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**Concept Paper: Organizational Change and Knowledge Management:
Designing a knowledge culture within Federal Policing in Canada**

ABSTRACT

‘To be competitive and cope with the evolution of markets, organizations need to adapt their structures and processes, change how they design and distribute tasks, assign roles and coordinate decisions and activities’ (Barbaroux, 2011:626). Such change management initiatives normally require tackling complex problems that are often distributed across a range of people and processes within an organization. The management literature clearly articulates the challenges citing that close to 70% of change management initiatives fail. What makes change management a complex domain is that organizations are characterized by their intricate and multiple intertwined interactions, relationships and cultures. Recognizing the complex and dynamic environment, transformational change may result in a move towards the creation of new configurations of organizational components. This can have significant impact on how knowledge is created, shared and applied. The objective of the study is to position culture as a critical design feature and enabler of the knowledge management strategy for RCMP Federal Policing. This concept paper demonstrates how the network analysis approach can be applied to garner insights into the development of the Federal Policing knowledge agenda and the subsequent implementation of a Knowledge Management System that recognizes culture as a key feature to support the change management initiative.

1 INTRODUCTION

In August 2011, Royal Canadian Mounted Police (RCMP) members representing Federal Policing from across Canada met over a 3-day period to discuss the following question:

‘What do we need to do to re-engineer RCMP Federal Policing into an integrated, innovative and flexible program that can optimally execute its operational mission?’

The new paradigm that emerged from this discussion was the evolution of a Priority-Based Federal Policing model, which emphasized activity over commodity, to realize greater flexibility and effectiveness in attacking organized crime groups. In so doing a networked, distributed organizational model was developed.

Knowledge management is considered to be the most valuable and important resource in an organization (Cummings, 2003). In Federal policing operations, knowledge is of strategic importance through its contribution to sense making and decision making. Integrating a knowledge management (KM) strategy as part of the federal policing re-engineering initiative, requires the realization that traditional organizational structures can often obscure network relationships that permeate the organizational functions, hierarchies and business model. It is these networks and supporting culture that shape collaborative work efforts in an environment that is increasingly being recognized as knowledge-intensive. Knowledge sharing is considered critical to support operational effectiveness (Quigley, Tesluk and Bartol, 2007). The question that emerges is how can knowledge be managed and integrated in the business processes associated with police operations given the ‘radical’ organizational and cultural change that has transpired within the RCMP. For many policing organizations, this is still an open issue (Seba and Rowley, 2010).

The objective of a change management initiative is to drive sustainable transformation in an organization that allows it to be more effective, efficient and competitive. New organizational structures and

business models are often created to support a change management initiative. This often involves transforming the way people work and interact which requires adoption of new behaviours and attitudes (culture) within the organization which may result in new organizational structures to support the change management initiative. In a knowledge-intensive organization such changes invariably affect how knowledge is created, shared and applied. This thereby requires attention and sensitivity to the need for a well-articulated knowledge management strategy that recognizes culture as a key factor that supports the change management drivers. The success of a KM program is linked to the level of adoption of new behaviours and attitudes among knowledge workers.

Management literature supports the findings that close to 70% of change management initiatives fail. Similarly, upwards of 80% of KM initiatives fail to have any significant impact (Chua and Lam, 1995:7). The challenge associated with successful change management is the recognition of knowledge management as a key enabler in a knowledge-intensive environment. Mohamed, Stankosky, Murray (2004: 127) argue that traditional organizations with heavy internal competition, rigid functional silos and undue compartmentalization exhibit sub-optimal performance by inhibiting critical knowledge flows. Through the advent of Cross-functional teaming these issues are addressed by building organizational connections across functional silos (Mohamed et al., 2004: 127). The move to a networked model for RCMP Federal Policing recognizes the requirement for cultural change to support greater collaboration and knowledge sharing in order to realize the vision of a more integrated, innovative and flexible Federal Policing program. As cited in Mohamed et al (2004:128), collaborative knowledge teams give corporations an edge on creativity and innovation. Through a networked organizational structure that typifies cross-functionality, a purposeful and supported knowledge management strategy, through this 'teaming effort' '... generally leads to enhancement in efficiency and effectiveness of the process and reduction in multi-task lead-time and redundancies (Goulden, 1995, Anumba et al., 2001; Shipley, 1994; Zhang and Cao, 2002; Proehl, 1996; Jones, 1994; Webber, 2002; Koch, 1995)'. The successful application of KM thereby necessitates interaction among multi-disciplinary groups of people as a basic requirement. Cross-functionality cannot be effective without a culture of sharing knowledge among team members and thereby a knowledge strategy that embraces the requisite worldview of people, processes, technology and overarching supporting culture to support the new organizational structure and business model. Through organizational network analysis, the people, processes, technology (socio-technical) worldview emerges thereby facilitating ongoing design and evolution of the knowledge management strategy.

As discussed in Seba and Rowley (2010:615), knowledge creation, sharing, storing and application are key requirements in police operations which are characterized as knowledge-intensive and time critical. In the policing domain, information and knowledge have a shelf life thereby requiring unprecedented levels of knowledge sharing and creation to inform decision making. Recent events such as the RCMP apprehension of two suspected al Qaeda linked terrorists plotting to bomb a VIA rail train between Toronto and New York (Blackwell, 2013), highlights how knowledge creation, sharing and application are key enablers in police work and cannot be left to ad hoc processes. Although KM is critical in police operations, Seba and Rowley (2010:620) report from their study that 'No clear KM strategy existed in police forces, nor a formal strategy to encourage knowledge sharing. Lack of awareness and lack of clear strategy, along with embedded barriers in both the structure and the culture which exist in public organizations are found to hinder the effectiveness of knowledge management'. The importance of a KM strategy (Bosua and Venkitachalam, 2013) and alignment with knowledge infrastructure capabilities (Pandey and Dutta, 2013) resonates and is well recognized with the change management initiative of the RCMP. However, as reported by (Bosua and Venkitachalam, 2013:1) '...existing management literature suggests that alignment is often difficult to achieve due to issues including vague guidelines on how to achieve alignment, the interrelated nature of organizational processes and difficulties in measuring the progress of alignment efforts'. This paper presents a knowledge management framework and performance measurement methodology (organizational network analysis) to support the development of a KM strategy and alignment with the processes.

2 KNOWLEDGE MANAGEMENT

Knowledge Management facilitates the systematic, effective management and application of knowledge, knowledge products and resources available to an organization. To facilitate decision making in this complex and dynamic problem space requires collaboration inside and outside the organization, to promote information

access and sharing. It is this key KM practice of collaboration that keeps knowledge vital and relevant. Alavi and Leidner (cited in Lu and Tsai, 2005:279) classified the processes of Knowledge Management into four key steps: knowledge creation, knowledge storage/retrieval, knowledge transfer/sharing and knowledge application. According to Kuhlen (2003), 'the understanding of knowledge management has undergone a paradigm shift from a static, knowledge-warehouse approach towards a more dynamic communication-based or network approach'.

Luen and Al-Hawamdeh (2001) suggest that many organizations in the public sector are knowledge-intensive organizations and that the costs of poor knowledge management practices may be high leading to lost institutional memory, knowledge gaps and poor decisions. Knowledge thereby has strategic importance as an asset to an organization. Critical to this realization is the importance to understand the motivations and mechanisms that facilitate knowledge sharing between employees. Building a culture that recognizes the critical value of knowledge that is distributed throughout the organization and creating mechanisms to facilitate knowledge creation, knowledge access, knowledge sharing and application, will enhance productivity, innovation and organizational competitiveness. This characterizes some of the challenges associated with a change management initiative.

Some of the challenges that organizations face today with regards to knowledge management and knowledge transfer revolve around issues pertaining to how knowledge is created, stored, shared and leveraged to support their business. When knowledge is created and shared across a collaborative environment it becomes an organizational asset and a competitive advantage. Knowledge management does not emerge from a business model but must be designed as part of the broader strategic objectives of the organization. The knowledge management cycle Champoux (1999) (figure 1) and Choo (1998) sense-making model (figure 2) capture key elements for the knowledge intensive environment of Federal Policing.

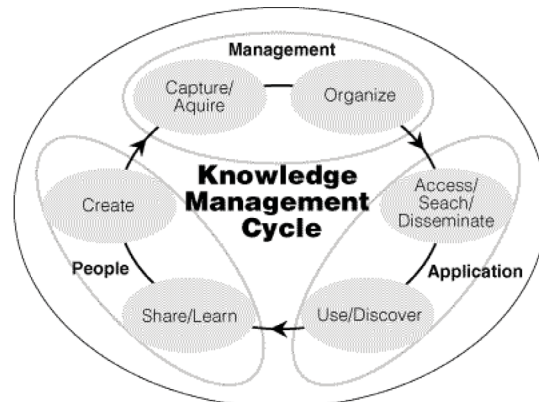


Figure 1: Knowledge management Cycle

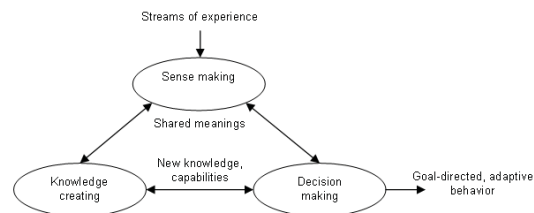


Figure 2: Sense making and knowledge management

As part of Federal Policing re-engineering, a complete rethink of the organizational purpose, core competencies, and long-range intention was enacted. This analysis took into consideration the five constituent components of KM, namely: people, processes, technology, culture, and structure. This re-engineering

initiative of the RCMP is critical to KM because it challenges traditional 'siloed' thinking forcing the organization to reflect upon how it will ensure the distributed knowledge is leveraged, and how to work, interact and think collaboratively. It is recognized that, traditional organizations are often characterized as monolithic with isolated functional silos that exhibit an inherent disconnect thereby creating barriers to communication and knowledge sharing. Such hierarchical organizations slow down change, lengthen the decision making process and imprison innovation (Mohamed, Stankosky, Murray, 2004: 129). The flattened organization structure, such as that envisioned for Federal Policing, minimizes cross-functional boundaries and opens the necessary channels for exchanging ideas and sharing knowledge. For effective knowledge sharing rigid multi-layers must be softened and morphed into blurred non-restrictive boundaries for cross-functionality and community networking (Mohamed, Stankosky, Murray, 2004: 129).

Organization structure and knowledge management are synergistic and are strategically linked to supporting agility and competitiveness (Mohamed, Stankosky, Murray, 2004: 129). RCMP Federal policing has embraced a networked model to facilitate cross-functional collaboration in addition to the formation of communities of practices to facilitate knowledge management (Amayah, 2013:10). The establishment of this new structure and processes with a culture of collaboration was informed by network analysis. To ensure that efficiencies and effectiveness have been realized will require a validation of how knowledge is distributed across the network, shared, stored and how it informs decision making.

While many consider technology as an end solution, proper KM treats technology as an enabler. Technology infrastructure is currently in place that supported the traditional hierarchical model of federal policing. The network analysis will help to identify the gaps and solutions to ensure the viability of the network model and premise of distributed knowledge.

A recurrent theme derived from the literature review is that of the importance of organizational culture. Seba and Rowley (2010:616) argue that 'organizational culture and its associated beliefs, values and attitudes can be viewed as either a facilitator or barrier to the success of KM initiatives and commitment to knowledge sharing practices'. The current culture of Federal Policing may be defined as "need to know" rather than "need to share"; as one of silos rather than integration, and as "being all things to all people" rather than a culture of prioritization.

A critical success factor for a KM system is existence of dialogue and sharing as a natural and integrated process. This culture does not shift or manifest in isolation, but rather it is a derivative of the overall purpose and intent of the organization. A purpose statement that clearly defines the desired direction of the organization, coupled with the necessary values and behaviours that contribute to operational outcomes, is a key starting point for Federal Policing (Nonaka & Takeuchi, 1995).

The purpose of Federal Policing can be succinctly defined as to "stop the threat". This statement is supported by the following essential behaviours/values:

- We are one organization
- We are performance-driven:
 - Prioritise what we do
 - Make evidence-based decisions
 - Focus on results
- We champion diversity and work as a team
- We recognize and value knowledge as a critical ingredient for operational success.

The emulation of these behaviours by senior leadership is essential for the requisite cultural shift to take root. This leadership action is insufficient on its own however; the values and behaviours must be broadly communicated throughout all of Federal Policing.

The effectiveness of the new Federal Policing cross-functional model will depend upon knowledge processes, people, technology, and the ability to influence traditional thinking from a culture of "need to know" to a culture of "need to share" (McDermott & O'Dell, 2001). Moreover, the Federal Policing reengineering initiative requires a culture shift in business processes, knowledge management and collaboration. The network distributed organizational model that characterizes the reengineering effort requires unprecedented collaboration and cross-functional working. As such, and as with any initiative that seeks to fundamentally alter the way people work, the ability to manage that change effectively is crucial to the ongoing success of the knowledge management agenda. Within the RCMP there is a keen awareness of the value of information and intelligence, and the pivotal role that knowledge sharing can play in organizational performance. What is

required therefore as part of the reengineering initiative is the development of a knowledge management strategy.

3 ORGANIZATIONAL NETWORK ANALYSIS

An organization's ability to realise its full operational potential is dependent on the interconnectivity and relationships between people, processes and technology. As described in Pandey and Dutta (2013:12), organizational structure plays a great role in promoting or inhibiting interaction and collaboration and is a collaboration culture enabler. **Organizational-network analysis** can be used to collate and analyse the patterns of these interconnections and relationships that exist in an organization, and outlines the potential benefits the methodology can bring to a corporate knowledge-management program.

Through Organizational Capability theory, Gold, Malhorta and Segars (2001:186) argue that an organization's KM effectiveness depends on the infrastructure capabilities (cultural, structural and technological) and process capabilities (knowledge acquisition, conversion, application and protection). Leveraging the change management literature and organizational capability lens, a knowledge management system (KMS) framework has evolved that characterizes the KM strategy within the RCMP Federal Policing (figure 3). As with any change management initiative, culture plays a significant role. With regards to KM, an organization's culture is considered to be one of the most significant influences. As described in Gold et al. (2001) and cited in (Pandey and Dutta, 2013:14) '...when culture is operationalized around the themes of corporate vision and corporate values it contributes significantly to an organization's knowledge infrastructure capability'. Hence the role of leadership and vision in shaping not only the change management initiative (Kotter, 1996), but also the KM strategy and knowledge management framework (figure 3).

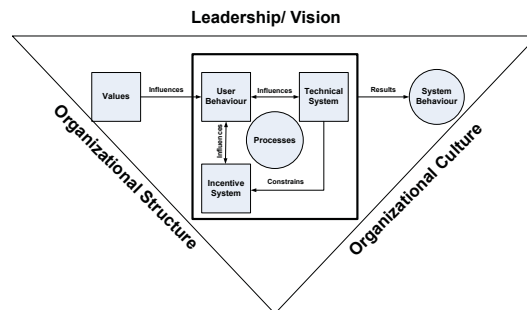


Figure 3: KMS Framework (modified from Muller, Spiliopoulou and Lenz, 2005:2)

Organizational-network analysis (ONA) is a diagnostic method for collecting and analysing data about the patterns of relationships among people in groups. Applied to knowledge management, ONA can identify patterns of interaction in an organization, including its properties, such as the average number of links between people, the number and qualities of subgroups, information bottlenecks and knowledge brokers. ONA (figure 4) provides a view into the network of relationships that gives knowledge managers leverage to:

- Improve the flow of knowledge and information;
- Acknowledge the thought leaders and key information brokers (and bottlenecks);
- Target opportunities where increased knowledge flow will have the most impact on your bottom line.
- Indicate cultural synergy in supporting KM and collaboration

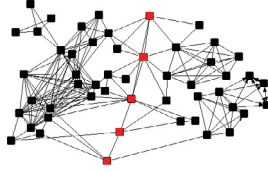


Figure 4: Information Network with Five Boundary Spanners

Through surveys, ethnographic observation, interviews and ONA, key enablers can be discovered that will inform the KM strategy and highlight key measures to facilitate benchmarking and improvement. This approach encapsulates a performance measurement strategy that focuses specifically on the people, processes, technology cultural, and structural enablers of the KM strategy. Emerging from this analysis will be the salient features of the KM strategy that will serve the RCMP Federal Policing.

4 CONCLUSIONS

A KM strategy that supports Federal Policing reengineering will require a shift in culture and a fundamental re-organization of the way the RCMP does business. Like any change management initiative, the success of a KM strategy will depend upon having a clear vision, leadership support and the adoption among knowledge workers of new behaviours and attitudes. The value that KM brings to an organization results from the potential for enhancing and leveraging knowledge flows among distributed functional teams (Mohamed, Stankosky, Murray, 2004: 128).

A strategically driven KM agenda creates a capacity and capability that supports the primacy of operations through the integration of people, processes and technology in a distributed networked organizational structure thereby fostering a culture of collaboration and knowledge sharing.

As the police work environment becomes ever more complex and dynamic, the RCMP specifically and police forces in general have to make efforts to improve their efficiency and effectiveness. Through Organizational Network Analysis (ONA), the KM system and strategy can be designed to ensure operational effectiveness through attention to people, processes, technology, culture and structure (all key areas of the change management initiative).

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