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# KNOWLEDGE SHARING BY CANADIAN NON-PROFIT ORGANIZATIONS (NPOS) WITH COMMUNITY STAKEHOLDERS (PAPER)

#### Abstract:

This paper presents results of a nation-wide online survey of Canadian Non-Profit Organizations (NPOs) on their knowledge sharing approaches when engaging with the general public, including volunteers and other community stakeholders. The findings presented in this paper are based on qualitative and quantitative data analyses of responses received. The findings reveal that NPOs use different approaches such as emails, text-messaging, formal and informal inperson interactions and social media to share knowledge with various community stakeholders.

#### Résumé:

## 1. Introduction

Knowledge management (KM) involves capturing, organizing, storing, retrieving and sharing knowledge among users (Zakaria et al. 2004, p.16). Non-Profit Organizations (NPOs) need effective KM practices, as they are knowledge-intensive organizations (Renshaw and Krishnaswamy, 2009). Knowledge sharing is critical to foster KM (Bartola and Srivastava, 2002; Riege, 2005) as this leads to knowledge creation (Bartol and Srivastava, 2002) and effective and efficient use of resources. Further, focused sharing of relevant knowledge enhances employees' learning and speeds the development of products and services leading to quicker delivery to end users (Riege, 2005). Bartol and Srivastava (2002) noted people are interested in identifying how best to increase knowledge sharing. However, research on NPOs is limited. Drawing inspiration from the KM For-Profit-Organization (FPO) literature, this study explored how NPOs share and manage knowledge, particularly with community stakeholders. The findings provide insight into knowledge sharing strategies of Canadian NPOs.

#### 2. Literature Review

Organizations use multiple sharing strategies and tools. Spencer (2003) noted organizations share explicit knowledge through written documents (e.g., journal publications), with tacit knowledge shared primarily through rich interactions (e.g., face-to-face). These interactions can be formal (e.g., training programs) or informal (e.g., hallway discussions) (Bartol and Srivastava, 2002; Eriksson and Dickson, 2000; Chen et al., 2013; Morais, 1998; Ipe, 2003). Social capital, created through personal networks, is vital. Som et al. (2010) noted knowledge sharing happens through "personal sharing and frequent communication" (p.125); it is "mainly people-related and facilitated by workshops, discussion forums, training, and mentoring" (Riege, 2005, p.22).

Researchers note the key role of information technologies in KM sharing practices (Reychav and Te'eni, 2009) especially if organizations are distributed geographically (Kotlarsky and Oshri, 2005). Researchers have identified sharing tools and technologies such as e-meeting and chats (Marwick, 2001), corporate portals (Benbya et al., 2004), and email, groupware, and intranets (Edwards et al., 2005). For example, organizations like IBM and ING Barings used the intranet to collect employees' experiences for the benefit of other employees (Huysman and De Wit, 2004). NPOs also use social media (e.g., blogs, wikis) for KM (see Hsu and Lin, 2008; Grace, 2009; Given et al., 2013; Forcier et al., 2013a). Ford and Mason (2013) noted the use of social media can "leverage organizational knowledge and improve knowledge management initiatives" (p.8). Forcier et al. (2013b) identified the use of social media by NPOs for KM, including communication and engagement with stakeholders.

## 3. Research Design

This research was conducted with Canadian NPOs across sectors, such as animal welfare, health, culture and arts, and social services. An online survey, with multiple-choice and open-ended questions, was hosted on SurveyMonkey and emailed to Canadian NPOs identified through a publicly available list from Canada Revenue Agency (CRA) (http://www.craarc.gc.ca). The findings are based on responses from NPOs who responded to 'knowledge sharing' questions and self-identified the sectors served (e.g., animal welfare, health, and social services) and self-identified organizational size e.g., very small, small, medium, large, very large and others) (see sub-section 4.1 and 4.2 for the number of responses for each); organizations ranged in size from those with only one or two employees, or a small set of volunteers only, to large organizations with several hundred employees. Quantitative data were analysed using descriptive and inferential statistics and qualitative data were analyzed using a thematic analysis approach. For this paper, the analysis focuses on key demographic questions (i.e., operational sector and size) and knowledge sharing strategies with community stakeholders.

## 4. Findings and Discussion

The 'knowledge sharing' questions included nine pre-defined strategy options and an 'other' category (the latter was not used in the analysis presented here). Considering length limitations, the focus of this discussion is knowledge sharing strategies with the general public across sector and size. Knowledge sharing practices with other stakeholders (e.g., staff and volunteers) will be included in the presentation.

## 4.1 Knowledge Sharing Strategies with Public and Organization Size

The responses to knowledge sharing strategies were analyzed in conjunction with the respondents' self-identification of organizational size (i.e., very small, small, medium, large,

very large and others). There were over 1200 responses. For analysis purpose, 'large' and 'very large' were combined into one "large" category because there were few responses (only 2.4%) in these categories. The findings document knowledge sharing strategies of NPOs of different sizes through different modes (see Table 1). The examples of "formal written documentation" included manuals, reports, and newsletters; "informal in-person interactions" included friendly conversations and ad-hoc meetings; and "formal in-person interactions" included formal meetings, seminars and training sessions.

#### "Insert Table 1 here"

The analysis reveals videoconferencing, SMS/text messaging and instant messaging are not popular for sharing with the public compared to formal written documents for all types of organizations. Text messaging had a higher level of use in large NPOs. Also, as organizational sizes increase (very small  $\rightarrow$  small  $\rightarrow$  medium), there is a relative increase in knowledge sharing strategies used. For example, only 58.7% of "very small" organizations use "formal written documentation" as a strategy compared to 69.3% and 76.0% of "small" and "medium" NPOs, respectively.

Social media are preferred tools to share knowledge with the public, comparable to other popular strategies, especially in large NPOs (87.1%). Social media can be effective and simple tools to create mass outreach, which may explain why they are popular. This finding supports work by Given, et al. (2013), Forcier et al. (2013a) and Rathi et al. (2014) on the use of social media by Canadian NPOs; they suggest that NPOs use Facebook and Twitter, in particular, to maintain public relationships, among other reasons.

The data were further analyzed to assess the impact of organizational size – i.e., any statistical difference between the nine strategies used by NPOs based on size. Chi-square tests were conducted with a p-value of 0.0221 (2.21%). Since the value is less than the five percent significance level, it can be inferred that knowledge sharing strategies used by NPOs are connected to organization size – i.e., knowledge-sharing strategies used are not independent of NPO size.

#### 4.2 Knowledge Sharing Strategies with Public and Sector (i.e., Area of Operations)

The responses to knowledge sharing strategies were analyzed in conjunction with the respondents' self-identification of area of operation i.e., animal welfare, community, etc. (see Table 2). There were over 1400 responses. Categories are those used by CRA; however, for analysis purposes, International Aid and Religious organizations were included in "Other" due to lack of data for the Chi-square test.

#### "Insert Table 2 here"

The findings suggest that the most popular strategy across all sectors was "formal written documentation" and the least popular was "videoconferencing". In the animal welfare sector, SMS (17.2%) and instant messaging (20.7%) had higher levels of adoption compared to other sectors. Social media tools were popular across sectors, but particularly in animal welfare (82.8%), and culture and arts (74.7%); this may be due to the content nature of these two sectors, which facilitate posting of animal pictures and other visual media. The data were further analyzed to understand any statistical difference between the nine strategies based on NPO

sector. The calculated p-value was 0.0008 (0.08%), which is substantially lower than 5% significance level; the inference can be drawn that knowledge-sharing strategies are connected to sector – i.e., they are not independent of NPO area of operation.

## 4.3 Qualitative Data Analysis

A number of respondents also gave additional information in the "Other" category and the analysis of such qualitative data suggest that NPOs use other approaches, as well, for sharing knowledge with community stakeholders. Most prominent of these include the use of NPO organizational websites and apps. One unexpected observation was NPOs' concern about security of data (e.g., not trusting social media for privacy reasons) and potential for abusive responses. Additional qualitative findings, including strategies for sharing with staff and volunteers, will be discussed at the conference.

## 5. Conclusion

This study examined NPOs' knowledge sharing strategies for engaging with the general public, as well as staff and volunteers. The results complement previous work in Canada (Given et al., 2013; Forcier et al., 2013a; Forcier et al., 2013b; Rathi et al., 2014) and provide a glimpse into current KM sharing practices. This paper fits the theme of "Information Science in our Communities" as it explores how NPOs, working for communities, use and implement knowledge sharing practices. The implementation of KM practices supports community-building activities, so this research also connects to conference sub-themes, such as best practices. These findings provide future direction for research in the community from a KM perspective. For example, it would be interesting to explore why knowledge-sharing practices differ across NPO sectors except when organizational size is a criterion. Additional research is needed to best understand the implications of these findings.

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Strategy $\downarrow$ / Organization Size $\rightarrow$	Overall	Very Small	Small	Medium	Large
Formal written documentation	65.8%	58.7%	69.3%	76.0%	80.6%
Informal in-person interactions	56.6%	55.5%	56.2%	60.6%	58.1%
Formal in-person interactions	41.5%	36.6%	44.2%	48.6%	45.2%
Email conversations	55.4%	49.7%	59.0%	62.9%	58.1%
Telephone conversations	53.7%	42.3%	61.4%	65.7%	64.5%
Videoconferencing	6.8%	3.8%	6.6%	14.3%	19.4%
SMS/Text-messaging	5.4%	4.9%	4.2%	8.6%	16.1%
Instant messaging	5.2%	5.4%	4.4%	6.3%	6.5%
Online social media	65.5%	56.9%	69.9%	76.6%	87.1%

 Table 1. Knowledge Sharing Strategies with Public and Organization Size

Sector $\rightarrow$ / Strategy $\downarrow$	Animal welfare	Community	Culture & Arts	Education & Research	Health	Social services	Other
Formal written documentation	72.4%	61.2%	63.9%	70.6%	68.1%	69.3%	63.4%
Informal in-person interactions	58.6%	57.0%	58.8%	49.2%	58.0%	56.5%	57.8%
Formal in-person interactions	41.4%	38.0%	32.0%	45.2%	55.8%	44.7%	38.8%
Email conversations	69.0%	44.6%	57.8%	61.0%	57.2%	54.4%	53.4%
Telephone conversations	58.6%	34.7%	50.1%	57.6%	63.8%	57.8%	52.2%
Videoconferencing	0.0%	2.5%	3.6%	10.2%	12.3%	8.5%	4.3%
SMS / Text-messaging	17.2%	4.1%	4.1%	2.3%	8.7%	6.7%	3.9%
Instant messaging	20.7%	5.0%	5.1%	2.8%	7.2%	4.9%	4.3%
Online social media	82.8%	52.9%	74.7%	59.3%	61.6%	66.6%	61.6%

Table 2. Knowledge Sharing Strategies with the Public across NPO Sectors