' social actions, reliability of the source of knowledge and motivation to acquire new knowledge to contribute to the NPO's improvement – are crucial.

The present study also provides with managerial implications to enable successful knowledge management in NPOs. First, the use of mentoring systems to teach new activities in a more practical and appropriate way to be adapted to each organization's specific processes. Second, the identification of intrinsic motivators to allow them to innovate, share knowledge and, most importantly, retain committed volunteers. Third, documentation of main processes to formalize their activities to seize funding opportunities is another relevant implication, as well as the encouragement of socialization of knowledge among collaborators and volunteers to improve their practices or create new ways to do things are also relevant. Knowledge management could be an excellent opportunity to make their tacit knowledge explicit, recognizing what the organization does not know about itself and capturing the meaningful knowledge that resides in people's minds. There is also a chance that NPOs can become aware of knowledge that is distinctive to each organization, through the social network ties and personal volunteer motivations that are crucial for management and, in most cases, include funding activities.

We suggest a certain amount of caution when interpreting these results, as this study features several limitations. Although the qualitative methodology of the study and the number of firms that participated in the investigation allowed for the examination of the phenomenon under study, future research efforts should also address how to evaluate knowledge management processes in NPOs in a holistic approach. It would also be interesting to study whether NPOs that carry out efforts to integrate the management of knowledge maximize their performance.

Finally, our study is limited to NPOs operating in a specific context – namely, Mexico. Our NPOs have a local and national presence, probably sharing many of the same relevant contextual and knowledge elements. An investigation that considers Mexican NPOs with international associations or international operations would contribute to a better understanding of the dynamics of knowledge generation and transfer in these particular organizations.

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Further reading

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