ORGANIZATIONAL CAPACITY AND KNOWLEDGE TRANSFER: A QUALITATIVE CASE STUDY OF THE 2007 CANADA WINTER GAMES HOST SOCIETY

Melody Rioux, BSM

Submitted in partial fulfillment of the requirements for the degree of

Master of Arts in Applied Health Science

(Sport Management)

Supervisor: Julie Stevens, PhD

Faculty of Applied Health Sciences
Brock University
St. Catharines, Ontario, Canada

Abstract

Understanding and managing the knowledge transfer process in sport organizations is an essential component to enhance organizational capacity. Very little research on either capacity or knowledge transfer within a sport organization exists. Consequently, the purpose of this qualitative case study was to examine the transfer of knowledge process within a major games host society. Specifically, two research goals guided the study: 1) To develop a model to explain a knowledge transfer process in a non-profit major games host organization and 2) To examine the relevance of the model to a Canada Games Host Society. Data were collected from interviews with middle and senior level volunteers as well as senior staff members (n= 27), documents and observations. The findings indicated three barriers to knowledge transfer: structural, systemic, and cultural. As a result of the findings a revised model for knowledge transfer was proposed that included modifications related to the direction of knowledge flow, timing of the knowledge transfer process, and group inter-relations. Implications identified the importance of intuition managers, time and organizational levels for successful knowledge transfer. Recommendations for future host societies and the Canada Games Council are presented.

Acknowledgements

Completing this document has resulted in experiencing the very lows of valleys but also the very highest of mountain peaks. When I reflect upon this educational journey there are many individuals who have assisted me and kept me on the right path. First of all I would like to thank Dr. Julie Stevens for that initial phone call while I was enjoying some time off on Catalina Island in California, to ask me to come back to Brock and complete a Master's degree with her. Julie, I cannot really put into words how grateful I am to you for the ongoing encouragement and most importantly for not giving up on me over the last four years. Although this has been a very long and arduous process for both of us, the end result of this document speaks to the intelligence, strength and determination that we both have.

Second, I would like to thank Dr. Lisa Kikulus and Dr. Cheryl Mallen for hanging in with me as committee members. Dr. Kikulus, I appreciate the determination to help me understand the various aspects of qualitative research, and Dr. Mallen, thank you for the knowledge textbook and the numerous informal conversations early in this process about knowledge. I would also like to thank Dr. Cheri Bradish and Dr. Chris Chard for serving as Chairs on my proposal and thesis defences.

Finally, I would like to thank my family for the continued encouragement and support. My brother Robb, even though you keep reminding me that I should be a doctor after this many years in school, knowing and asking me how its been going has meant a lot. My parents Pat and Ron, there have been many distractions over the last four years, however your continued harassment, encouragement, and support to ensure I completed this endeavour is something I have always been able to count on. My husband Stephane, words cannot describe how incredibly lucky I am to have you continue to stand by my side. We have laughed and cried together throughout this journey but what has kept me grounded is your undying love and commitment to help me reach my goal, I love you.

Mom, I would like to dedicate this entire thesis, the time, frustrations, disappointments, struggles, and finally the successes to you. The battle that I have gone through the last four years is nothing compared to yours, but I have drawn strength from your ability to fight in the toughest of times. You have always pushed me to be the best that I can be, to strive to be a life-long learner and to always work for more. You have set an excellent example for me and I can only hope that one day I find a job where I can teach with as much passion and enthusiasm as you have throughout your career. You have always taught me not to give up and to persevere, as you continue to fight please remember that wisdom. I love you and am happy that I have made you proud by completing my Master's.

Thank you to everyone who has assisted in one way or another with this educational journey. I look forward to where the next adventure will take me!!

Table of Contents

List of Figures

List of Tables

Chapter 1: Introduction

Capacity is a burgeoning area of research and one that is important in sport, and in this thesis it is noted as being of particular importance in the non-profit sector (Backer, 2001; Mackay & Horton, 2002). In the 1990's the federal government partnered with volunteer organizations to focus on finding ways to improve the non-profit volunteer sector. This partnership was called the Voluntary Sector Initiative (VSI) and the VSI created a Panel on Accountability and Governance to conduct research about the voluntary sector. One of the key issues that emerged from the research was a need to strengthen the volunteer sector's capacity. Raising the awareness of capacity provided an opportunity for both the government and the voluntary sector to improve volunteer organizations.

The VSI of the 1990's was a catalyst for capacity awareness in the voluntary sector. However the VSI did not specify sport organizations and how they can contribute to enhancing the voluntary sector in Canada. The sport sector can take advantage of many of the initiatives that emerged from the VSI by focusing upon three specific areas identified in the Canadian Sport Policy (CSP). First, the Canadian Sport Policy (CSP) identifies capacity as an area requiring improvement in the Canadian sport system. Second, the policy identifies the importance of the Canada Games to the development of young Canadian athletes. Third, the Canada Games provides communities with hosting experience and when successful in achieving the rights to host the Canada Games, community development can occur. Consequently, the 2007 Canada Winter Games Host Society is an excellent case to enhance our understanding of the capacity-knowledge

connection within a non-profit sport organization and provide an impetus for further research on capacity within non-profit sport entities.

Capacity was also prioritized within a Canadian non-profit sport sector initiative. The 2002 *Canadian Sport Policy* identified four goals to enhance the Canadian Amateur sport system: participation, excellence, capacity, and interaction. In regards to capacity, the Canadian government policy did not provide a specific definition but rather stated that the goal by 2012 is to have "an ethically based, athlete/participant-centered development system" (Canada, 2002, p. 19) in place. In the *Canadian Sport Policy* five key capacity initiatives are listed that the federal-provincial/territorial governments would work to achieve over the 10 year implementation period. These five points include: first, ensuring that all components of the participation and excellence goals meet the needs of the athletes; second, promoting safety and ethics in sport environments to increase value of participation; third, to "develop a long-term strategic approach to the hosting of major national and international sport events to maximize their contribution to sport and community objectives" (Canada, 2002, p. 19); fourth, to support the development at all levels of volunteer and paid staff as well as organizations in order to " strengthen their contribution to a healthy and ethically based, athlete/participant-centered sport system" (Canada, 2002, p. 19); and finally fifth, to "develop a sustainable and diversified public and private resource base for the ongoing development of sport at all levels" (Canada, 2002, p. 19). Achieving these five initiatives is a concern for the non-profit sport sector because capacity building has been identified as an area requiring a significant amount of attention. Despite including the goal statement and the five initiatives the CSP did not provide specific executables to guide sport leaders towards the attainment of capacity.

This contributed to the lack of progress that was made from the *2002 Canadian Sport Policy* regarding capacity and amateur sport organizations.

In order to assist with progress one area that has been researched identifies organizational learning and knowledge management as key aspects of organizational capacity within a non-profit sport entity. The Panel on Accountability and Governance defined organizational capacity as:

> [The] assets, strengths, qualities or characteristics that enable a voluntary organization or the sector as a whole to survive while addressing ongoing challenges and to grow and thrive while meeting new opportunities. In addition to 'hard' infrastructure, such as funding, technology, and human resources, capacity entails *knowledge* and *understanding* [emphasis added](Panel on Accountability and Governance in the Voluntary Sector, 1999, p. 14).

In her study, Marunchuk (2006), conducted a case study of organizational capacity within a major games host society. Her research provided one very interesting finding related to organizational capacity in a sport entity. Her work highlighted the connection between capacity and organizational form specifying that in order to enhance organizational capacity, organizations need to adopt a brain metaphor as opposed to a machine metaphor. Marunchuk's research was based on Morgan's (1997) work on metaphors where he linked a brain metaphor to a learning organization. Additionally Boisot (2002) connected learning organizations and knowledge management. Learning organizations recognized the importance of knowledge management and utilized strategies to extract the knowledge. Boisot (2002) suggested "knowledge management is about the capture, storage, and retrieval of knowledge located either in the heads of employees, in the heads

of outside collaborators, or in documents"(p. 69). He also argued it is important to generate useful and valid knowledge management strategies that may be shared.

Carrying the knowledge management and organizational capacity theme further, a connection between knowledge transfer, knowledge management strategy and organizational capacity is evident in the literature. Ebrahim (2003) purported that the ability to manage individual tacit knowledge and knowledge transfer is essential for organizational capacity. However, in order for an organization to successfully transfer knowledge, it must first recognize the difference between tacit and explicit knowledge. According to Grant (2002) "explicit knowledge can be articulated and easily communicated between individuals and organizations. Tacit knowledge (skills, know-how, and contextual knowledge) is manifest only in its application – transferring it from one individual to another is costly and slow" (p. 136). Since these two types of knowledge are intertwined, it is important to examine the process whereby tacit knowledge becomes explicit knowledge. In an organization each individual brings his/her own experiences to a position, which is tacit knowledge. Through socialization, one's tacit knowledge is shared and essentially transferred to other individuals and becomes explicit knowledge, which is then institutionalized into the organization.

Despite the fact that individuals learn and acquire new knowledge in a variety of different ways, it is critical to understand the means through which an individual transfers his/her knowledge to other individuals within the organization, and to the organization as a whole in order to build capacity. The methods that individuals and organizations employ to transfer knowledge are extremely important because some methods are more effective than others. One method, a written document may contain explicit knowledge

but the context in which it is received may not be fully understood because the tacit knowledge from the sender is not available to the receiver.

Consequently, the purpose of this qualitative case study was to examine the transfer of knowledge process within a major games host society. Specifically, two research goals guided the study. The first goal was to develop a model to explain a knowledge transfer process in a non-profit major games host organization. The second goal was to examine the relevance of the model to a Canada Games Host Society. The following two questions guided the study:

1. a) What factors enable the knowledge transfer processes outlined in the model?

   b) How do the factors influence the model?

2. a) What factors inhibit the knowledge transfer processes outlined in the model?

   b) How do the factors influence the model?

The 2007 Canada Winter Games Host Society provided the case context for this research. It was previously noted that knowledge management difficulties are common within a Canada Games Host Society (Canada Games Host Society, 2006a). For example, the Vice-President (VP) of Venues from the 2007 Canada Winter Games Host Society may transfer a report to a committee chair involving a policy or procedure s/he are required to implement. However, the committee chair may not understand how the content of the policy or procedure should be implemented and s/he believes that the policy is irrelevant. In this case content refers to the particular forms of knowledge that are housed within policies or procedures while context refers to the situations that managers deal with in

divisions in the host society. If this knowledge can be successfully implemented by different members within an organization, which relates closely to knowledge transfer, then organizational capacity within the host society will be greater. Therefore, the findings of this study on knowledge transfer may hold important implications for capacity within nonprofit amateur sport organizations because they provide insight on how individuals can overcome the knowledge context-content issue and provide opportunities to build the capacity of an organization as a whole.

Chapter 2: Theoretical Framework and Model

In knowledge management research the strategies that are employed to transfer knowledge are an area of growing interest. The increased attention for these knowledge transfer strategies resulted from the significant impact they have on how knowledge is mobilized and how an organization can adapt this knowledge to build capacity. It is important to examine the relationship between knowledge and organizational capacity because the ability of an organization to generate "knowledge is not enough; learning also involves the use of knowledge to influence organizational practices" (Ebrahim, 2003, p. 14). The capacity of an organization can be enhanced through the generation of organizational knowledge from both internal and external sources followed by the dissemination of the knowledge throughout the organization.

According to Creswell (2003) " the literature review might take several different forms, and little consensus exists about a preferable form" (p. 32). One approach is to present background information of previous research findings, methodologies, inconsistencies in the field, and gaps in the published original research articles (Gaston and Smith, 1988). Another approach that is popular with dissertations is integrative, and includes a summarization of the broad themes outlined in the literature (Cooper, 1984). Additionally a theoretical review, "focuses on extant theory that relates to the problem under study" (Creswell, p. 32). Therefore this chapter utilizes a theoretical framework approach in order to integrate key literature pertaining to organizational capacity and knowledge management.

The theoretical framework approach identifies and interrelates concepts from the literature which are crucial for examining the research problem. Several aspects emerged

from existing organizational capacity and knowledge management literature and each was instrumental in the development of the knowledge transfer model presented in this chapter. However the model, called A Conceptual Model for Intra-Organizational Knowledge Transfer represents an extension of this work in a comprehensive synthesis of key concepts of work. While the literature provides these concepts primarily in isolated forms, this work bridges the concepts from the 4 I's and the 4 modes of conversion [explored further in this chapter] on how knowledge management occurs in an organization. Together these concepts in the model contribute to increasing organizational capacity through successful knowledge transfer in an organization.

This chapter consists of seven sections that provide literature on specific knowledge-transfer related topics. The first section on organizational capacity includes three subsections - absorptive capacity, adaptive capacity, and organizational learning. The second section on knowledge transfer includes two subsections - explicit knowledge and tacit knowledge. The third section on knowledge management includes four subsections - knowledge profiles, middle managers, chief knowledge officer, and knowledge creation culture. The fourth section describes the conceptual model and consists of seven subsections - individual level, individual intuition, individual interpreting, feed forward learning, group level, group level socialization and integration, and organizational level. The final three sections in the chapter are intra-organizational knowledge transfer strategies, knowledge management in a multi-sport event organization and finally literature gaps. The theoretical framework will begin with the section on organizational capacity.

Organizational Capacity

Organizational capacity is a term with several definitions, therefore "whatever capacity building might be, it is not going to be the same across such a diversity of kinds of organizations" (Wing, 2004, p. 154). Each organization will modify its interpretation of organizational capacity as it pertains to its goals, purpose, or mission. There are many areas that encompass capacity building such as the "purchasing of computer hardware and software, consulting assistance in everything from fundraising to strategic planning, coaching the executive director, board training, and more" (Wing, p. 154).While these areas involve very different practices, a common aspect is how each practice is dependent upon a knowledge base within the organization.

In addition to knowledge, organizational capacity is strongly influenced by the individuals within an organization. Marunchuk (2006) investigated the 2005 Canada Games Host Society and found the existence of an "emphasis on human resources as a connecting element" (p. 127) for organizational capacity. In addition, Marunchuk indicated that the individual, rather than the organization as a whole, is a critical aspect of organizational capacity. Donahue, Selden, and Ingraham (2000) identify the components of human resources that are important to capacity: workforce planning; hiring the workforce; sustaining the workforce; motivating workforce; and finally workforce structure. Donahue et al. believe that in order to achieve capacity the individuals who are hired must have the specified qualifications and appropriate skills for the job. Furthermore, they go on to say that in order to maintain a qualified workforce it is important to provide "training to develop and maintain employees skills, by retraining skilled and experienced employees …" (p. 395). Consequently if organizations are

constantly hiring new employees the capacity of the overall organization will take significantly longer to increase and maintaining a level of capacity will be difficult to achieve.

Eisenger (2002) concludes that the ability of the organization to reach its full capacity is dependent upon the individuals within the organization and the knowledge that they possess. Wing (2004) found it interesting how organizations link soft (people) and hard (structure) systems, and how this connection impacts organizational capacity. In addition, Wing (2004) states:

> organizational capacity must partake of both: It has to be person carried or it is dead; yet it has to be institutionalized in systems, or it evaporates. When we are measuring the effectiveness of capacity building, we have to look at people, systems, and how they relate and reinforce each other (p. 158).

Overall, the importance of the individuals working within the organizations to increase organizational capacity is something that is supported by many researchers (Wing, 2004; Marunchuk, 2006; Eisenger, 2002; Tsai, 2001; and Ebrahim, 2003).

Absorptive Capacity. Individuals working within an organization have what Tsai (2001) calls absorptive capacity that is a cumulative process that builds upon knowledge that each individual within the organization has already obtained. This type of capacity refers to an individual's ability to learn and since every individual's capability of learning and acquiring knowledge is not the same, it has an effect on organizational capacity. A key issue surrounding absorptive capacity is that:

> a unit may be able to access certain new knowledge, but not enhance its

> innovation and performance if it does not have enough capacity to absorb such knowledge. The better a unit can access other units' knowledge, the more it needs absorptive capacity to benefit from such knowledge (Tsai, 2001, p. 998).

The individual's position within the organization is extremely crucial for the possibility of knowledge sharing within the organization. If the individual is located in a central position then access to a wide range of knowledge sources will be available. In this instance, organizational absorptive capacity is dependent upon knowledge transfer.

Adaptive Capacity. Absorptive capacity refers to the internal capacity within an organization's soft resources (people). However, Ebrahim (2003) introduces the term adaptive capacity as "the ability of a non-profit organization to monitor, assess, and respond to internal and external changes" (p. 14) and suggests the concept of adaptive capacity refers to an organization's ability to "reflect upon and respond to changes in the external and internal environment" (p. 14). Similarly, Tsai (2001) describes the importance of an individuals' ability to absorb knowledge and how that ability will impact the organization through the process of knowledge sharing. However, adaptive capacity takes the process of knowledge sharing one step further by placing the ability of an individual to actually respond to the knowledge as a central consideration of capacity. In order to be able to build organizational capacity based on knowledge, practices such as "consulting, coaching, training, and peer exchanges" (Ebrahim, 2003, p. 14) should be utilized to develop the skills of the individual leaders and to assist in their ability to respond to the knowledge. The ability to provide training and development for all organizational members is key to the understanding and rationale for organizational

changes, and will contribute to the development of new knowledge and the required "new ways of thinking and working"(Sanderson, 2001, p. 310).

Organizational Learning. When both the organization and the individuals working within an organization can maximize their learning potential through effective knowledge transfer from individual to individual, organizational capacity can be enhanced. Within a non-profit organization transferring knowledge from individual to individual can be made easier through cross-functional teamwork in organizations that do not have a high number of staff. This type of teamwork "can help generate and spread new knowledge and learning in an organization" (Ebrahim, 2003, p. 17). This is an important point for non-profit organizations as they often do not have many financial resources to spend on training and development, therefore the manner in which a non-profit structures its organization can enhance organizational learning by encouraging the generation of new knowledge within its existing organization. In the field, managers are expressing a desire to learn from one another and are desperate to uncover and implement the proper structures for knowledge transfer to occur (Ebrahim).

Similar to capacity, organizational learning has many different definitions. For the purpose of this study organizational learning will be defined "as increasing an organizations capacity to take effective action" (Bontis, Grossman and Hulland, 2002, p. 439). Organizational learning is extremely important as Bontis, Grossman and Hulland allude to when they state "an organization's capacity to learn may be its only sustainable competitive advantage … organizations must either learn or die" (p. 437). Discovering

the most effective strategies to transfer knowledge is important for non-profit organizations because they may lose the opportunity to increase their capacity.

Knowledge Transfer

In order to achieve the first research goal of developing a proposed model of knowledge transfer within a non-profit sport organization, knowledge must be defined and explored. Theorists argue there is no single definition of knowledge, but rather it is a work in progress and an individual or organization may define knowledge as it applies to a specific context. The difficulty in creating one over-arching definition of knowledge may originate from the number of different types of knowledge that have been identified. The literature includes terms such as tacit knowledge (Leonard & Sensiper, 2002), social tacit knowledge (Nahapiet & Ghoshal, 2002), explicit knowledge (Leonard & Sensiper, 2002), advancement knowledge (Mallen & Adams, 2008), common knowledge (English & Baker, 2006), implicit knowledge (Kogut & Zander, 1996), propositional knowledge (Tsoukas, 1996), and procedural knowledge (Kogut & Zander, 1996) (See Table 1). For the purpose of this study the terms tacit and explicit knowledge will be utilized.

Explicit Knowledge. Explicit knowledge is "codified, structured and accessible to people other than the individuals originating it" while tacit knowledge is "not yet explicated … semiconscious and unconscious knowledge held in people's heads and bodies" (Leonard & Sensiper, 2002, p. 485). According to Leonard and Sensiper (2002) knowledge contains "information that is relevant, actionable, and based at least partially on experience. Knowledge is a subset of information; it is subjective; it is linked to

Table 1

List of Definitions for Tacit and Explicit Knowledge

TACIT KNOWLEDGE	EXPLICIT KNOWLEDGE
Tacit – "semiconscious and unconscious knowledge held in people's heads and bodies" (Leonard & Sensiper, 2002, p. 485)	**Explicit** – "codified, structured and accessible to people other than the individuals originating it" (Leonard & Sensiper, 2002, p. 485)
Advanced – "is tacit in nature" (Nonaka & Takeuci as cited in Mallen & Adams, 2008, p. 6)	**Common** – "… thorough knowledge of the theory and actual practice of a process or procedure…" (English & Baker, 2006, p. 4)
Implicit – "much that is known is implicit knowledge and only tacitly known" (Kogut & Zander, 1996, p. 508)	**Propositional** – "is concerned with generalizations: types of environments are connected to types of strategic behaviour in types of circumstances" (Tsoukas, 1996, p. 12)
Social tacit knowledge – "the knowledge that is fundamentally embedded in the forms of social and institutional practice and that resides in the tacit experiences and enactment of the collective" (Brown & Duguid, 1991 as cited in Nahapiet & Ghoshal, 2002, p. 673)	**Procedural** – "provides the conceptual underpinning to understanding the generation of routines as arising out of sustained interaction" (Kogut & Zander, 1996, p. 508)

meaningful behaviour; and it has tacit elements born of experience" (p. 485). Explicit knowledge implies knowledge that exists in structures such as an organization while tacit refers to the individual knowledge, however scholars argue the two are well connected. Tsoukas (1996) states that "... to split tacit from explicit knowledge is to miss the point – the two are inseparably related" (p. 14). Nonaka (2002) combines both tacit and explicit knowledge within a knowledge spiral involving a shared process. Here, explicit knowledge becomes tacit through internalization and tacit knowledge becomes explicit through the process of socialization and externalization.

When trying to understand the differences between tacit and explicit knowledge Skyrme and Amidon (1997) paint an excellent picture. Explicit knowledge is formal, systematic and objective, and it is generally codified in words or numbers. Explicit knowledge can be acquired from a number of sources including company-internal data, business processes, records of policies and procedures, and external sources such as through intelligence gathering. Tacit knowledge is more intangible. It resides in an individual's brain and forms the basis on which an individual makes decisions and takes action, but is not externalized in any form. The ability of tacit knowledge to be transferred will assist in determining its explicit relevance. If the knowledge is housed in items such as words or numbers, in the form of hard data, scientific formulas, manuals, computer files, documents, patents and standardized procedures, or universal works of reference (Beijerse, 1999), it can be classified as transferable and therefore explicit.

Knowledge that is highly structured, formal and classified describes explicit knowledge through the use of digital means such as multimedia. The less structured forms of knowledge can still be explicit and may include other digital properties such as

email communication. Tacit knowledge is quite different as it is "non-explicit, non-digital personal and organizational knowledge … can consist … of individual memories or expertise" (Maula, 2000, p. 56). As Arnaert and Delesie (2005) state "tacit knowledge needs to be grounded in the body before it can be transformed into explicit knowledge" (p. 4). Therefore in order to encourage employees to share their knowledge "the explicit knowledge held in intellectual property portfolios, databases and increasingly, corporate Intranets need to be supplemented by tacit knowledge in the heads of staff" (Kakabadse et. al., 2001, p. 148) that can be facilitated through the organizational structure and culture.

Tacit Knowledge. Tacit knowledge is very difficult to articulate as it is housed within individuals. Therefore in order to fully understand the complexity of tacit knowledge, an investigation into its various properties and characteristics will follow. Dating back to 1958, Polanyi, one of the first scholars to define tacit knowledge, believed that in a specific domain individuals would gain direct experience resulting in an enhanced form of personal knowledge. He also highlighted a very interesting point about tacit knowledge – tacit knowledge is non-verbal an it is in our subconscious. Therefore, tacit knowledge represents a knowledge transfer barrier because an individual cannot verbally express his/her tacit knowledge to anyone else. Polyani felt that tacit knowledge became evident to others only through the process of routines and various types of cultures.

When individuals are working for an organization they encounter many situations in which they must apply their tacit knowledge by observing and determining what the

problem or issues are, and deciding how to move forward (Wright, 2005). Since tacit knowledge is "non-verbalized, intuitive and unarticulated" (Baskerville & Dulipovici, 2006, p. 90) and often held within people's heads (Bollinger & Smith, 2001) it is strongly linked to individuals. This type of knowledge develops through "… lessons learned, know-how, judgement, rules of thumb, and intuition …" (Crawford, 2005, p. 7). Tacit knowledge develops over the course of many years and through a culmination of experiences for each individual (McKenzie, 2005).

Tacit knowledge can be acquired at the workplace as well as in other areas of an individual's life. When looking at tacit knowledge in the workplace, Gourlay (2006) suggests "managers are not able to influence the character of tacit knowledge people bring with them but once someone is a member of an organization their tacit knowledge is inevitably influenced by the situation there …" (p. 65). The manner in which tacit knowledge can be applied to organizations is important because:

> An optimum utilization of tacit knowledge is not only the need of the organization to grow and flourish in business but also the need of the individual to fulfill the highest need of self-actualization. A free flow of tacit knowledge always contributes to an increased sense of well-being as it unfolds a small portion of creativity in an individual. The unleashing of tacit knowledge can provide that missing link between the integration of the individual well-being with the organizational well-being and lead to a much needed nourishment of psychological, intellectual and knowledge thread (Bhardwaj & Monin, 2006, p. 81).

If an organization can capitalize on providing an atmosphere and environment where the individual and organizational well-being are met, knowledge will be created and the capacity of the overall organization will increase.

Every individual develops his/her own tacit knowledge. Collective tacit knowledge is developed by more than one person in an organization having and utilizing the knowledge in making decisions and it remains within the individuals. Bhardwaj & Morin (2006) compare tacit knowledge to an iceberg as collective tacit knowledge can be represented as the 10 percent of an iceberg that floats above the water. The remaining 90 percent of tacit knowledge, the part of the iceberg that lies below the surface of the water, is the type of knowledge that fuels organizational creativity and has yet to become explicated for the benefit of the organization. The organizational knowledge base is formed by interpreting the tacit knowledge of individuals that interact with the following subsystems: psychological, intellectual, knowledge, functional, social and cultural (Bhardwaj & Morin).

The tacit knowledge that resides within individuals in an organization must be continually massaged to foster growth as this is "the creative resource in each organization" (Arnaert & Delesie, 2005, p. 4). Organizational creativity is dependent upon the type of environment that exists for individuals (Maula, 2006). Gourlay (2006) claims that tacit knowledge is both an individual and a collective form of knowledge, therefore an environment that encourages "the presence of others is generally regarded as essential for its acquisition, but not by everyone" (p. 61). If individuals are encouraged to act upon their intuition and inspiration for both highly structured and less-structured formats while being provided with open access to information and communication

mechanisms, then organizational creativity will be enhanced. Organizations that encourage socialization amongst individuals will be in a favourable position when it comes to continual knowledge creation.

Modern day organizations can produce an environment that fosters knowledge creation; however, the key is to find successful mechanisms to manage the knowledge creation process. Bhardwaj and Monin (2006) discuss four major themes that relate to the creation process for tacit knowledge in an organization. The first theme explores how tacit knowledge management refers to a holistic approach in the way knowledge is captured, stored, shared, and leveraged (Bhardwaj & Monin). The second theme discusses the mobilization of organizational tacit knowledge and focuses on the incorporation of individual knowledge and experience within a group and an organization (Bhardwaj & Monin). The third theme of tacit knowledge refers to problem solving, proactive and novel situations, and refers to the activation of knowledge in these types of situations. The final tacit knowledge theme speaks to an individual's ability to use his/her intuition in various situations (Bhardwaj & Monin). Although they found these four themes to be important, Bhardwaj and Monin do not state whether all four themes must occur to manage the knowledge creation process for tacit knowledge. As the tacit knowledge evolves to become explicit, individuals utilize their tacit knowledge in various situations, they share their reasoning for the desired action through dialogue that "can be seen as the concept that expresses the dynamics of tacit knowledge" (Kakabadse, Kouzmin, & Kakabadse, 2001, p. 150) or the process of making tacit knowledge explicit.

Knowledge Management

As previously mentioned tacit and explicit are the two key terms for knowledge that will be utilized throughout this study. However, it is also important to address strategies for managing these two types of knowledge. Hackett (2002) provides a definition for knowledge management that includes aspects of tacit and explicit knowledge:

> an integrated, systematic approach to identifying, managing, and sharing all of an enterprise's information assets, including databases, documents, policies, and procedures as well as previously unarticulated expertise held by individual workers. Fundamentally, it is about making the collective information and experience of an enterprise available to the individual knowledge worker, who is responsible for using it wisely and for replenishing the stock. This ongoing cycle encourages a learning organization, stimulates collaboration, and empowers people to continually enhance the way they perform work (p.727).

The importance of utilizing this definition is that it identifies knowledge as applied to individuals but it also acknowledges the organizational aspect of learning and how it impacts the individuals that work within the organization. Thompson and Walsham (2004) contribute to the idea of knowledge management when they state "the focus of knowledge management systems (KMS) should be to 'externalize' and 'combine' tacit forms of knowledge" (p. 726). Furthermore, Tsoukas (1996) specifically identifies two types of knowledge that exist at the organizational level, these include objectified and collective that focus on externalizing and combining tacit knowledge.

Another important aspect is the organizational structures and systems and how these further the creation of knowledge within. Every organization will go through various structural analyses to determine if knowledge that is being created can be considered a knowledge-based asset. This typically depends upon the organizational systems and its objectives as these assets are linked to innovation. Goh (2005) explains that "for organizations to benefit fully from their knowledge management efforts, the real payoff lies in the ability to harness knowledge for innovations" (p. 9). Essentially this means a structured systematic approach will take knowledge that has been created within an organization, classify it, and store it for future use (Goh).

Creating and maintaining a knowledge management system that can be produced and then distributed back to the organization "as a commodity for consumption within the organization's value chain" (Baskerville & Dulipovici, 2006, p. 88) relates to the knowledge economy theory. The knowledge economy theory ideally focuses on an organization's ability to create knowledge, manage the knowledge within the organization and redistribute the new knowledge back into the organization. This particular theory identifies a four step process for knowledge management. The first step identifies a class of knowledge through construction, discovery or structure. The second step is crucial as this is where the embodiment of the knowledge container is chosen, such as a document. The third step involves dissemination; the human or technical processes that make the embodied knowledge available in its market. Finally, the fourth step addresses the actual use of the knowledge that is the production of commercial value for the customer (Demarest, 1997). Within the organization the creation of knowledge networks or clusters is a component that cannot be overlooked as these clusters "enhance

competitiveness because the knowledge sharing network upgrades skills and knowledge more quickly" (Baskerville & Dulipovici, 2006, p. 88).

These knowledge networks or clusters nurture the creation of new knowledge; however, there are several issues that can effect these networks. The ability to manage individuals is an issue during the knowledge creation process as people have different "personalities, attitudes, competencies and preferences" (Schou, 2007, p. 26). Being able to manage the knowledge creation process is difficult for both the individuals involved in the networks as well as their managers. Another issue in knowledge creation relates to the particular contexts where knowledge that is created constitutes a variety of layers and types of fit, such as "social, personal, technical, institutional, financial, etc." (Williams, 2006, p. 85). These contexts can be linked to organizational strategy and design; however, they are still influenced by the judgements of the individuals or organizations involved. Maintaining flexibility in the management of knowledge networks is also key as Williams (2006) points out:

> the capability to take effective action is not exercised in a vacuum, it happens within a context, a social/institutional context. Knowledge is invariably created, developed and maintained in communities of practice, some of which are highly formalized … some of which are highly informal … as such knowledge is dynamic, strategic, political, and subject to change (p. 90).

The individuals involved in the knowledge creation and application processes can positively impact or significantly impede these processes based on their own specific knowledge profiles.

Knowledge Profiles. According to Schou (2007) there are six different types of individual knowledge profiles and these include the inventor, the detective, the documentarist, the consultant, the learnmaster, and finally the activist. An inventor prefers to use ideas, intuition and creativity to develop new solutions to knowledge. A detective becomes involved in the collection and analysis of knowledge that essentially involves the transformation process of turning tacit knowledge into explicit knowledge. A documentarist seeks to "create structure to explicit knowledge, making it fit to systematic demands and procedures and making knowledge easier to find" (Schou, p. 26). A consultant strives for a group approach where sharing tacit knowledge is involved leaving time for reflection to reach conclusions. A learnmaster "prefers to build learning sequences making sure that the right competencies are present when knowledge is applied in a controlled process" (Schou, p. 26). Finally, an activist uses a process of trial and error through experimentation by making things happen through the combination of existing knowledge with their tacit knowledge. Managers need to be aware of knowledge activists as they will often seclude themselves from the knowledge network and utilize their own intuition to make quick decisions without consulting the network where more relevant knowledge could impact the final decision (Schou).

Middle Managers. In organizations, it is the job of the middle managers to facilitate the learning and knowledge creation processes while maintaining an environment that fosters continual learning as individuals battle through the ups and down of day to day activities. The middle managers are required to "engage in face-to-face dialogue connecting managers of different levels in order to solve problems

collectively" (Janczak, 2004, p. 210). Middle managers must evaluate all concepts and opportunities that individuals have developed through the knowledge sharing process and make sure that they are in accordance with company boundaries. The middle managers play a key role in transferring knowledge between employees and senior management therefore they need to gather all information including, but not limited to, employee suggestions and feedback.

Middle managers access information that is generated through discussions in formal appraisals or meetings, and take the information to a higher level of management where it can be utilized to develop strategies for organization- wide knowledge management. By taking on the role of facilitator in the generation of knowledge, middle managers fall into the category of continuity management (Baskerville & Dulipovici, 2006). This type of management motivates the middle managers to orchestrate the knowledge transfer among employees and to "diversify organizational memory beyond single individuals as retainers" (Baskerville & Dulipovici, 2006, p. 88). One mechanism that the middle manager can implement is the creation of a shared vision to empower employees and provide them with the resources to fulfill their organizational duties (Crawford, 2005).

Chief Knowledge Officer. Although middle managers hold a great deal of the responsibility for fostering the growth and development of employees as opposed to aspects of knowledge management, they can be charged with full responsibility for the enormous task of the latter. Many organizations are now hiring a Chief Knowledge Officer (CKO) who can be explained as:

> an evangelist who preaches and exemplifies the important skills required to leverage the knowledge embedded in every person and system … a CKO's job is to capture that same imagination from all employees while providing a charismatic spark that creates new ideas and innovation (Bontis, 2001, p. 30).

The combination of a CKO and a middle manager who are both heavily involved in the knowledge management process of the organization is an asset that cannot be overlooked. The CKO can take the time to promote to the employees different mechanisms for sharing knowledge because "they promote stability during environmental turbulence; they enable speedy delivery of productions or services; they create high efficiency in the knowledge value chain by sharing resources synergistically; they enable the separation of work so that specialization is feasible" (Bontis, p. 30). When middle managers become bogged down with other responsibilities, the CKO can make sure that individuals within the organization are not operating in silos, whereby two or more employees are working on the same task without knowing about others involvement (Bontis).

In some organizations where a Chief Knowledge Officer is not possible, consultants may be hired to bring their experience and expertise to the organization. Consultants are usually brought in to facilitate a training session that is extremely intense and that all organization members attend (Rijinders & Boer, 2004). The skills that the consultants bring include implementation capabilities, and their own personal tacit knowledge allows the key organizational members (Middle management) to observe, participate and gain the confidence to run future sessions (Rijinders & Boer). Recruiting the right consultants for each organization is key as those individuals must have the

ability "to produce a catalytic effect by presenting alternative frameworks" (Cegarra-Navarro & Moya, 2005, p. 35).

Knowledge Creation Culture. The managers of organizations have increasing demands from all aspects of the organization. The ability to manage the knowledge management processes and the individuals involved in the process, while at the same time maintaining a culture that encourages knowledge creation is a difficult task. Organizations where the management operates based on a top-down concept works to create a culture that encourages and values knowledge creation will allocate employee time for "internalizing, reflecting, and articulating knowledge" (Baskerville & Dulipovici, 2006, p. 91). Creating a culture where the importance of knowledge creation is known to all individuals will further strengthen the bond and trust of employees that is essential for a "knowledge orientated culture" (Baskerville & Dulipovici, 2006, p. 91).

Organizational culture can significantly influence the knowledge behaviours of individuals, such as knowledge creation, sharing and use, in four distinct ways. The first way that culture can influence behaviours is with knowledge valuation (Abou-Zeid, 2005). The second manner, knowledge structure, includes how "skills are distributed and utilized within the firm" (Abou-Zeid, 2005, p. 149). The third element relates to knowledge contextuality where the formal procedures are created for socialization through "three dimensions; vertical interactions, horizontal interactions, and special behaviours that promote knowledge sharing and use" (Abou-Zeid, 2005, p. 149). Finally, culture shapes the behaviours of individuals through knowledge actualization where action is taken from knowledge that has been created (Abou-Zeid, 2005). When the

organizational culture supports and encourages knowledge creation the organization will continue to learn and evolve, thus enhancing its capacity.

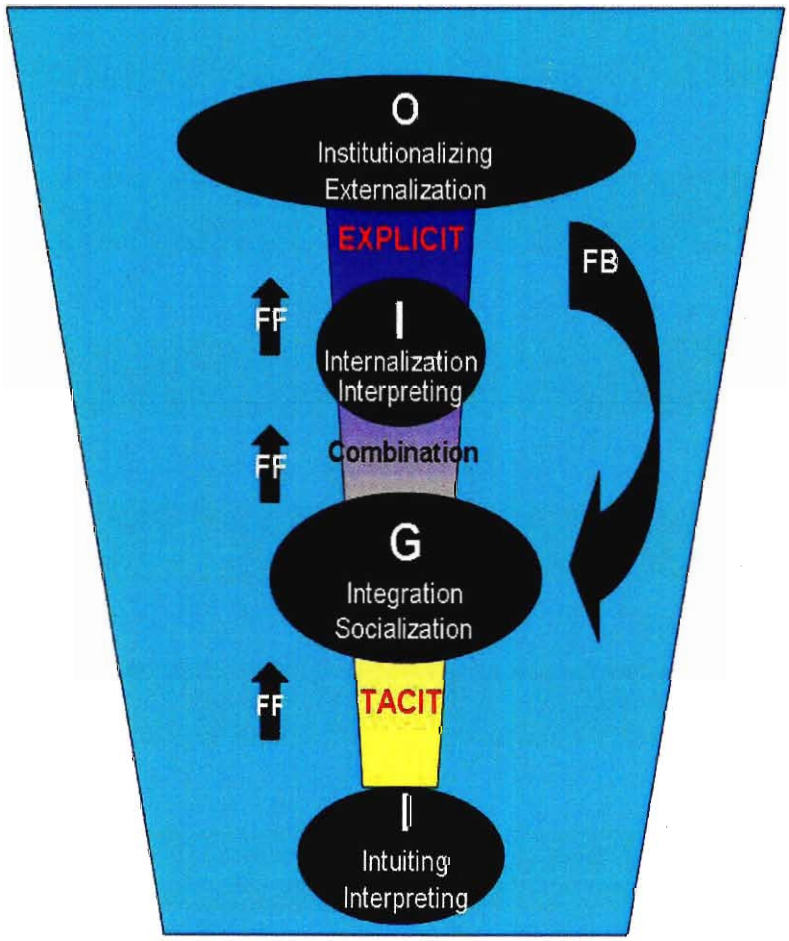
The knowledge management literature outlined above provides an in-depth perspective of the essential components of knowledge transfer within an organization. If knowledge savvy organizations are to develop, then it is important to examine ways in which the key aspects of the KT literature can be utilized within the organization. The integration of the key aspects of KT literature into a knowledge transfer process model provide a guide on how knowledge may be transferred in an organization. An individual may use this guide and adjust according to her/his knowledge transfer practices. Consequently, a conceptual model for intra-organizational knowledge transfer is discussed below.

Description of Conceptual Model

This section on knowledge presents a conceptual model for intra-organizational knowledge transfer within the 2007 Canada Winter Games Host Society (See Figure 1). The model was compiled from seminal works about knowledge transfer by Nonaka, (2002), along with Bontis, Grossman and Hulland (2002). The key terms from the model will be discussed in this section. To begin, intra-organizational knowledge transfer involves three levels; individual, group and organizational (See Figure 1). Individuals bring their own experiences when they join an organization and can identify and apply experiences that are relevant to their position to further develop concepts or insights. The individual level focuses on the "social and cognitive micro-processes in which knowledge is created, transformed and transferred" (Guzman & Wilson, 2005, p. 62). At the

Figure 1

A Conceptual Model for Intra-Organizational Knowledge Transfer



LEGEND

Abbreviation	Definition
FF	Feed-forward
FB	Feed-backward
I	Individual
G	Group
O	Organization

Compiled from: Nonaka, 2002; Bontis, Grossman & Hulland 2002

individual level, organizational learning takes place through the trial and error process (Bontis, et. al., 2002) that requires individuals to develop relationships with a high level of trust that will assist in just-in-time problem solving (Wright, 2005). A high level of trust increases the efficiency and effectiveness of communications within the organization. Establishing a common language, lateral communication and mutual adjustment among organizational teams will ensure that the individual knowledge flow is functioning throughout the team (Cegarra-Navarro & Rodrigo-Moya, 2005).

Individual Level. At the individual level, it is the individuals themselves, along with the socialization process that they are encouraged to participate in, that essentially "drive the behaviour of organizations" (Nissen & Levitt, 2004, p. 172). These behaviours are difficult to predict at any level; therefore, it is important that management recognize "there is no knowledge nugget, skill, or expertise that is rare and housed in the mind of only one employee" (Desouza & Awazu, 2006, p. 38). There is the potential for an individual at any level within the organization to be a knowledge driver. This individual could possess advanced judgement. Advanced judgement refers to an individual's ability to "have the capacity to see the whole picture and yet zoom in on a specific problem that others have not been able to diagnose. Almost intuitively, they can make the right decision, at the right level, with the right people" (Leonard & Swap, 2004, p. 88).

One of the difficulties in the process of managing knowledge within an organization and encouraging advanced judgement within the personnel is when there is turnover within the organization. In circumstances where the individual chooses to leave, a "replacement node" (Baskerville & Dulipovici, 2006) can be trained and key

knowledge transferred to the new employee. However, in circumstances where the departure is very quick there is no time for knowledge transfer and the knowledge network will then become disrupted. The management process must be instituted within a strategic knowledge management process.

Individual Intuition. In order for an organization to absorb the benefits of strategic knowledge management, "the organization needs to capitalize on individual knowledge and turn as much of it as possible into organizational knowledge" (Ford & Chan, 2003, p. 12). The individual level outlined in the proposed model recognizes the importance of tacit knowledge through the development of new insights, called "intuiting". Tacit knowledge and intuition are intertwined as they both develop over an extended period of time in an individuals life and highly personal tacit knowledge consists of intuition (Williams, 2006). Intuition is a phenomena that is very difficult to articulate and even harder to understand. Welling (2005) describes intuition as:

> taking place in an intimate world, so subtle that we hardly ever take notice of its existence. Even more rarely is it communicated, and almost never is a description of it attempted. It is a factory of pieces of thoughts, images, and vague feelings, where the raw materials seem to float around half formless, a world so often present, though we hardly ever visit it (p. 33).

Intuition is a valuable resource in an organization and should be managed properly to encourage the continual development and creation of knowledge. Within an organization an individual begins to interpret insights and create stocks of her/his own learning.

Stocks "represent individual knowledge and competencies," and are the "focal points of organizational learning" (Bontis et. al., p. 442).

Intuiting a component of tacit knowledge is the first 'I' in the 4I framework developed by Bontis, Grossman and Hulland (2002). Intuition is closely linked with individuals as "the recognition of a pattern of possibility comes from within an individual" (Crossman, Lane & White, 1999, p. 525). According to Woolhouse and Bayne (2000) the following properties have been linked to intuition: "sudden appearance, emotional involvement, preconscious process, contrast with logical thought, understanding by feeling, associations with creativity, instinctive knowledge and a subjective certainty of correctness" (p. 158). Intuition is not formalized, never articulated, and highly personal (Williams, 2006). It can be viewed as a "primary mode of perception which operates subconsciously" (Pretz & Sentman, 2007, p. 1248), and is characterized by a strong sense of truth (Pretz & Sentman).

Individuals demonstrate a variety of aspects of intuition by doing things such as "following hunches, experiencing sudden insights, choosing directions without really knowing why, or having uncanny feelings that turn out to be of great importance …" (Welling, 2005, p. 19). Eleven different meanings for intuition have been gathered by Welling (p.22):

1. An experienced scientist's feeling of direction, of knowing whether a certain direction is promising.
2. A sense of solution, a feeling that a solution is pending, without knowing which, or knowing that there is a better solution than the present one.
3. Knowledge that something about a solution is wrong or lacking.

4. The appearance of meaningful visual images, words, memories, or kinaesthetic sensations.
5. The incubation phenomenon, the sudden appearance of a solution at an unexpected moment.
6. Warnings, uncanny feelings, a foresight of danger that afterward proves justified.
7. One's knowledge of what is good for oneself, inner knowing.
8. The first impression of a person's trustworthiness.
9. Gut feeling in decisions.
10. Hunches in selection and memory tasks.
11. Artistic inspiration and creativity.

The eleven different meanings for intuition cover a wide spectrum of tasks and it is interesting to note that it can take up to ten years to become an expert in intuition as intuition "requires the acquisition of 50,000 chunks of data" (Crossman et. al., 1999). By quantifying a specific amount of data in order to be considered an intuition expert, the experience of an individual is ignored. It is not the amount of experience or chunks of data an individual acquires that is important, it is the ability to draw upon any and/or all of the experience or chunks of data to create solutions in other situations.

Individuals are very fortunate that they have a variety of experiences to call upon in problem situations where they tend to act in "intuitive and non-rationale ways" (Wright, 2005, p. 157). When individuals act in an intuitive fashion they may do so because that was how they perceived the situation being resolved (Andersen, 2000; Guzman & Wilson, 2005). These intuitions represent the early stages of the process of

knowledge representation and they are therefore extremely "instrumental in the construction of knowledge itself" (Welling, 2005, p. 30).

Individual differences in the utilization of knowledge are evident in highly productive personnel through their ability to apply their cultured intuition to their daily work projects (Wright, 2005) and through their personality (Woolhouse & Bayne, 2000). Specifically, middle managers demonstrate the ability to influence people in the working environment through the use of trust and enthusiasm (Janczak, 2004). Intuitive middle managers are able to separate organizational procedures from current patterns and focus on the generation of new methods ultimately generating satisfaction amongst the workforce (Janczak, 2004). The intuitive manager chooses to ignore minute details and focuses on new possibilities and future opportunities, which is one of the many reasons why managers with intuition are extremely effective (Andersen, 2000).

A developing aspect of intuition is that of entrepreneurial intuition, which focuses on the future possibilities and the generation of new and creative insights (Crossman et. al., 1999). This type of intuition is a subconscious process and preverbal, which makes articulating ones insights very difficult (Crossman et. al., 1999). Basically individuals have "a sensation – an insight into a possibility – but they have no literal language to describe it" (Crossman et. al., 1999, p. 527) therefore they use metaphors to describe their insight that moves the individual into the interpreting phase.

Individual Interpreting. Interpreting is the second concept of the individual level of learning proposed in the model and this stage requires motivation, focus, competence and capability (See Figure 1). The interpretation phase moves away from the

subconscious processes and begins to focus solely on the "conscious elements of the individual learning process" (Crossman et. al., 1999, p. 528). Language is utilized at this stage to assist individuals in the development of their own cognitive maps (Crossman et. al.). These cognitive maps lay the foundation for which individuals can then begin to interpret the new tacit knowledge that is being shared by other individuals. Interpretation is normally an activity that occurs through the process of socialization where a shared understanding between individuals is developed (Crossman, et. al.).

Each person's cognitive map is unique, therefore it is important to understand that individuals will interpret conversations, documents, videos and pictures differently (Crossman, et. al., 1999). The differences in these interpretations have the potential to affect the organizational structures and the daily work routines of individuals (Guzman & Wilson, 2005). As organizations grow and prosper managers are able to interpret what actions they will take based on the organizational memory (Guzman & Wilson). Ideally developing a common knowledge among organizational members is key because "common knowledge forms a shared context for interpretation and communication" (Desouza & Awazu, 2006, p. 36). The goal of every organization should be to achieve Ishin-Denshin, which is a Japanese term that means the "presence of tacit understanding between communicators and signifies the speed of knowledge transfer that will occur if communicators share the same context" (Desouza & Awazu, p. 37). When the context for interpretation is understood, individuals will often know what the other is going to say before s/he begins speaking.

Feed-Forward Learning. At the individual level, new insights and different perspectives are generated; however, organizational members must also take ownership of their work and be mindful of the critical aspects that can affect one's work. In order for organizational learning to occur, tacit knowledge from the individuals must be transferred to other individuals. This process, called feed-forward (FF), involves 'looking forward' and transferring new knowledge to the group level (See Figure 1). The FF process involves the utilization of each individuals personal cognitive maps and working together to find a way to create a shared understanding amongst the group (Crossman et. al., 1999). The key component of FF learning is that individuals must attempt to articulate the various dimensions of their cognitive maps, which contain tacit knowledge, to make that information and knowledge explicit (Crossman et. al., 1999). Once the knowledge and information has become explicit, the group level can begin to function at their optimal capacity.

Group Level. As the knowledge transfer process progresses to the group level, an individual's tacit knowledge becomes explicit through the process of socialization and integration (See Figure 1). At the group level, knowledge sharing between individuals occurs in order to create a common understanding among organizational members. A successful group is one in which each individual feels they have contributed to the outcome and that they can describe what the group, as a functioning unit, knows (Cegarra-Navarro & Rodrigo, 2005). In order for groups to function at an acceptable level, the group members must develop a shared language that incorporates the groups "subjective viewpoint" (Cegarra-Navarro & Rodrigo, p. 33). When all members

understand the language the cohesion of the group is elevated and the productivity increases in all forms of occupational tasks (Cegarra-Navarro & Rodrigo).

In order to facilitate the knowledge flow within a group, Cegarra-Navarro and Rodrigo (2005) recommend the institution of a "common language, lateral communication and mutual adjustment" (p. 34). In this group level, individuals are able to begin the transformation of their individual knowledge into that of social knowledge. Social knowledge has two components: collective, which is knowledge that cannot easily be put into words and objective, where knowledge can be expressed in words and objectives (Cegarra-Navarro & Rodrigo). Communities of practice are being utilized to link individuals to experts through the natural knowledge processes (Wright, 2005). Collaboration is a key link for group members in the communities of practice as the members move between individual and collective activities while building trust, which is a key element for group cohesion and success (Wright, 2005).

At the group level knowledge creation has the potential to come to a standstill. If this occurs, the hiring of outside consultants can be beneficial to offer fresh perspectives and to regenerate the sharing of "insights and intuitions" (McKenzie, 2005, p. 19). Utilizing different mechanisms to display knowledge, such as bulletin boards and documents, can assist in the improvisation of the continuation of sharing knowledge and to avoid a standstill status (McKnight & Bontis, 2002). However, issues can develop within the groups that cannot be solved based on the configuration of the knowledge networks. For example, groups can be faced with challenges that cannot be solved from their existing knowledge bases and they must develop outside linkages to find the necessary information (Wright, 2005).

Unfortunately, sometimes linkages or informal knowledge flows that develop outside the organization can create difficulties for managers within the organization because they are not aligned with company objectives (Ford & Chan, 2003). If managers are willing and able, they can guide these knowledge flows into more formal applications and reorientate the groups focus (Ford & Chan). These knowledge flows can be impacted by a number of issues; for instance, if the relationship between management and organizational members is tense, issues that could provoke manager discomfort will not be brought forward (Kakabadse, Kouzmin & Kakabadse, 2001). However, through the proper "manipulation of facilitating factors, organizations can foster a dynamic process where the team and its members are continuously able to increase their capacity to produce favourable outcomes" (Cegarra-Navarro & Rodrigo-Moya, 2005, p. 33).

Group Level Socialization and Integration. One of the methods that is utilized at the group level to facilitate the transfer of knowledge is socialization (See Figure 1). According to Nissen and Levitt (2004), "socialization denotes members of a team sharing experiences and perspectives …" (p. 171). Socialization and integration occur simultaneously as the process of socialization allows members of the group to integrate their tacit knowledge with that of other members and as a result, develop a shared vision. At this stage, individuals usually converse in a free and open manner through dialogue that essentially bounces their ideas and opinions off one another. Wright (2005) found that group members preferred a collaborative approach to the social networks in order to uncover knowledge. Socialization occurs through interaction among individuals and promotes the conversion of tacit knowledge. The important aspect of this conversion is

experience because individuals cannot share knowledge if they have not experienced it themselves (Nonaka).

In the four nodes of conversion by Nonaka (2002), socialization is the dominant activity for both formal and informal knowledge transfer. Some of these transfer strategies include observation, imitation, practice, and on-the-job training. Another interesting strategy that can be utilized for the transfer of knowledge is storytelling (Bhardwaj & Monin, 2006). When explaining a story the tacit knowledge that is embedded in the story becomes visible to the listeners and initiates the integration process. Scheduling weekly meetings with all group members is another means of ensuring that knowledge transfer will occur while providing a positive environment for the transfer to take place.

It is through this process of integrating aspects of each individual's perspective that common and shared understanding is developed. At the group level, self-organized teams can be very effective by facilitating:

> the building of mutual trust among members and accelerates creation of an implicit perspective shared by members as tacit knowledge … the shared implicit perspective is conceptualized through continuous dialogue among members. The creative dialogue is realized only when redundancy of information exists within the team (Nonaka, 2002, p. 442).

Key factors for the creation of self-organizing teams include the number and background of group members, relationships with other employees and positions in the organization. Smaller groups are recommended when attempting to solve problems - Cegarra-Navarro and Rodrigo specifically recommend five to seven individual members within a small

group. In a group of this size, all individuals will be free to participate without fear of domination by one or more individuals. Dominating personalities can evolve at any time from individuals, but in smaller group sizes group learning is encouraged along with more one-on-one interactions to share, and ultimately transfer knowledge within the group. Nonaka recommends a team or small group with 10-30 individuals, with four or five members who "have career histories that include multiple job functions" (p. 447). If a team exceeds 30 individuals then it becomes difficult for interaction to occur amongst all members and the individuals who have multiple experiences can not assist in sharing their tacit knowledge with the other individuals who have limited experiences.

When managers organize project teams or groups in the organization, it is difficult to restrict the socialization participants to the specific team. Socialization is an aspect of organizational life and will occur formally and informally regardless of whether the organization manages the process (Davenport & Prusak, 1998). Providing a framework for knowledge sharing with other groups within the organization, as well as groups outside of the organization is important; however, managers must proceed with caution. When initiating knowledge sharing outside the project team, difficulties may arise as the knowledge culture is undeveloped and knowledge may be fragmented into silos (Kakabadse et. al., 2001). Despite the difficulties that may surface when expanding socialization networks, both the "internal and external social processes" (Wright, 2005, p. 162) are vital to success. The socialization process involves many functions where knowledge is both created and shared, therefore an organization needs to ensure it has a learning culture where knowledge sharing is highly encouraged and often rewarded.

Combination the second node of Nonaka's (2002) 4 Nodes of conversion, is included in the proposed model in the feed-forward stage above the group level (See Figure 1). As the socialization and integration process continues, FF (feed-forward) learning occurs as individuals begin combining the new knowledge they have acquired. This "new knowledge is explored by importing, experimenting, and integrating such knowledge into organizational capabilities" (Janczak, 2004, p. 211). This mode refers to the combination of individual's explicit knowledge through social processes. Desouza and Awazu (2006) define combination as "the act of synthesizing explicit pieces of knowledge" (p. 35). Through observation of their business, managers are able to combine their personal tacit knowledge with knowledge created in the business environment.

The knowledge transfer strategies that encourage knowledge combinations are telephone conversations and meetings. The conversation that can occur through these means of communication encourage individual's to reconfigure "existing information through the sorting, adding, recategorizing, and recontextualizing of explicit knowledge" (Nonaka, 2002, p. 442). Individuals increase their explicit knowledge through interpretation of the socialization process. Different groups within the organization have to coordinate their intra-team concepts with existing organizational knowledge items, such as documents (Nissen & Levitt, 2004).

Knowledge creation can be broken down into two different forms of combination. The first form investigates how "new knowledge can be created through incremental change and development from existing knowledge" (Nahapiet & Ghoshal, 2002, p. 678). The second form involves more radical changes such as innovation or what can also be called double-loop learning. Both of these types of knowledge creation involve the

combination of "elements previously unconnected or by developing novel ways of combining elements previously associated" (Nahapiet & Ghoshal, p. 678). In order to secure a successful combination process of resources that belong to different individuals, exchange is a necessity. Nahapiet and Ghoshal suggest the combination process will prosper when four conditions are satisfied – "… the opportunity exists to make the combination or exchange … second … [the parties] must anticipate that interaction, exchange, and combination will prove worthwhile … Third … those involved must feel that their engagement in the knowledge exchange and combination will be worth their while … fourth … combination capability" (p. 679). When the aforementioned conditions are met in the socialization processes knowledge combination and integration will occur at the group level.

As the interpretation of an individual's new knowledge continues, internalization and externalization occur simultaneously (See Figure 1). These are the third and fourth modes of Nonaka's (2002) conversion that are very similar and involve both tacit and explicit knowledge. Externalization and internalization "capture the idea that tacit and explicit knowledge are complementary and can expand over time through a process of mutual interaction" (Nonaka, p. 442). When tacit insights are applied to an external entity such as work, externalization occurs.

When attempting to understand the difference between externalization and internalization, Nissen and Levitt (2004) state that "externalization denotes the use of metaphors through dialog that leads to articulation of tacit knowledge and its subsequent formalization to make it concrete and explicit" (p. 171) while "internalization denotes diverse members in the organization applying the combined knowledge from above –

often through trial and error – and in turn translating such knowledge into tacit form at the organizational level; the term learning by doing is used to describe the trigger for knowledge internalization" (p. 171). A variety of internalization processes will be required depending upon the type of externalized knowledge (Kalpic & Bernus, 2006). External events provide an opportunity for individuals to internalize their knowledge such as mangers holding training sessions to share their knowledge through the process of socialization (Desouza & Awazu, 2006). Once internalization has occurred and externalization begins, the knowledge has reached the organizational level.

Organizational Level. At the organizational level institutionalization occurs (See Figure 1). This is the final process before feed-back learning begins. There are four stages to the institutionalization of knowledge; knowledge creation, knowledge sharing, knowledge application and knowledge acquisition (Kakabadse et. al., 2001). Desouza and Awazu, (2006) argue "putting knowledge into practice helps in immediate institutionalization of the insight and the improvement of work practices" (p. 40). Institutionalization focuses on the implementation of new procedures based on new knowledge that was created from the group level. Organizational stability can be obtained through the development of "institutionalized roles, structures and processes" (Andrikopoulos, 2005, p. 169).

Each of the four stages to the institutionalization of knowledge are required to move knowledge along the tacit-explicit forum and begin the institutionalization process. The first stage, knowledge creation, occurs at the internalization stage with the emergence of new knowledge from the socialization process and the effort of individuals.

During the second stage, knowledge sharing, individuals share their tacit knowledge through the socialization process. The third stage, knowledge application, involves a codification process where knowledge is codified and classified similar to information in a library. For this stage to be completely successful the recruitment and implementation of a knowledge content manager may be required to ensure that all knowledge is being catalogued correctly. Finally, the fourth stage, acquisition of knowledge, includes the "development of comprehensive frameworks for managing every phase of the knowledge process and a way of measuring these intellectual assets …" (Kakabadse et. al., 2001, p. 144). This particular phase of knowledge institutionalization involves the recruitment and retention of qualified and productive individuals for the organization. An organizational culture that is conducive for knowledge transfer is essential in order to encourage continual knowledge creation and organization learning.

The organizational level of learning moves away from the individuals working on their own and focuses on a process whereby shared understandings initiate new organizational products, procedures, structures, processes, and most importantly, strategies. The organizational level prepares the organization as a whole for "the non-human artefacts of the organization that endure even though individuals may leave" (Bontis. et. al., 2002, p. 444). The key point at the organizational level is whether or not the organization has the capacity to change its members when it introduces a newly developed strategic plan. Organizations that "are successful in leveraging knowledge, normally witness increased efficiencies in operations, higher rates of successful innovations, increased levels of customer service, and an ability to have foresight on trends and patterns emerging in the marketplace" (Desouza & Awazu, 2006, p. 33). When

the individuals adapt to the organizational changes the common knowledge level of the organization increases. Maintaining a high level of common knowledge is essential for an organization not only for leveraging knowledge but also for preventing a breakdown in the knowledge flow between the different levels.

In summary, the three different levels of learning (individual, group and organizational) are dependent upon the successful process of feed-forward and feed-back learning. Feed-forward learning involves the ability of individual learning to feed-forward to the group level and then feed-forward to the organizational level. Changes to different organizational elements, such as structure and strategy can facilitate the feed-forward learning process. Alternatively feed-back learning depends on how the learning held by the organization transfers back to the group and individual levels of learning. Once new knowledge has moved from the individual level to the group level, it will arrive at the organizational level where it will become institutionalized in the organization. When this process has occurred the feed-back learning can be simultaneously implemented to the group and individual levels. It is important to note that the 4I's and feed-forward and feed-backward learning processes can occur concurrently. However in order for these processes to occur simultaneously, it is imperative that organizations institute strategies for knowledge transfer.

Intra-Organizational Knowledge Transfer Strategies

For the purpose of this research project, how the individuals in an organization learn and retain knowledge is important. However, it is also critical to address how the individuals utilize their knowledge to impact organizational capacity. This is

accomplished through various knowledge transfer strategies. Consequently, this section outlines intra-organizational transfer strategies. The majority of strategies for transferring knowledge focus on explicit forms of knowledge, that is important to note as some forms of transferring knowledge will be ineffective without tacit knowledge. An example of an ineffective knowledge transfer (KT) method relates to a case about the vehicle producing company Toyota. After many years of shared decision making and knowledge among its many employees, the practices and methods that worked in a Toyota plant in Japan were embedded in the individual, group, and organization levels of the company in the North American vehicle production market (Choo, 2002). When an individual from GM of Canada observed the Toyota practices, it was difficult to interpret all aspects of the process as the tacit knowledge could not be extracted. Observing the Toyota practices as a stand-alone knowledge transfer strategy was ineffective as the individual from GM was unaware of the reasons for the differences between the two companies. In order to overcome this difficulty, a new plant was created in Canada that utilized the practices of Toyota and was managed by individuals from Toyota and GM. This partnership allowed the explicit and tacit forms of knowledge to be transferred.

The intra-organization KT strategies include a codified algorithm or protein sequence (Choo, 2002), newsletter, other colleagues in the company, equipment vendors, material suppliers, and customers (Appleyard, 2002), past projects (Watson and Hewett, 2006), communities of practice indexes, customer profiles and templates, and finally old presentation slides (Thompson and Walsham, 2004). Alternate strategies include technological KT strategies such as email (Appleyard: Thompson and Walsham, 2004), telephone, technologies at other companies (Appleyard), CASE (computer assisted

software engineering) tools, news, and 'technology push' reports (Thompson and Walsham). Human resource KT strategies include face-to-face meetings (Appleyard), training (Appleyard: Ebrahim, 2003), consulting, coaching, peer exchanges (Ebrahim), mentor relationships, special interest groups word of mouth, (Thompson and Walsham) and professionals (Bontis, 2001). Finally, structural KT strategies include benchmarking studies, (Appleyard, 2002), formulae, maps, graphs, 'bard', best practice, reports and documents, decision making tools, and a well stocked bookshelf (Thompson and Walsham, 2004).

An interesting point is that all of the strategies mentioned above focus on increasing profits. No information was uncovered specifically on knowledge transfer strategies for non-profit organizations. In addition, there was no indication as to what type of information should be included to pass explicit knowledge to other individuals, groups, or organizations. It was also mentioned that some strategies would be difficult to interpret depending upon the absorptive capacity that an organization had, especially if tacit knowledge was not transferred. To combat limited knowledge transfer, a layered transfer of knowledge strategy could be an effective option. For example, in the case of a Canada Games, if the Vice-President (VP) of Transportation from the 2005 Canada Summer Games submitted a report upon the completion of his/her duty it would contain explicit knowledge. When the VP of Transportation for the 2007 Winter Games receives the report from the 2005 Canada Summer Games the information may seem irrelevant because of the different venues, community size, and weather conditions. However, if the VP's were to have a conversation or connect through email, the 2007 Games VP would

have access to the 2005 Games VP tacit knowledge that could impact the significance of the report.

Knowledge Management in a Multi-Sport Event Organization

Similar to other businesses, it is extremely important for sport organizations to find a system where they can "capture, share, manage and harness their corporate knowledge …" (Halbwirth & Toohey, 2001, p. 91). When hosting a major multi-sport event, or Games, these steps are crucial to event success as each Games begins with a new host city and a different culture from the previous host organization. Over time things such as technology requirements and other procedures evolve and require different approaches, and this presents many challenges for Major Games Organizing Committees (MGOC). Not only does a MGOC have to recruit personnel for the planning and implementation of the Games, but it also has to secure investment by the public sector for expenditures such as the improvement of the host city's sports facilities and infrastructure (Preuss & Solberg, 2006).

The most predominant challenge facing a host society is to continuously reinvent the wheel when it comes to event planning. In most cases, there has not been an effective knowledge management system in place to transfer knowledge from one Games host to the next. This creates problems because the re-invention utilizes a significant amount of time and resources, which are scarce elements considering the timeframe within which a host society operates. Another difficult challenge to overcome in a host organization is organizational culture. As the fixed Games deadline approaches the number of volunteers and staff increases, which means the organization is dynamic as opposed to static

(Halbwirth & Toohey). In the case of the Sydney Olympic Games, this challenge strongly impacted KT as indicated in the following comment:

> … how to include in the knowledge processes the capture of the valuable tacit knowledge. Once the Sydney Games were over there was no value in what [Sydney Organizing Committee of the Olympic Games] SOCOG had learned unless it was able to pass on its knowledge to the future [Organizing Committee of Olympic Games] OCOGs or to the [International Olympic Committee] IOC (Halbwirth & Toohey, p. 97).

Creating a knowledge flow from one organizing committee to the next is crucial for a successful knowledge management program.

The sport management literature includes limited sources specifically about knowledge transfer and sport events. However, previous studies identify several barriers to KT both within one Major Games Organizing Committee (MGOC) and between two MCOGs. In their research on the 2000 Sydney Organizing Olympic Committee, Halbwirth and Toohey (2001) identified three key reasons why MGOCs struggle with knowledge transfer. First the senior management does not publicly support this initiative. In the case of the 2000 Sydney Olympic Organizing Committee "it was recognized by senior management that a centralised information department that professionally administered its corporate records was important for organisational efficiency in the planning tasks ahead" (Halbwirth & Toohey, 2001, p. 92). Second MGOCs are temporary in nature and have a very short life-span. Third volunteers and staff do not fully understand the complexities and the importance of the interdependencies within the MGOC (Halbwirth & Toohey).

In addition, the majority of MGOCs are non-profit in nature and this comes with an enormous number of challenges. As O'Reilly & Knight (2007) claim "NPOs have mandates and operate in environments that differ considerably from the for-profit world and, as such, require managerial tools and tactics that are specific to the not-for-profit context" (p. 269). For non-profit organizations, Taylor & McGraw (2006) state that "current pressures to formalise management practices are juxtaposed with challenges of limited human and financial resources, reliance on volunteers, and a long tradition of informal planning, control and administrative systems" (p. 230). In order to combat many of the issues facing MGOC "training the employees to perform at an effectiveness and efficiency that allows the organization to reach its established goals, as per organisational vision and mission, is only the sensible strategy to follow" (Davakos, 2006, p. 393). In a sport non-profit organization where volunteer personnel represent a larger percentage than paid staff, the high frequency of key personnel changes is one of the reasons why training staff is not a viable answer (Parent & Seguin, 2007; O'Reilly & Knight, 2007).

Further, it is difficult to sustain knowledge sharing within an organization if members are worried that sharing knowledge may cost them their jobs (Halbwirth & Toohey, 2001, p. 95). In order to ensure that knowledge hoarding does not occur, host societies should follow this example:

> To counter knowledge hoarding and create an environment where the right hand knew what the left hand was doing, during at least three of the monthly, whole-of-staff communication meetings, Sandy Hollway, [Sydney Organizing Committee of the Olympic Games] SOCOG's CEO, acknowledged that the organisational needed to

> shift from a 'silo' culture. He stressed that it was important to share information throughout and across the organisation (Halbwirth & Toohey, 2001, p. 95).

Many host societies do not have a President or Chief executive Officer who will publicly make a claim like Hollway did, which assists in eliminating the resentment and fear organizational members have when it comes to sharing their knowledge. Therefore, in order to build capacity organizational learning and KT, is important to hire individuals who can bring tacit knowledge from other MGOCs.

Literature Gaps

Literature pertaining to organizational capacity has not yet explored the importance and relevance of knowledge management. This study will assist in decreasing the gap in the organizational capacity literature by exploring the relationship and the contribution of knowledge management, particularly the utilization of knowledge transfer, to organizational capacity. Furthermore, this research project provides a significant contribution to Canadian sport event management literature by providing an in-depth analysis of knowledge transfer within a Major Games Organizing Committee. There are growing amounts of literature related to non-profit organizations, however literature pertaining to non-profit sport organizations are scarce, specifically when investigating a Canadian Major Games Organizing Committee. This project will investigate knowledge transfer within the Canada Games, more specifically the 2007 Canada Winter Games Host Society in Whitehorse, Yukon.

Chapter 3: Research Design & Methodology

The purpose of this qualitative case study was to examine the transfer of knowledge process within a major games host society. The 2007 Canada Winter Games Host Society will provide the case context for this research. The first goal was to develop a model that explains a knowledge transfer process in a non-profit major games host organization. The second goal is to examine the relevance of the model to a Canada Games Host Society. As a result of these goals the following two questions will guide this study:

1. a) What factors enable the knowledge transfer processes outlined in the model?
   b) How do the factors influence the model?
2. a) What factors inhibit the knowledge transfer processes outlined in the model?
   b) How do the factors influence the model?

This study will enhance our understanding of the capacity-knowledge connection within a non-profit sport organization, and provide an impetus for further research on capacity within non-profit sport entities. This section of the thesis will address the methodology including the rationale and explanation for the case selection, sampling, data collection and analysis, trustworthiness and finally ethical considerations.

Strategy of Inquiry. A case study design is selected as the research strategy for this study. Case studies investigate the complexity of a single case while at the same time consider the fact that characteristics are located both within and outside the boundaries of

the case (Stake, 1998). There are five different applications for case studies in qualitative research and they include the ability to explain, describe, illustrate, explore, and provide "meta-evaluation" in situations where the phenomenon of study is too complex for quantitative methods (Yin, 1994). Specifically the researcher is able "to explain the casual links in real-life interventions that are too complex for the survey or experimental strategies" (Yin, p. 15). According to Yin (1994) the "how" and "why" questions are best suited for case studies because the nature of the questions investigates a phenomenon that occurs over time. Intrinsic, instrumental and collective are three different types of case studies (Stake). Intrinsic study occurs when the researcher has a personal interest in the particular case whereas an instrumental approach considers the case under study to be of secondary interest as the researcher seeks to provide insight into a particular issue. Finally, collective study involves a number of studies in order to determine if there are generalizations that may be further extended.

In this study, an instrumental approach utilizes a single case, as the 2007 Canada Winter Games Host Society, to investigate the relation between organizational capacity and knowledge transfer strategies within a non-profit sport entity. The actual case of the 2007 Canada Winter Games Host Society is extremely important to this investigation. The Canadian Sport Policy's recommendation to build capacity involves games hosting specifically, the Canada Games. This qualitative case describes and explains the issues pertaining to knowledge transfer strategies and their relation to organizational capacity. The researcher seeks an in-depth understanding of these strategies therefore a qualitative approach is adopted.

It is important to acknowledge the disadvantages of case studies. Yin (1994) states criticisms of case study design include a lack of rigor, generalization, and time frame. In addition, Stake (1995) recognizes that critiques of case studies include the overly subjective nature of the case study, how case studies typically involve high financial expenses compared to other research approaches, that case design is extremely slow in reaching the intended audience, and the plethora of ethical risks associated with researching the human subjects involved in a case study. Yin addresses the perceived lack of rigor in case studies is perpetuated by the personal biases of the researcher which affect the data. However, as long as the researcher states her bias and how it has affected the study, the results and credibility of the findings will be enhanced (Yin). The generalization of case studies has also come into question and a researcher must keep in mind that case study research is "generalizable to theoretical propositions and not to populations or universes" (Yin, p. 10). Finally, the subjective nature of qualitative case studies may be addressed through triangulation, which is discussed later in this section.

According to Yin (1994) there are a set of prescribed steps that should be followed when conducting various types of case studies. The sequence of these prescribed steps is linear as the first step must occur before moving on to step two. On the other hand, Stake (1995) addresses the importance of adaptability when conducting case studies. Stakes recognizes that during the process of conducting research factors may change which require a different sequence of steps. This study incorporated both approaches by starting out following specific prescribed steps but adapting to changes in situations as they occurred.

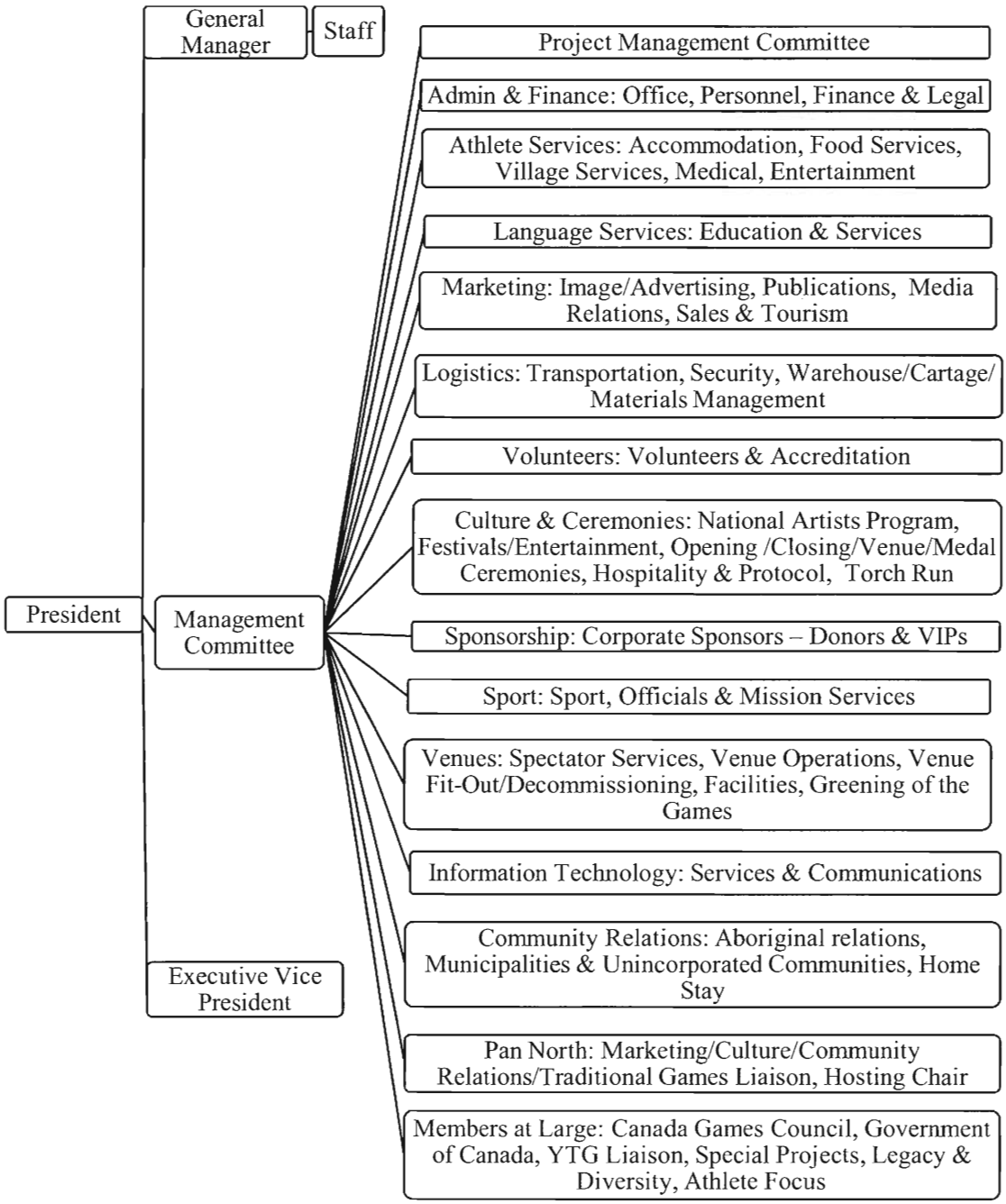
METHOD

Sampling – Case. According to Miles and Huberman (1994) there are two actions which are required for sampling in qualitative research. The first action involves setting the boundaries of the case based on the researcher's time frame and means. The second action involves the creation of a frame which will assist the researcher in uncovering the constructs that under gird the study. Acknowledging that the relationship between knowledge transfer strategies and organizational capacity is a significant aspect of this study, it is imperative to select a case that will emphasize this phenomenon. The selected case [2007 Canada Winter Games Host Society] is a temporary non-profit volunteer sport organization. This limited timeframe context heightens the need for capacity and knowledge transfer (Ebrahim, 2003).

The 2007 Canada Winter Games Host Society is a temporary organization as it was created solely for the creation, implementation and delivery of the 2007 Canada Winter Games (CWG) in Whitehorse, Yukon (CGC, 2006a). The Canada Games began in 1967 coinciding with Canada's Centennial celebrations. The Canada Games are held every two years alternating between Summer and Winter Games, similar to the Olympics hosting cycle. There have been 18 Canada Games held since 1967 and by 1991 all provinces and territories had held the Games at least once (CGC, 2006b). Multifarious volunteers, along with a minimum number of staff, are responsible for the planning, organizing and delivering of the games. The 2007 Host Society is comprised of 13 Divisions that oversee key functions of the Games, such as sponsorship, logistics, and athlete services (see Figures 2 and 3).

Figure 2

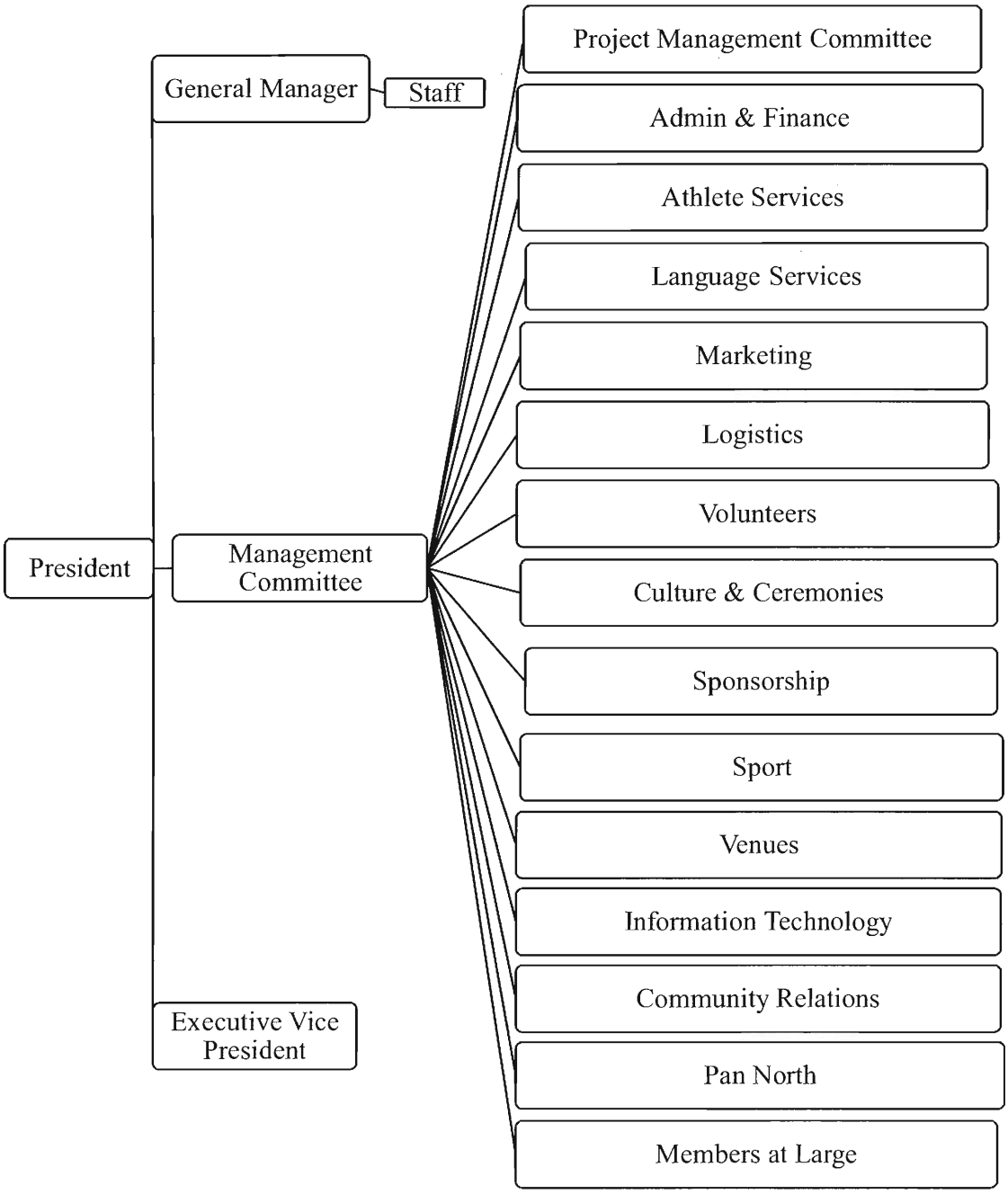
Whitehorse 2007 Jeux du Canada Games Host Society Management Committee Responsibilities (Modified)



Source: Canada Games Council. (2005c). *Organizational Chart*. Unpublished manuscript

Figure 3

Whitehorse 2007 Jeux du Canada Games Host Society Organization Chart With Division Titles



Source: Canada Games Council. (2005c). *Organizational Chart*. Unpublished manuscript

The 2007 Host Society is governed by the Management Committee which includes one President, one Vice President (VP), one Chief Operating Officer (COO), 13 Divisional Vice Presidents (VP), 26 Divisional Associate Vice Presidents (two AVP's from each division), and 13 Volunteer Project Managers (VPM). The 2007 CWG were held from February 23rd until March 10th, 2007 and included 22 sporting competitions at ten venues. In addition to the sporting venues there were also several non-sporting venues such as an Athlete Village, Mission Centre, Media Centre, Volunteer Centre, and venues for the Opening and Closing Ceremonies (CGC, 2006a). Although staged in Whitehorse, the 2007 CWG involved an alliance of all three territorial governments, the Yukon Territories, the Northwest Territories, and Nunavut, in order to showcase to the nation the true spirit of friendship and hospitality by providing a Pan Northern experience:

> The 2007 Games will be teeming with the sounds, sights and aromas of Canada's North. There will be brilliant cultural performances, a bustling marketplace, exhibitions of northern art, and northern culinary delights! We'll also stage a special competition of Inuit Games and Dene Games (CGC, 2006a, ¶ 2).

One of the most interesting aspects about the 2007 Games is that "the thirteen divisions of the 2007 Host Society in collaboration with their committees and volunteers will be delivering the largest multi sport event ever held North of the 60th parallel" (CGC, 2006a, ¶3). Illustrating the host society's commitment to the Pan Northern experience, three husky dogs dressed in the cultural outerwear of each respective territory were created as mascots for the Games.

In addition to sport, culture has become an area of extreme interest to the Canada Games and the host society incorporated this into the planning of the opening and closing

ceremonies, the National Artists Program, the cultural festival, and the Canada Games torches. The torches were hand carved out of caribou antlers with the Canada Games maple leaf emblem and animal specific to each territory looking over 13 elements representing the 13 provinces and territories that will be compete at the CWG (CGC, 2006c). The Torch Relay is extremely important to the 2007 CWG HS as it "covers over 100,000 km, visits 83 communities, highlights unique places in each territory with a special Torch Challenge, and involves all forms of northern transportation" (CGC, 2006c, ¶ 2).

Although the description above outlines the goals and structure of the 2007 Canada Winter Games Host Society, it is also important to describe why this case highlights knowledge transfer and organizational capacity. A unique aspect to the Canada Games movement is that the Games are replicated every two years, with a different host. Since the Canada Games happens on a renewable basis, the opportunity to learn from previous host societies is a benefit that must be captured. The knowledge that can be transferred from one host to another significantly impacts a host's ability to optimize its time management and financial resources. Instead of having each host society re-invent the wheel, the Canada Games Council is continually striving to improve its transfer of knowledge strategies. Through collaboration with other host society members and consultants, the transfer of knowledge strategies are slowly enhancing capacity within the Canada Games.

Role of the Canada Games Council. The Canada Games Council (CGC) is the governing body for the Canada Games movement. The CGC is a multi-sport organization

affiliated with 49 national sport organizations. The mission of the CGC is to maintain an active role in partnerships with the private sector, governments and the sporting community in order to utilize the Canada Games Movement to enhance the experiences of young athletes (Canada Games Council, 2007a). The CGC has five strategic goals that include strengthening sport development in Canada, providing leadership to communities, nation building, innovation management and principles. The CGC is governed by a 21 member Board of Directors and the managerial and administration duties are distributed among 8 staff members.

The CGC is responsible for both Games bidding and hosting processes. The bid process begins when the CGC sends invitations to submit a Games bid to Provincial or Territory (P/T) Ministers at least six years in advance of a Games. The CGC then holds a preliminary information session to which all candidates of the provinces or territories are invited. Once the CGC receives a letter of Intent to Bid approximately five and a half years prior to a Games, it holds a meeting with the bid committees to present specific details about the hosting process. One year later the CGC receives and evaluates each Bid Book and follows this review with an on-site evaluation. Approximately four years before a Games the CGC Board selects a Games Host from the pool of bids and, once the Bid is approved by the respective P/T Minister, the hosting agreement is finalized. The P/T Minister, the Federal Minister and the CGC make a public announcement immediately after the hosting agreement is complete. From this point on, the CGC works closely with the new Games Host Society to begin a process of preparation for the event.

A Bid Committee oversees a Games bid process, however once a host agreement is final, a Host Society (HS) is formed. Some members from the Bid Committee may

remain with the Host Society while others may leave. Members of the local host community join the HS and four and two years prior to the start of the Games HS members typically attend another Canada Games. For example, when the 2005 Canada Summer Games were held in Regina, Saskatchewan, members from the 2007 Canada Winter Games HS, and the 2009 Canada Summer Games HS attended to observe the event. The planning for every aspect of a Games is divided among the divisions of each HS and the number of divisions varies from host to host. Transfer of knowledge content is provided to the HS by the CGC and a HS may contact the CGC at any time with KT queries. Within a year of the completion of the Games the HS must submit the financial report and statement. The HS may also submit a final report to the CGC with information pertaining to each division and the Games as a whole.

Sampling – Participants. The selection of the participants was extremely important to the study; therefore, the researcher utilized purposeful and intensity sampling. Participants were strategically and purposefully selected to provide detailed information in order to find "the information-rich cases that manifest the phenomenon intensely, but not extremely" (Patton, 2002, p. 243). In order to have a sample that captured in-depth details from more than one perspective regarding the capacity-knowledge transfer relation within a Canada Games Host Society, one to two participants from each of 12 host society divisions (n =18) were selected for snapshot interviews[1].

[1] It is important to note that the researcher decided to exclude one of the divisions from the interview process, the Pan Northern division. This decision was made (after consultation with Dr. Julie Stevens the researchers' advisor) six days into the Games, February 28, 2007. The researcher felt that since the division had been created by the 2007 Host Society because of the three territories co-hosting the Games, no other Host Society would ever have a Pan Northern division.

The researcher purposefully selected two individuals from each division where possible to be able to compare and contrast the different experiences. In addition, the researcher purposefully selected one senior planning volunteer participant from five different divisions (n = 5), as well as one senior staff representative from four different divisions (n = 4) for in-depth interviews. These additional participants were selected to enhance the researchers perspective of the difference between middle and upper management and the difference between volunteer and staff experiences in upper management. The total sample included 18 snapshot interviews and nine in-depth interviews (n=27).

Participants were volunteers and/or staff from upper management (Senior Managers, VP, and/or AVP) and middle management (Division Chairs) of the host society. These members were key decision makers and planners, who were involved with the Host Society for more than two years and they all played an important role in knowledge transfer. These individuals were responsible for creating knowledge and transferring it from upper management to middle management and the middle managers had to transfer it to the individuals in their committees. As such, they were able to speak to the intimate details of the organization, such as capacity and knowledge transfer strategies which would inform the researcher about issues relating to the research questions. As previously stated the researcher selected five divisions in the Host Society for in-depth interviews. These divisions emerged from the data obtained in the middle management snapshot interviews, and direct observations, in regards to the importance and prevalence of knowledge transfer within the division. The researcher felt that by selecting the five divisions to conduct in-depth interviews based upon knowledge gained from initial data collection strategies, she was able to select the five divisions in which

knowledge transfer was critical for operations within the division as well as the ability to obtain organizational capacity.

Data Collection Methods. According to Yin (1994) utilizing a variety of data sources provides a stronger case study. This study utilized three data collection techniques: interviews, field observation, and document analysis (See Table 2 for summary). The rationale for utilizing three different data collection techniques stems from the fact that with observation, "we cannot observe feelings, thoughts, and intentions" (Patton, 2002, p. 341) whereas interviewing permits a researcher to gain an in-depth understanding of the interviewee's perspective to compliment the observations. In addition, documents "are another rich source of case data to supplement field observations and interviews" (Patton, p. 293). Therefore, incorporating interviews, field observation, and document analysis demonstrates triangulation which strengthens the credibility of the findings. Interviews constituted the main source of data for this study while the observations and documents became supplementary sources to understand events that had transpired and further explanation of key concepts.

When compiling case study information, interviews are an essential component of the data collection method (Yin, 1994). In this study there were two different types of interviews conducted: snap shot and in-depth interviews. A researcher may follow an informal conversational interview, an interview guide, a standardized open-ended interview or they may combine their approach (Patton, 2002; Stake, 1995). A semi-structured interview guide was utilized for both the snap-shot and in-depth interviews.

Table 2

Data Collection

Type of Data	Amount of Data	Time of Collection
Interviews	29 Participants 27 Interviews 261 Pages	February / March 2007 (During & Post Games)
Direct Observations	12 Entries 28 Pages	February 2007 (During Games)
Documents	12 Reports 604 pages	March 2007 (Post Games)
Total	893 Pages	

The snap-shot interviews were conducted during the games and inquired about individual knowledge, intra organizational knowledge transfer, and organizational capacity. Five in-depth interviews were conducted at the Games and one post-Games and they inquired about the intra organizational knowledge transfer conceptual framework diagram (See Figure 1).

In order to determine if the questions in the interview guide were sufficient to obtain relevant and detailed information, the researcher initially participated in a pilot interview conducted on location in Whitehorse the day before the official opening of the 2007 CWG (February 22, 2007). The interview guide was piloted with an individual from the 2009 Canada Summer Games Host Society in order to determine if the questions in the guide were complete and followed an appropriate sequence (See Appendix A). After the interview, the researcher debriefed and developed a more structured and directed interview guide (see Appendix B). The new interview guide was tested in another pilot interview the day after the first pilot the opening day of the Games (February 23, 2007). A debrief confirmed that the new interview guide provided on-target data relating to capacity and knowledge transfer and would be utilized for the snap-shot interviews.

When the snap-shot interviews progressed the researcher realized that due to the intensity of the Games-time environment, it would be appropriate to conduct the in-depth interviews during the Games. Previously the in-depth interviews were scheduled to take place in the months following the Games over the phone after the snap-shot interviews had been transcribed. Although conducting the interviews during the Games would not allow for post-Games reflections by the participants, issues that were heightened during the Games may have been overlooked at a later date. Thesis Committee Members were

contacted via email and approval (to conduct all interviews while in Whitehorse) was confirmed on March 4, 2007.

Based on the information acquired from the snap-shot interviews, the researcher decided that a new guide was required for the in-depth interviews. The in-depth interview guide (see Appendix C) is based upon the conceptual framework diagram. The researcher felt that the VPs and staff members would be able to speak intimately about the proposed transfer of knowledge process as they had to deal with individuals and groups on all levels. Therefore the questions focused on the key individuals involved in the transfer of knowledge process, what different aspects of the organization enhanced or stalled the process, and finally what if any aspects were missing in the process. A semi-structured format was employed to ensure each question was included in each interview as well as enable the flexibility to follow any leads which produced relevant data.

To conduct the interviews, the researcher secured a micro-cassette recorder, micro-cassettes, extra batteries, pens, and pads of paper for each interview. The informed consent (see Appendix F) was issued to each of the interviewees at the start of the interview and once permission had been granted, the tape recorder was turned on. The importance of "informed consent means the knowing consent of individuals to participate as an exercise of their choice, free from any element of fraud, deceit, duress, or similar unfair inducement or manipulation" (Berg, 2001, p. 56). Upon completion of the interview the micro-cassette was stored at the local residence of the researcher in Whitehorse. After the Games, all of the tapes were stored in a locked safe in a residence away from the Brock University campus.

The semi-structured interview guide allowed the researcher to ask additional questions when the interview led into another relevant area where more useful information was acquired. Utilizing this approach is supported by Patton (2002) who stated that:

> the combined strategy offers the interviewer the flexibility in probing and in determining when it is appropriate to explore certain subjects in greater depth, or even to pose questions about new areas of inquiry that were not originally anticipated in the interview instrument's development (p. 347).

In addition to the in-depth interview, snap-shot interview questions were structured into five sets of questions about demographic information and questions about tacit knowledge, inter-explicit/tacit, intra-explicit/tacit, and organizational capacity. For example, questions include; What knowledge did you bring? What knowledge have you received from a previous host society? What knowledge have you received from senior planning volunteers or staff? Has knowledge transfer from members from your unit/team had a positive or negative impact on your capacity to do your job?

One VP from five different divisions that indicated a high prevalence of knowledge transfer strategies based on the snap-shot interviews and observations were invited to participate in an in-depth interview (see Appendix C). The in-depth interview guide was created based upon literature and information that the researcher uncovered through the snap-shot interviews. These concepts were directly applicable to the transfer of knowledge process conceptual framework diagram. The in-depth interview questions were structured into three sets of questions about demographic information, the intra-organizational knowledge transfer process, and the inter-organizational knowledge

transfer process. For example, questions include; After listening to the explanation about how I view the TOK process taking place, How do you view this process in terms of your division? This process appears to be something that is very fluid, is there anything that you can suggest that may alter this process? Who are the key players involved in making this TOK process happen from host to host and what are there roles? A) CGC, previous hosts, planning volunteers of current hosts, VP/AVP & PM, V-team. Specifically what knowledge was transferred to you from previous hosts or the CGC? Was it useful? If so how was it useful and if not what would have made it more useful?

The second data collection method involved field observations. Direct non-participant observations provide an opportunity to "fully understand the complexities of many situations, direct participation in and observation of the phenomenon of interest …" (Patton, 2002, p. 21). Direct non-participant observations took place (during the Games) in Whitehorse, Yukon at various venue locations. The intensity of living and working in a Games time environment provided experiences similar to that of ethnographic researchers who spend months or years living with their subjects (Patton) (See Appendix F). Observations were overt as the researcher was introduced to the 2007 CWG Host Society Management Committee and her intentions for gathering data for a masters thesis were made public. As Patton states "the scope can be broad, encompassing virtually all aspects of the setting, or it can be narrow, involving a look at only some small part of what is happening" (p. 275).

The researcher attended daily Chef de Mission and Management Committee meetings, weekly one-division transfer of knowledge sessions, and one three-hour transfer of knowledge session hosted by the CGC. The researcher also engaged in

conversation with several different planning volunteers and staff to gain a more thorough and in-depth understanding of Games management. The researcher "lived" in the Games experience for 18 days, the full duration of the event, which was very intense as observations were constant from the arrival at the airport in Whitehorse up until the departure from the airport in Whitehorse.

When conducting direct non-participant observations "relevant behaviours or environmental conditions will be available for observation" (Yin, 1994, p. 86). It is important that during an observation, the qualitative researcher keep "a good record of events to provide a relatively *incontestable description* for further analysis and ultimate reporting" (Stake, 1995, p. 62). The researcher recorded twelve field notes (n=12) in which she continually recorded her observations throughout the observation opportunities. Patton also states that "through direct observations the inquirer is better able to understand and capture the context within which people interact" (p. 262). When conducting observations the researcher should engage in training as it requires rigorous preparation (Patton, 2002). Preparation involves four dimensions: mental; physical; intellectual; and psychological (Patton). Part of this preparation involves the process of concentration during the observation time period. In order to facilitate concentration, and more importantly preparation, a field observation framework (see Appendix D) was created as a guide. The sensitizing concepts that she utilized from the model (See Figure 1) were knowledge transfer levels, such as individuals, groups, organizations, and explicit and tacit knowledge types. The continual observations that took place from the moment of arrival in Whitehorse to the take-off on the final day in Whitehorse significantly enhanced the researcher's ability to understand participants' responses in interviews. The

researcher was also able to probe and ask additional questions not on the interview guide as a result of the enhanced understanding of the context of the Games. The observations also enabled the researcher to understand key points in the documents that were specific to individuals or aspects of the Games.

The final data collection method used for this study, document analysis, can be very useful in a case study as documents may contain information that the researcher would not otherwise have access (Patton, 2002). Documents are also called "material culture" as they "constitute a particularly rich source of information about many organizations and programs" (Patton, p. 293). It is important to note that documents should not be considered official untampered documents as some organizations will modify information that is sensitive (Yin, 1994). According to Yin, "the most important use of documents is to corroborate and augment evidence from other sources" (p. 81).

While in Whitehorse for the Canada Winter Games, the researcher acquired documents including organizational structure diagrams, bid process guidelines, hosting guidelines, volunteer policies such as a volunteer handbook and registration guide, contact lists such as media guides and press releases, and host-to-host transfer of knowledge documents. All of these documents were accessible while at the Games, however the 2007 Canada Games Host Society intranet page link posted post-Games Host Society divisional final reports and these were not available until after the Games. Due to the fact that the researcher utilized a computer based data analysis program, the ability to download all of the documents from the intranet page, was an advantage for the analysis stage. These documents were analyzed using a document analysis framework (See Appendix E). All documents utilized for analysis were internal to the Canada Games

Council and the 2007 Canada Winter Games Host Society. Documents obtained during the Games were utilized to gain an understanding of the organization (Organizational structure), volunteer documents were useful in interviews with participants directly effected by them, and the host-to-host transfer of knowledge documents were extremely important when engaging in conversations and formal interviews with participants.

The field observation and document analysis proceeded via opportunistic sampling, which meant that the researcher found new leads and took advantage of the unexpected (Miles & Huberman, 1994). For example, the CEO of the Canada Games Council heard about the study and was interested in meeting for a half hour. During this meeting the researcher was able to record observations as well as gain access to two key documents pertaining to knowledge transfer plans from the Canada Games Council perspective. Any situation where the researcher felt knowledge was being transferred between individuals provided an opportunity for field observation. Similarly, through conversations with individuals opportunities arose where the researcher was able to access documents.

Data Analysis. One of the least developed aspects of case studies is the analysis of the data (Yin, 1994). The process of "data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence to address the initial propositions of a study" (Yin, p. 102). A case study analysis is organized strategically in order to account for comparison and in-depth examination (Patton, 2002). The analysis was completed by the researcher as it provided her with the opportunity to become immersed in the data and generate emergent insights (Patton, 2002). An iterative analysis approach was utilized,

which accounted for the use of both a priori and emergent themes (Huberman & Miles, 1994). The a priori categories and sensitizing concepts were developed from the literature that was utilized in the model. For example, individual-level knowledge concepts included intuiting and interpreting, group-level concepts included integration and socialization, and organization-level concepts included institutionalizing and externalization.

Qualitative research includes the process of both inductive and deductive analysis where the inquirer remains open to emergent data leading to the elucidation of what is emerging (Patton, 2002). The deductive phase of this analysis included the creation of themes and categories while the inductive analysis allowed the researcher to discover emergent themes and compare them to other categories and themes which generated the findings. According to Maykut and Morehouse (1994) this process is called the constant comparative method. The emergent categories developed based on the data collected. Initially the researcher utilized descriptive codes which "entail little interpretation. Rather, you are attributing a class of phenomena to a segment of text" (Miles and Huberman, 1994, p. 57). As the data analysis progressed and more insightful knowledge about the various dynamics of the case were obtained, interpretive coding was incorporated. The inclusion of interpretive coding provided flexibility to identify a "more 'backstage' web of motives" in the data (Miles and Huberman, p. 57). Finally as the analysis moved beyond the interpretive stage, patterns in the analysis emerged based upon a priori and emergent themes.

The researcher uploaded the transcripts of the interviews and direct observations and text from the documents into the Atlas.ti software data management program. All

data was provided with codes to identify the data source type: Interview participants were coded P with a number to identify the participant in order of interview sequence (i.e. Interview participant one = P1), observations were coded OB with a number to identify the observations in sequence (i.e. Observation one = OB1), and finally documents were coded D with a number to identify which document (i.e. Document one = D1). Although the program was able to assist in the coding, and the inductive and deductive process of analysis, the researcher chose to create all codes on her own. The researcher developed a list and definition of a priori codes. These a priori codes were derived from the model and the research questions (Miles and Huberman, 1994).

Once the data were uploaded, codes were utilized to categorize sections of the data. For example, because the model involved examination of an empirical setting, five codes were created for the first phase of analysis. The first code, support, is based on how well the data reflected literature in knowledge management and organizational capacity settings. The second code, barriers, captures problems that impeded knowledge transfer in the model. The third code, enhanced, uncovers what changes can be made to improve knowledge transfer. The fourth code, capacity, reveals the link between knowledge transfer and capacity and the impact it has on the host society. The fifth and final code, key terms from the model, covers all of the terms that are explicit in the knowledge transfer model.

A priori sub-themes were also developed for each of the five initial categories. For the three codes supports, barriers and enhanced sub-themes included individual, group, and organizational levels. A priori sub-themes for capacity include support for individuals and senior staff members as well as both the positive and negative comments

for capacity and knowledge transfer. Finally all other terms from the model that are not related to levels, such as communication, integration, internalization to name a few, have been included as the sub-themes.

Upon completion of the data analysis for the a priori codes it became apparent that several areas of interest had emerged within the data. The creation of the emergent codes were categorized within the broad a priori themes - support, barriers, enhanced, capacity, and key terms from the model. These emergent codes provided a more in-depth analysis of the knowledge transfer – organizational capacity relationship. Please see Appendix G for coding process and Figures 4, 5, and 6 for specific codes utilized during coding process.

Trustworthiness of the Data. Trustworthiness is explained by Lincoln and Guba (1985) as the processes to enhance the credibility of qualitative research findings. The most important aspect of trustworthiness and validity is to accurately describe the 'reality' of the phenomenon according to participant descriptions. Lincoln and Guba (1985) identify four criteria to enhance trustworthiness of data within a qualitative case study. In this study *credibility*, the first criteria was enhanced through the techniques of member checks, triangulation, and prolonged engagement (Morse, Barret, Mayan, Olson, and Spiers, 2002; and Huberman and Miles,1994). Stake, (1992) defines member checking as the process in which the interviewee "is asked to review the material for accuracy and palatability" (p. 115). Each interview participant received a copy of her/his interview transcript and a summary of the key statements from the interview. The summary sheet improved the return time of the member checks.

Figure 4

A-Priori Codes Utilized During Coding Process

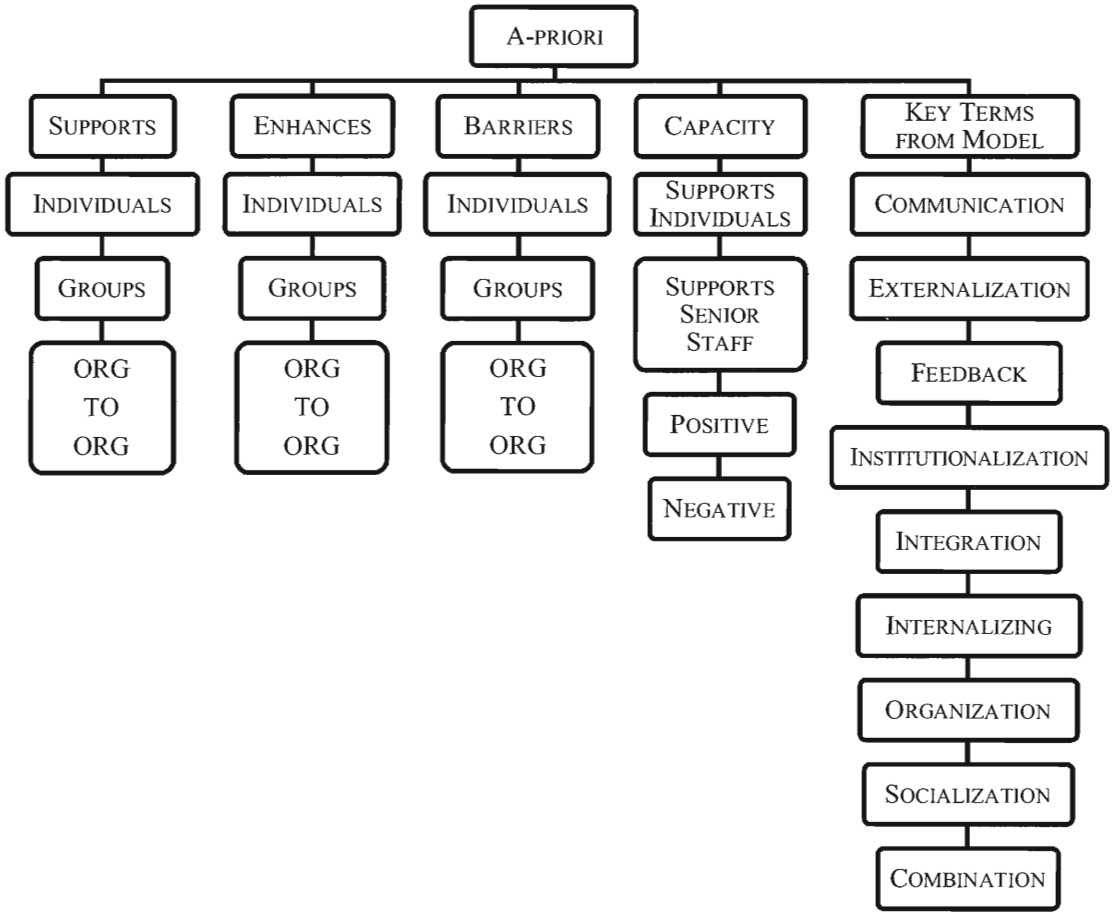


Figure 5

Emergent Codes Utilized During Coding Process

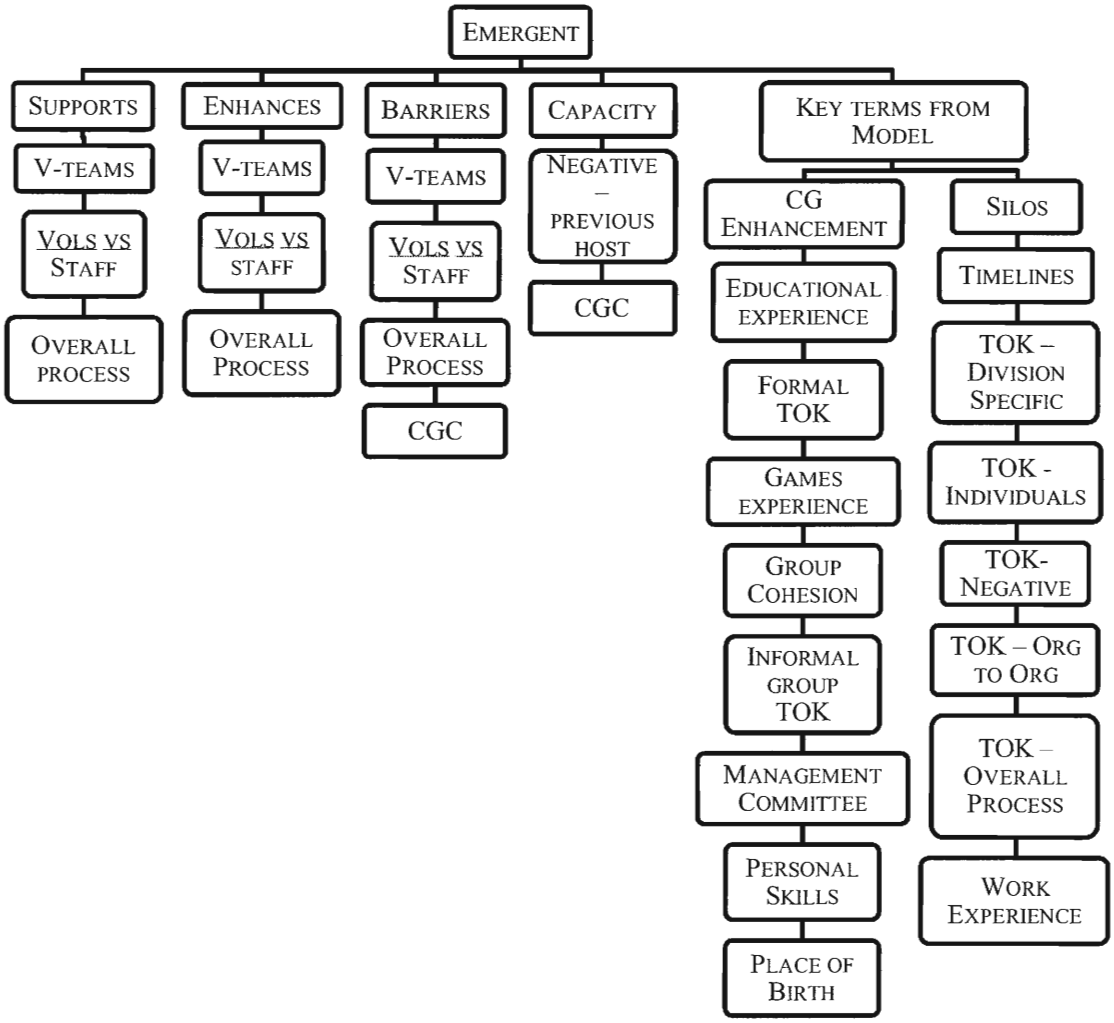
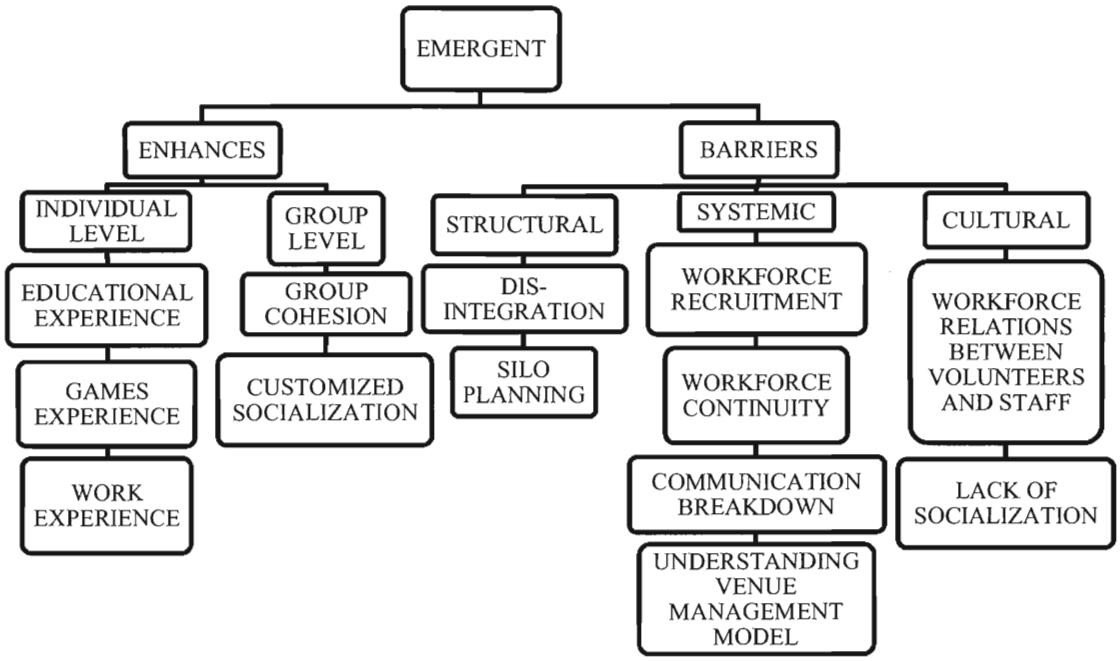


Figure 6

Final Emergent Codes Utilized During Coding Process



Patton (2002) argues a researcher should triangulate data as well as utilize the empirical findings instead of his/her own voice in order to increase the credibility of the research. The purpose of triangulation is to describe the case in substantial detail so that anyone who may conduct a study using the same data collection methods will uncover similar results (Stake). According to Yin (1994) triangulation addresses the potential problems of construct validity "because the multiple sources of evidence essentially provide multiple measures of the same phenomenon" (p. 92). This study also employed triangulation, through the use of interviews, direct observations, and document analysis, to enhance the credibility of all findings. Prolonged engagement enables the researcher to gain trust of the participants and develop an increased understanding of the culture of the participants and/or organization. The engagement was intense as it occurred over 18 straight days the time of the event being observed and limited as this was the only opportunity for face-to-face conversations. Conducting member-checks increased the credibility of the data as it provided an opportunity for each participant to clarify/add/delete any information from their interview transcript.

Transferability the second criteria to enhance trustworthiness is described as an ability to prepare the data with thick description (Lincoln & Guba, 1985). In this study, three types of data provided thick description, which provide a database "that makes transferability judgments possible on the part of potential appliers" (Lincoln and Guba, p. 316). At the completion of this study it is expected that future Canada Games Host Societies will be provided with recommendations for knowledge transfer strategies that will enable them to successfully transfer data within the Host Society.

The third criteria for trustworthiness is *dependability* (Lincoln & Guba, 1985). Dependability can be developed through the techniques of purposeful sampling, ensuring participants confidentiality, and an audit trail. The researcher employed purposeful sampling in order to recruit dependable participants who had access to the information pertaining to the research questions. Participants were not identified in interviews as they were coded with numbers and any and all identifying factors such as division names were removed in Chapter 4. The ability to offer participants confidentiality encouraged direct and honest responses including both positive and negative experiences creating dependable data. Finally, an audit trail of the researcher's development ensures dependability as well as confirmability.

According to Lincoln and Guba (1985) the final criteria to enhance trustworthiness is *confirmability.* Confirmability can be improved through meticulous data management, in other words an audit trail. Patton (2002) states an audit trail is the rigour of fieldwork. Raw data, data reduction and analysis products, and instrument development information are key components of a credible audit trail (Lincoln and Guba). In order to assure a sufficient audit trail, time and date stamped drafts of documents were maintained in the Atlas.ti program, and record minutes from meetings with the Research Advisor and thesis committee were recorded. Finally, if a researcher demonstrates an audit trail, the dependability and the confirmability of the data will be supported (Lincoln and Guba).

Ethical Considerations. Before proceeding to the data collection phase an ethics application was submitted to the Research Ethics Board at Brock University. This process

is required if human subjects are included in a research study. Once the research study has approval from the university ethics board a reference number is provided and individuals may be invited to participate (See Appendix A). An invitation letter outlines what is being investigated, who will benefit from the research, and finally the requirements for the individual. For interviews during the Games the informed consent form (See Appendix B) was given to the participant at the start of the interview. In order to be eligible to participate in the interviews, all participants were over the age of 19 years.

For this particular study there were no risks related to participation in the interviews, however the issues of anonymity and confidentiality were extremely important. Anonymity was achieved through participant pseudonyms. Confidentiality was achieved through informed consent, conducting interviews in private locations, the concealment of all names and identifying division references from quotes utilized in Chapter 4, accessibility of data at any time is restricted to the researcher and her advisor, and finally the storage of all data in a remote setting away from the university campus.

Chapter 4: Findings

The following chapter is a presentation of the findings of the study. These findings are presented in a format that answers the two research questions discussed earlier in the thesis. Research question one, what factors enable the knowledge transfer processes outlined in the model? How do the factors influence the model? Research question two, what factors inhibit the knowledge transfer processes outlined in the model? How do the factors influence the model? The first research question addressed the factors that enabled knowledge transfer and the findings indicate data that support various aspects of the proposed conceptual model. The key enabling themes that emerged from the research are explained according to the levels initially indentified in the model. The Individual level included the emergent theme of experience and the Group level included the emergent themes of cohesion and customized socialization. The second research question addressed the barriers to knowledge transfer. The key barrier themes that emerged from the research included structural barriers, systemic barriers, and cultural barriers.

Factors that Enabled Knowledge Transfer

The Individual Level

In order for transfer of knowledge to successfully occur in the 2007 Canada Winter Games Host Society, individuals were required to initiate the process. Data that enabled the proposed transfer of knowledge model specifically at the individual level revealed three different experience related themes: educational experience, work experience, and Games experience. Different aspects of each of the themes fit under more

than one term which demonstrates that they are not exclusive. Although the following discussion addresses each theme individually certain aspects of the data signal inter-connection.

Educational, Work, and Games Experiences. One of the findings from this case study is that individuals who are in either a senior or middle management position are able to activate and utilize their intuition. This skill prevents knowledge breakdowns and enables the transfer of knowledge process to continuously flow. The three themes of education, work and Games are each related to experience and emerged as the most critical aspect of TOK at the individual level. The individuals who were recruited to become members of the 2007 CWGHS had a variety of experiences including but not limited to education, work, and volunteering which contributed to their selection and placement in the Host Society.

Educational Experiences. In this study, 27 interviews were conducted and each participant was asked about the relevance of her/his education to her/his position with the Host Society. The researcher asked the participants how useful their education was in providing and preparing them with sufficient skills to fulfill their roles, including those relevant to knowledge management. Participant roles required skills including research, decision-making and project management to meet employment obligations. Surprisingly, only 13 participants felt their education was useful and that they could draw upon this training to complete required aspects of their job within the Host Society (see Table 3).

Table 3

Participants Perception of the Relevance of their Educational Experiences

PARTICIPANT	EDUCATION	USEFUL	NOT USEFUL
P1			X
P2	Sport Management	X	
P3	Recreation	X	
P4			X
P5	Communications, Accounting, & Public relations	X	
P6			X
P7			X
P8	Nursing	X	
P9	Accounting	X	
P10	Phys-ed	X	
P11			X
P12	Accounting	X	
P13			X
P14			X
P15			X
P16	Computer Science	X	
P17			X
P18			X
P19			X
P20	Education	X	
P21	Education	X	
P22	Commerce & an MBA	X	
P23			X
P24			X
P25			X
P26			X
P27	Commerce	X	
P28			X
P29			X
TOTAL		12	17

Thirteen participants found their education useful and were able to utilize skills honed during their formal educational years which is an important finding. Their education, whether directly related to their specific job or skills they mastered while in school, provided them with the tools to initiate the TOK process. Examples of the importance of experience are:

> … with Athlete Services that was far more of my comfort zone like I have a Bachelors in Sport Management … (P2).
>
> … education in communication, accounting and public relations … (P5).
>
> … I have a nursing background so that has certainly been helpful for this role … (P8).
>
> … I am a teacher and that is my trade and hone a lot of organizational skills which are necessary for this job … (P21).
>
> … I have a Bachelors of Commerce from the University of Calgary in Marketing and an MBA from Queen's University … (P22).
>
> [Hire] Young staff with high energy and a recreation and leisure background as they are keen and their energy is still going … (OB11).

Together these examples demonstrate how a participant's education builds the foundation for her/him to be a successful in the 2007 CWGHS.

Work Experiences. The second theme relates to work experiences. As mentioned, 17 participants disregarded education as a key part of their experience. These individuals were older and had many other experiences which they indicated were more relevant. Participants were working professionals who held a variety of jobs ranging from high level government positions, to teachers, and to business members in the local community. Education is usually a key element of consideration for job placement, however, this

group of participants felt their education was outdated and that their work experience was far more current. The following comments support the work experience theme:

> … well my education is so far back and I was trained as a teacher in that the communication skills and things like that come in really handy.
>
> … so again my project management was more intuitive as opposed to the formal process which is essentially the way things are done now. Keep in mind I started doing this 30 years ago right. I know … you know … developed my own processes with some education but not a lot … (P6).
>
> … my organizational skills have been very useful, I think specific job skills haven't come into play so much as … have … you know, personal qualities. Inter-personal skills has been key to managing both the committee work itself and the actual [work] on the group work implementing accreditation and … you know … working, well as part of the team … (P13).
>
> [Johnny] was asked to consider the AVP role. [Johnny] accepted and was often relied on for his Games experience, calm approach to issues and problem solving skills (D12).

These examples highlight the fact that work and volunteer experiences can be valuable for an individual's role, and the resulting impact this role has on TOK.

While employed in any position, individuals have the potential to learn a wide variety of skills which can be applied to a variety of situations. Participants from this study identified previous and current employment, along with volunteer opportunities as the experiences most useful in their roles for the Host Society. This is a key finding as these experiences significantly enhanced the individual's ability to interpret various situations and determine how they could apply their tacit knowledge to initiate the TOK process. Unique to this case was the secondment of several employees from the Government of the Yukon (YK):

> … brought certainly a fair number of skills to the job. I was a secondment from the YK government … and then like I said I assumed the role of [senior planning manager] as opposed to [being] hired into it. I came on initially as a [Division Representative] and I have 20 years experience with the YK government …

> somewhere in that order of 20 years experience with the YK government working with First Nations doing negotiations … so I certainly brought what they needed from the Pan North perspective I also have a degree in recreation from way back. And having worked for 5 years as the Manager of Sport, Arts and Recreation so I have both and really a good combination but really when I was initially invited to come over by the President it was because of my work in the with the aboriginal community here and my inter-governmental experience (P3).

> … there was just no way that myself as the [committee] Chair that I was going to be able to fulfill all the requirements for the Games and still be employed and still have my job. So to take that on I think even from conversations at the beginning even to a year and a half ago … it was very helpful to be able to get the information that we did receive to understand that there was no way we could do this off the side of our desk. It was important to do this business case up to government and to seek fulltime secondment for one of our officers to address all the requirements for security (P25).

> Staffing of Senior Accountant on secondment basis was probably the key ingredient to good accounting and control (D1).

Several of the seconded individuals were recruited because their roles with the Yukon Government could be aligned directly with the positions they were required to fulfill for the Host Society. Their high level of tacit knowledge, coupled with their managerial experience within the Government, enhanced the TOK process at the individual level of the Host Society. At the individual level the ability to interpret knowledge from a variety of sources is crucial to TOK. Secondment implied that the roles and responsibilities of the individual's position with the Host Society was the primary focus; therefore, the individuals were competent, focused and motivated. Through their experience with leading teams and being able to make key decisions, the seconded individuals significantly increased the capacity of the transfer of knowledge process.

The Canada Games is an extremely large and complex endeavour and many participants felt project management – both software applications and individuals with experience - was required for specific positions. Individuals gained project management

experience through employment experiences in engineering, information technology, and warehouse and procurement management.

> Well I think just the fact that in my working career and I am an engineer and a land surveyor ... I worked on various projects throughout the years and it was just sort of the project management and those skills that I think were relevant to where and what I was doing with the Canada Games (P6).

> I had a few years experience as a programmer before I came to Whitehorse. I moved up to Whitehorse and I have worked and held instructional positions for science and computer science type courses and business technology courses at the college ... I have got about almost 10 years with Yukon government as the data administrator which involves a fair bit of project management as well (P16).

> My background is 23 years involved in the procurement and warehousing management when I joined the Games originally I was working with Northwestel Bell Canada. Where I was Director of Logistics for that company in the north so there specific operating area is all of the YK, NWT, Nunavut and northern BC. Where I had five different warehouses located coast to coast to coast so that knowledge of the north and the logistics of getting things done in the north and moving materials very substantial. I was also quite fortunate in that Northwestel is one of the sponsors and allowed some of their senior directors to devote some time to the planning and development of the Games where they viewed that as being a donation to the host society so I was very lucky there. Before that I spent almost about 10 years in the mining business in northern Quebec and in Alberta again in logistics and procurement management (P22).

During a TOK session at the CWG, one of the presenters involved in project management for the Games stressed the importance of hiring an individual who is an expert of Microsoft Project (OB11). This program was utilized for the 2007 CWG and recruiting an individual experienced in this program was key for project management success. Working on a variety of different types of projects enabled participants to bring their experience and expertise and utilize those skills when interpreting and coming to an understanding of their individual role in the Host Society.

A number of individuals were recruited to become a part of the Host Society because of their current employment positions. This was evident in positions related to administration, finance, and venues:

> My background is accounting and I was primarily helping out with the budgeting and the financial statements … because of my work experience at the city I was familiar with the software system that was decided to be used for the Games. And so I had the software knowledge to make it spit out the reports that we wanted and that sort of thing (P12).

> I was the ADM for eight years responsible for sport and recreation among others. So that was extremely relevant and I am a chartered accountant so like many of the other volunteers that we recruited … we have a variety of professional accounting designations with significant experience in that area … which I found has been really helpful in terms of translating and helping other divisions translating their plans and express them in terms of numbers and budgets … and not seeing the budget as something that is really foreign and they don't know how to do. So it's like tell me your plan and we'll work out together how much that plan is going to cost you (P9).

> Members of the Bid Committee were asked to consider VP roles for the 2007 CWG Host Society. [Suzie] chose [Division] due to her job as Manager Parks and Recreation for the City of Whitehorse and the fact that City recreation facilities would host the majority of sport competitions. Parks and Recreation also managed the Joint Use Agreement for the use of school facilities by the community so it was a good fit (D12).

The ability of these key individuals to interpret the knowledge pertaining to specific job functions, such as accounting, enabled the TOK process to initiate at a much faster pace.

Recruiting and placing individuals in key positions that required specific tacit knowledge enabled the individuals to emerge as leaders. This occurred as individuals utilized their intuition, initiated a collaborative working environment and followed the feed forward learning process (as explained by the following quotes):

> Like I mentioned before [it] is in the ability to translate for the people who do not have a financial background … and my approach has always been when you are dealing with a professional field … if you can't explain the concepts you are talking about simply enough that somebody not in that field could understand … then you probably don't understand them yourself. So that is the approach we

> have taken to saying … ok … we are bringing something to the table to help you with that and I think that has been really helpful. And also many of us are of an age to have had a fair bit of financial and accounting control in a positive stand set … as in internal control type experience and to be able to … pretty well differentiate between work that is done just for the sake of doing work and where its really important and focus on what's important to move the job along (P9).

> I have been a nurse in this community for 27 years so I am well connected to the community that was very helpful in terms of resources knowing who to go to get things or to ask questions of … but I think in my position at the hospital here locally I am working in administration so I have a lot of background in policy development procedure writing the general flow of things emergency planning, contingency planning and a lot of that work experience can be applied to this smaller scale work operation that we've been able to do here … my unit chairs and committee chairs were also nurses so that brings a certain skill set as well as this ability to be extremely flexible and adaptable and look at situations from different angles there is not always just one way to do things and I think having those key roles fulfilled by nurses was also valuable (P8).

P9's ability to utilize intuition to transfer knowledge was received by the correct individuals in a fashion that they understand and was crucial to the success of the TOK model. P8 was able to apply her job experience to her position with the Host Society. She was also fortunate that the team recruited had the appropriate skill set to lead their respective committees. The knowledge and experience that these individuals gained over time, such as problem solving and decision making, enhanced their ability to demonstrate qualities required of an Intuition Manager.

The Host Society was comprised of numerous individuals with different levels of knowledge who were dispersed among the 13 divisions. As a result of the varying levels of experience, it was vital that each division had a leader who understood how to coordinate the division and/or committee to ensure that the TOK process enhanced, as opposed to hindered, organizational capacity. This was illustrated in the following quotes:

> … probably organizational skills, and some very specific I had budget experience and strategic planning experience and I think those were two key areas because it made me very comfortable with a planning process. And I think that I could also

> deal with in all my previous employment I have dealt with large groups of staff and people so I was comfortable with both the smaller planning teams and the bigger workshops we would do for mass groups of volunteers … I was able to not only work with my colleagues on management committee … (P7).
>
> In the relationship between volunteers, staff and the National Sport Organizations (NSO) the Sport Chair has to be the key lead with the NSO's and to build it up. (OB5).
>
> The Artistic Director came to the project with experience in bringing strong performance out of the community and professional artists ... She did not have direct experience in all art forms represented so she created a team of mentors and faculty to augment her skills and approach (D2).
>
> And I think the other thing that we have brought to it has nothing to do with technical knowledge but everything to do with leadership in terms of supporting the team, mentoring the team, empowering the team by meaning letting them … giving them what they need to make decisions on the go which is certainly what has been happening the last couple of days and be comfortable with those decisions so I think that's where a lot of that has happened. (P9)

All four of the examples stated above exhibit how professional and volunteer managers either applied their employment and experience to their specific role in the Host Society, or were able to recognize through their intuition what tasks were required to fulfill organization goals. Their employment and Host Society roles were not exactly aligned; however, they had other transferable experiences that benefited their division or committee. For example:

> I am a City Planner and so all this planning is completely different as far as the subject … but the organizational part of it … the holding meetings, chairing meetings, and working within a team structure with other expertise is absolutely applicable … as well as I am the Manager of my department so I have to lead as well and that has been a big help (P23).
>
> I manage large Wildfires so it's a fast going fast paced always changing system … so having to make decisions on the go and live with it and if it changes continues on helps a lot here because a lot of the time you don't know what's coming up you just find something out and have to make the change immediately to keep people happy or to address what issue is around and that helped … (P17).

> I think it's been very, my organization skills have been very useful, I think specific job skills haven't come into play so much as have you know personal qualities, inter-personal skills has been key to managing both the committee work itself and the actual on the group work implementing accreditation and you know working well as part of the team (P13).

Transferable experience proved useful when making key decisions and managing the consequences of those decisions.

Experiences that individuals gain from education, work and volunteer placements along with Games experiences, provide opportunities for personal skill development. Recruiting individuals for a Major Games will not always yield individuals with applicable education, work or Games experiences. However, the experiences that individuals have may strengthen other personal abilities, such as organizational skills. For instance:

> We also had a few sports that did not have any sport background in the territory which is very difficult but with the right people … people who are organizers, leaders, team players and are good at finding and securing resources-whatever they may need … ensures success. The right kind of staff is so important as well and it is not necessarily the staff with the most experience. The abilities of our staff were amazing and yet they had very little Games experience between them. They were team players, they were adaptable, they worked as many volunteer hours as paid without complaint, and they shared the vision of doing the job right! This was another key to our success (D11).

> I ended up recruiting people who were more organization friendly as opposed to people who were just good at their work but maybe you know like the leader who leads in a business and leads kind of 'damn Yankees' the best forward (P28).

In the final report for one of the divisions, the VP identified the importance of recruiting and placing individuals with the right skills (D11). The success of each division and committee was dependent upon a culmination of education, work, volunteer experiences as well as the personal skills and attributes they were able to bring to the division. Together this combination of experience and skills in the managers and leaders for

divisions and committees enabled the Intuition managers to emerge which promptly set the TOK process in motion.

Equally as important to the Host Society was the local connections that Host Society members had obtained through work or volunteer experiences. Whitehorse had several individuals who were extremely respected by, and involved in, the community. The affiliations and connections they cultivated proved useful when working to achieve community support for the Games:

> I mean having people who are high profile … I mean I run the bureau … [Joe] who is our VP of [division name] is amazing he works for tourism culture again really well known very active in the community people know him. [Fred] he is the president of [Company name] he is the sponsorship guy he is the VP of [Division name] … those are people who are pretty prominent in the community and knowing that they support the Games translates to people buying in to become a volunteer and also to a positive messaging of the Games … (P24).

> … the two AVPs who I recruited are well thought of in the community, they are seen as capacity builders as opposed to just astute business people who only look after their own stuff or are really good at their job as a marketer. These are people who have a lot of the work they have done has been for the community. So I got very good people who had a reputation for consensus (P28).

> I think they asked that I have maybe the culture and the respect and possibly the fact that I grew up here that I didn't have to come in from the outside and then learn about the culture and then try to gather everybody together for the festival and ceremonies (P2).

> It's imperative to recruit your key volunteers from those who are influential in your local medical community. It helps if they are not only influential, but well liked, and able to lead a group of volunteers through many years of planning. The more influential they are in the government, or local hospital organization, the easier it will be for them to get the local medical community on side, obtain funding, create partnerships, and obtain supplies/services for your division (D6).

Recruiting individuals who had an understanding of the local community proved to be a valuable asset for the Host Society. These individuals were able to lead their respective divisions or committees and engage their group in the TOK process by sharing their tacit

knowledge and initiating the feed forward learning process. The Yukon is a territory that does not have very many large communities; therefore, the majority of executive positions for any and all types of business originate in Whitehorse. Individuals who held these positions were recruited because of their experience, but also because of the local affiliations that they developed. This was shown in the following examples:

> ... it's not only the knowledge that I have garnered over the years it's also the contacts that I have within sport. Because when there is an issue I have been able to help by knowing who to go to resolve an issue especially local retailers ... or getting things printed even with the ticketing ... it became invaluable and we ran into deadline problems and I was able to ... I knew the local guy because I do business with him so all those good things you know, so you get help both ways. It's sort of a knowledge thing but it's also who you know (P11).

> My feeling in terms of what a person needs to come into the volunteer services area is organizational skills absolutely hands down, but also the person needs to be a fixture in the community. And I am not saying that I am a great fixture in the community I am not ... I am fairly low profile in the community but I have been here long enough to know the dynamics of our community ... there are many, many times I knew where to find volunteers. I may not have known where in the community, what pockets to go after and how to approach them. I may not have been the person to approach them but I could find somebody in the community to go after them. (P3)

> One of the best human resource decisions that the Community Relations division was to hire local people who knew the community and who had key contacts. (OB11).

Recruiting individuals from within the community of Whitehorse benefitted the TOK-capacity relation within the Host Society. In a time of crisis, individuals were able to make decisions based on their intuition. They were able to resolve these issues because of their key contacts in the local business community which enabled an uninterrupted TOK process.

Games Experience. The third individual level theme, Games Experience, can also significantly increase an organization's knowledge base. The 2007 CWGHS was very fortunate to recruit many individuals with previous Games experience, specifically staff with multi-sport Games experience. Due to their involvement in previous Games, key planning individuals utilized their intuition to make decisions to overcome previous Games shortcomings. Many of these managers had been involved in multiple Games in different positions which instilled an understanding of plans that did, or didn't work. For example:

> I have been Assistant Chef and Mission Staff and so on so I kept the goal of knowing what athletes needed at Games times and what's most important to them … so between my background and learning what did and didn't work for past Games I created a structure ... [Zack] and I created a structure for athlete services (P2).

> We were involved with the Arctic Winter Games in 2000, we did the venue for basketball as well as officiated … dealing with those issues and those situations ... we were able to bring that here and apply that and see some of the deficiencies we had there that we could fix and apply here (P18).

> As P18 mentioned we chaired the venue for basketball at the Arctic Winter Games and ran that venue. We have … I have been to the last 14 maybe not 14 probably 10 Games and you always know what is good and bad from the official's side … to what they want to see and don't want to see to what they expect and don't get. So when we took over the venue for official services we said well let's try and make it something that they want to remember as opposed to a negative … that was our goal at the end of the day so bringing in what we knew from the Games (P17).

> … In terms of Games experience I was a medical volunteer in the 2000 Arctic Winter Games held here in Whitehorse and then went to Fort McMurray for Arctic Winter Games as an observer … went to Regina as an observer but just for a day because I was on vacation. And then last year I took on the task of being mission staff for team Yukon for Arctic Winter Games in Kenai Alaska. And I also have five kids who are very active and have been on all of these teams so I have been around and have that parent background too … to help me wrap my head around that games experience. (P8)

Individuals with major Games experience are able to better understand a Games context compared to volunteers or staff who assume a Games management role. This specific Games knowledge enabled the individuals to make intuitive decisions based on their previous experience, and to share their knowledge with their team members through the feed forward process of knowledge transfer.

As previously mentioned Whitehorse has a large number of government officials and executive association members. These individuals, over time, accumulated a high volume of Games experience that enhanced an intuition-like approach within the 2007 CWGHS:

> … well I have been involved with amateur sport all my life as an administrator so I am an executive director for a non-profit society now and I have been involved with Sport Yukon which is the sport federation. So Arctic Winter Games and the events we do within that as well. So yeah I have been President of the host society for the Arctic Winter Games when we hosted them in Whitehorse in 1992 (P11).

> I have worked in the non-profit sector for a long time but I also worked, it was my job with softball and volleyball to organize … with softball to recruit, manage a host committee for National Western Canadian Championships … so I had done I think at least 8 or 9 national championships, national western championships where I recruited and posted and put the committee in place. I had also worked on the Arctic Winter Games as well, I had the experience of previous Major Games both as a coach, an official, mission staff … (P28).

> VP of a division stressed the importance of hiring a senior staff person who is highly skilled in marketing, sponsorship, media and broadcast and pay them what they deserve. This VP had done that and felt the hire was a significant reason for the success of their division (OB11).

The extent of Games experience among volunteers and staff was instrumental in providing guidance to fellow committee members during the planning phase. These individuals understand the importance of sharing knowledge within and amongst divisions which supports the entire TOK process.

Canada Games Host Societies have a reputation for successfully recruiting individuals from previous Games, particularly staff. Increasing the number of individuals with specific Canada Games experience is an asset to a Host Society, as indicated in the following quotes:

> The expertise of individual workers ... I was very fortunate my head of warehousing, cartage, fabrication person a gentlemen by the name of [Henry] who I believe you have met. I met him in Regina and he was doing the same job for Regina in the Summer Games ... extremely fortunate in recruiting him to come north and to help us out. It really made my job a lot easier, all of the materials and some of the bulk stuff you see here, he packaged and shipped up from Regina because we bought it. So as the material was coming in I was unloading it but I also knew that [Henry] would be coming very shortly and he would help me build a team. So his knowledge was extremely critical right so that's some of the ideas you know I have tried to apply (P22).

> If you aren't lucky enough to have a Chef de Mission involved as part of your planning volunteer contingent, then finding one as a regular advisor will make your job so much easier. It's the responsibility of the Chefs to ensure they are asking for the best possible situations/services for their athletes. Therefore, some of the "asks" may seem over and above what you were originally planning. Having a Chef de Mission (current or former) to bounce ideas off of will give you the luxury of a reality check, and sound advice, from someone who understands your constraints with budget, manpower, facilities, or logistics (D5).

> Bringing in people with Games experience was a valuable asset to both the Volunteer Division and the Volunteer Venue Representatives [VVR's]. It kept me focused on what needed to be done, and gave the VVR's a sense of what things would be like during the Games (D7).

Games experience of any kind is beneficial however experience specific to the Canada Games will decrease the level of frustration from those individuals with Major International Games experience. The Canada Games operates on a lower budget with less staff and less exposure. An individual who integrates this knowledge at the beginning phases of the transfer of knowledge process will assist his/her division or committee to set realistic planning expectations, which benefits the entire Host Society.

Despite the expectations that individuals from Major International Games may have regarding the Canada Games, they can still be an asset to the Host Society. For example, one finding from this case is that the Host Society had a difficult time understanding and fully engaging in the Venue Management Model[2]. P1 was recruited about a year before Games time and her extensive experience was evident from her credentials. She also had a strong understanding of a key area that certain groups of the 2007 CWGHS were not engaging – the venue management model:

> … well I have been in management background I have done three previous Games between management to get that into logistics part … I have actually seen a venue work at Games time at much higher level than a Canada Games, high service level I mean without disrespecting the Canada Games … I have seen bussing and I have seen materials management, I have been involved in procurement I worked with sport equipment for the [Olympic Games] … I did a lot of procurement which touched on marketing and sponsorship so I have had the understanding of how each division works to come together for operational delivery … (P1).

As a result of her experience at international multi-sport events, P1 was able to make key decisions which forced specific divisions to change operations. She was able to foresee the required changes and utilize her intuition to restart the TOK process.

Individuals like P1 who move from Games to Games are recognized within the Host Society for their hard work and dedication. The 2007 CWGHS was very fortunate to have such an eclectic group of individuals with varying levels and forms of experience:

> The team that was compiled for our Games was a good mix of personnel with different levels of skills and experience. We had many first timers with little Games experienced, yet were highly motivated employees, here to learn as much

[2] Venue Management Model is a decentralized approach to event staging where venues are supported by core service divisions. For example, the Takini Arena Team was comprised of representatives responsible for sport, logistics, athlete services, ceremonies and volunteers.

> as they could about the Games. We also had our share of seasoned veterans from past Olympics, Commonwealths and other Major Games that came on board to do exactly what they do best with the intention to leave afterwards and tackle the next set of Games. It's amazing to see that Games groupies do actually exist and they will go anywhere & everywhere to pursue the next challenge. (D11)

These Games 'groupies' are crucial to successful major Games planning because of the variety of experiences and high level of intuition they bring to each new Host Society.

Group Level

As the transfer of knowledge process proceeded through the individual level, the individuals were segmented into their various divisions and committees. As they became familiar with the other members of their division or committee, they began to share their tacit knowledge through the feed forward process of learning. This process occurred as the various groups evolved and individuals were able to engage in socialization, which enabled individuals to come together in a free and open manner. Socialization provided opportunities whereby individuals could express their ideas and information based upon their tacit knowledge. As this occurred, the various groups began to align their visions and integrate all of the new knowledge to which they were exposed. Socialization and integration occurred simultaneously and this promoted the conversion of tacit knowledge. The two key themes that emerged to support the group level of the transfer of knowledge process were the importance of group cohesion and customized socialization.

Group Cohesion. At the group level the transfer of knowledge process can only succeed if the group members are empowered by their manager, trust each other, and collaborate on tasks. As previously described in the individual level section, the 2007

CWGHS had personnel in key positions who demonstrated characteristics of intuition an important skill. The culture these managers created within their division or committee was essential for the success of group level TOK. One of the findings from the group level was the ability of managers to empower the group members to make decisions. When the group members were able to work with their colleagues to create plans, make decisions and utilize personal skills, group cohesion was achieved:

> … when I got staff what I tended to do, I am not a micro-manager so I would give them certain projects or responsibilities to staff and they have been fantastic and would take it and run with it … (P2).

> … I want you AVPs to solve all of your problems first if you can't solve them bring them to me. If they have to go up to the Host Society then I will deal with that so we stuck to that model as close as we could. Like [Greg] ran his whole thing and I didn't interfere really on the day to day operations, he got to run them set them up, there are things I might do a bit differently… I say you have to trust the people, you know its sort of recruit the right people and trust them to get the job done (P28).

> The Venue Management Model allows divisions to solve problems internally without having to rely on external resources (OB13).

> … I felt that I could concentrate on what I felt comfortable doing and also what I felt strongest at. I didn't feel I was left on my own … (P13).

Empowering individuals within the group to make decisions and to act upon the skills that they have encourages group learning. As the group continues to learn together it begins to integrate member's tacit knowledge, which means the group knowledge level becomes more explicit. With an increased amount of time spent together, the group members develop trust, a key component to group cohesion.

The planning volunteers of various divisions within the 2007 CWGHS were very fortunate when the VP's entrusted them to select their committee members. By allowing the division and committee managers to recruit the volunteers for their teams, they were

not only empowered to make those decisions, they were able to select individuals with whom they had an existing relationship. Group members who knew each other prior to joining the Host Society already had a trusting relationship, as indicated in the following data:

> … maybe it's the Arctic Winter Games that prepared us for it … I think also there is some social thing going on I never got my head around as well. There was a core group within the management group who were very used to working with each other and had been part of the Arctic Winter Games process and stuff like that for maybe years. And so I think there was maybe a real core group there that I was an outsider to at any rate. And I think that may have helped them, they knew those people were going to be there in 4 years (P16).

> … so similar to what I just said having the background in nursing enabled us to work together and because healthcare is a team there is no I in team … and were very used to doing that so it was not a difficult task for us at all to be able to use that concept in this environment and I think that worked very well (P8).

> Trust that the committee has chosen responsible people to do the job and let them get on with it. Allow that you are working with creative people who have different ways of doing things. That is part of what creates culture (D2).

> … getting that volunteer was like hitting the jackpot because she was competent, training was fast and I could let her go and I knew I could trust her. Reliability so finding a person is like finding the golden egg it was just … we just all appreciated her so much and she came in at a time when we needed her the most and she worked several hours a day helping us out so it reduced our stress level … because my co-worker could focus on what she needed to do and she really stresses when she cannot complete a task … so if she couldn't get all the applications into the database she would be all stressed out. (P21)

Working in a group environment and achieving success is dependent upon the relationships that individuals build and the trust that exists among its members. The 2007 CWGHS recruited the majority of its key planning volunteers from within Whitehorse, the host community. With the volunteers coming from the local community many groups had members with pre-existing relationships. These relationships were the key to building

trust between members and empowering the managers to make decisions for their divisions and committees, thus establishing a strong sense of group cohesion.

Although many divisions and committees were able to recruit local volunteers with whom they had pre-existing relationships, this was not always the case. A number of volunteers joined a division or a committee after being recommended by a colleague or after placement from the volunteer placement program. Through the utilization of their intuition the managers recognized it was imperative to find a way to develop trust between all members in order to have harmonious group cohesion. The following data demonstrate these efforts:

> We began meeting weekly as the Division Executive Committee (VP, AVPS (2), Project Manager and Senior Staff) two years in advance of the Games. The Management Committee composed of the Division Executive Committee members, all Division Committee Chairs and all staff in the Division met monthly during this period and then weekly six months out from the Games. This level of interaction served to build the team environment, trust and strengthened relationships that became key under the stress of Games time. The team was dynamic, effective and did not take themselves too seriously (D3).
>
> ... there was a lot of trust. You know one of the things that we have done here is about two years out we would host BBQ's and we would invite people up here to the warehouse because we didn't know who they were, so you know that whole level of trust within the VPs levels and the AVPs was always there from the get-go (P22).
>
> The Communications can play a very important role in speaking to the media on a regular basis. The Communications Officer arranged regular interviews on the radio, was upbeat and had all information at hand. The media trusted and respected her - this was key to keeping some crisis communications issues in check (D3).

Three different tactics were exercised to create trust in the division or committees with all group members. Trust was not something that had to exist solely within the divisions or committees it was also an important component with external affiliates of the Games. As explained in D3 (above) developing trust with the media enabled crisis situations to be

averted. When a group member handled a crisis situation, it created trust within her committee as the members knew they could rely upon her to defuse any future situations.

The bar-b-que's and other social events were instrumental in allowing group members to interact in a social forum where common interests and activities could be discussed creating relationships and developing trust between members. Meetings became quite common amongst the Host Society members to transfer knowledge as they provided a professional context in which to share knowledge. This process of sharing knowledge is a component of collaboration and is a key TOK process at the Group level.

Collaboration is also a key component in group situations because all members want to feel they contribute to group discussions and ultimately the final decisions. The smaller group sizes provide the opportunity for all members to be engaged which ultimately increases the opportunity for knowledge transfer within the group:

> … now having said that on the image and advertising side …there was certainly time for collaboration for people to bring their expertise … that committee was marketing professionals. You know you can't just pick a logo out of a hat. So it really was about identifying especially with the Pan-Northern approach we needed to incorporate the fact that it was 3 territories not just Yukon … it needed to be reflective of all three native and also be sensitive to first nations so there was a lot of collaboration that went into that piece (P24).

> Host Society volunteer and staff cooperation/collaboration was very important to the success of the Games. In fact we think that this was of extraordinary importance for our Committee in particular due to the high number of interdependencies we had with other groups within the Games Organization. The staff members assigned to us were extremely hard working and were able to provide the horsepower in planning and in executing plans when our volunteer team needed these resources. Furthermore, the staff resources assigned to our Committee provided a continuous and useful link to the other Divisions and Committees through their close working relationships with other staff working with these other groups (D9).

> One division had an expert flown in to conduct two workshops one for the planning committee and one for the management committee. They were given a questionnaire to see what they wanted and they received concrete explicit

> comments. These were then shared with the team so that they could collaborate and implement as many of the ideas as they could (OB11).

The groups that were able to capitalize on their members desire to collaborate on ideas assisted in their success. Whether functioning in small or large groups it is important to allow each member an opportunity to integrate their ideas with ideas presented by others. Integration aides the group members in aligning their vision of the Games with the entire group, and occurs through socialization, a key segment of the group level transfer of knowledge process.

Customized Socialization. The success of each division or committee was dependent upon the managers' ability to customize the socialization process to fit what worked best for the group. The managers of the divisions and committees had to create a culture where group members felt comfortable sharing their knowledge, participating in brainstorming sessions, and attending the forums for information exchange. Having focused on building group cohesion, the customized socialization process came easy to committees and divisions.

An important finding at the group level was that the key to success during the initial phase of socialization was the ability of group members to feel comfortable sharing their ideas and knowledge. As group members began to focus on a shared vision they integrated their tacit knowledge with that of their group members. For example:

> … we shared what we knew with our Committee Chairs and there was a lot of humming and hawing in terms of what exactly is it that we are trying to do and that sort of things. … (P6).

> … there was some of that available and I guess the other thing that did happen was that the Host Society brought in [a specialist] who has done Games all over to talk to people in all kinds of different areas … about things and she was probably

> the most useful resource we had. Because she had the hands on been on the ground a whole bunch of times seen it a dozen different ways and was able to share a whole bunch of that (P14).
>
> … I am a great believer in trying to share as much as possible because it helps people do what they need to do if they know everything that is going on … (P15).
>
> Having daily site visits by the V-Team Coordinators to trouble-shoot, respond to questions, share information - make box office staff feel supported (D1).
>
> They were team players, they were adaptable, they worked as many volunteer hours as paid hours without complaint, and they shared the vision of doing the job right! This was another key to our success (D11).

These examples demonstrate that sharing continued in the 2007 CWGHS from the initial planning stages until the completion of Games. Managers of these divisions or committees lead by example and made the decision to share all of their information which encouraged group members to do the same. Managers were also responsible for creating forums for group members to share and exchange knowledge and information.

The Host Society had 13 different divisions as well as numerous committees within those divisions. The managers for each of those divisions and committees had to customize the socialization process for their specific groups. This enabled the managers to determine the most efficient, and more importantly, the most effective means for sharing knowledge and information for their group. The following data provided examples of customization:

> … Yeah and if you have some people with some good group facilitation and team building stuff that really helps. Like we had a great team of people and we started off you know always making sure we were having fun, lots of potlucks lots of social stuff so we did that team building which really, really helped. Somebody was really on the ball because you can just get stuck in to having meetings with people and not having any fun and so that doesn't facilitate a lot of learning.(P20).
>
> And I think getting your committees together often ... getting your divisions together often ... we did a lot of social stuff as well. You know we would get together at somebody's house and have a glass of wine or potluck every six

> months or whatever and I think that was helpful because it really gelled our division and you know we communicated everything by email in templates. [Jack] did that and we shared that amongst the other divisions and with CGC (P24).

> As the CC&P division of the Jeux du Canda Games 2007 started to prepare for the Games, "Have Fun" was written into our project charter. The members of the division under the leadership of the Vice President, decided that "FUN" was to be taken seriously and that it was something that we needed to have. We were able to inject a little fun into our normal activities and meetings. However, this did not fulfill all the needs of the group and thus the CC&P PotLuck dinner came about (D2).

Potluck dinners were a popular mechanism to build trusting relationships among group members. Through these informal get-togethers group members were able to share not only their knowledge and information related to the Canada Games, but also from their personal lives. The relationships and bonds that were formed at the social gatherings strengthened the group cohesion and significantly increased the progress that occurred in the formal group meetings. The socialization that occurred at these informal gatherings contributed to strengthening the group cohesion. As the group cohesion continued to build during these functions, simultaneously the group leaders were customizing the socialization process for their specific group members.

In the earlier planning phases of the 2007 Canada Winter Games there were several formal opportunities for the transfer of knowledge process to take place, most notably the interdependency meetings. An inter-dependency meeting involves representatives from each of the 13 divisions who identify and discuss the interactive roles of all divisions in achieving the targets, tasks, and timelines of the Games. A finding from the group level identified the interdependency meetings as a key factor which enabled the transfer of knowledge process to continually progress without setbacks:

> … then with other divisions the same thing … finding out through the other inter-dependency, another new word that we all had to learn and how to pronounce that

> worked well … finding out ok who is most important, who do you need to talk to and who do you need to share information with so that our group can get our needs fulfilled (P15).
>
> … the interdependency meetings were brilliant I think that was when it was great for everyone to come together in one room and see how many people were working together on this massive project … and how we depend on one another so those meetings were good for motivating people … that was the point when we got to the work breakdown structure portion of our plan … well what we did was we had a really strict schedule on a bunch of different tables where from 8-8:15 logistics and athlete services would meet. We had a good structure where here are the top 5 things that we are responsible for and then they would go and then ding the bell would go and we would go do that with every other division. So the first one was very general you know like what does venues do … we knew what we were doing but everyone had the opportunity to be able to say what they were responsible for. Down the road we just got further and further into detail as to who was going to be your key person for bussing, how are you looking at it, what plans do you have in place and make sure you include us with the planning and so we had about 4 of those meetings (P2).
>
> You mentioned inter-dependencies and we did have inter-dependency meetings with other divisions and they were at a very early stage … they were at a time the first couple anyways they were at a time when they were certainly useful … they gave us somewhat an overview of what other people were doing and what they might be requiring from us … some of the information and knowledge carried right through to the end but a lot of it was very, very preliminary and it changed based on necessity. So the inter-dependency meetings at that stage were useful at that stage in getting to know the other divisions and to get the starting point. (P6)
>
> Critical to make the inter-dependency meetings happen. They can last between five and six hours ... The last two meetings included the venue leader and the sport leader which helped them to realize the scope of issues and good things in other divisions (OB11).

Once a Division Manager understood the concept behind the interdependency meetings and how her/his division could benefit from the knowledge that was shared, s/he were more forthcoming with information. One of the main advantages of the interdependency meetings was bringing all of the initial key planning volunteers together.

The interdependency meetings were pivotal at the initial planning stages; however, each group had to customize its format for communication. Taking into account

that the culture of each group was different, more than one method of communication was exercised to transfer knowledge. In addition, more than one method of communication was utilized within a group in order to maximize the opportunities for knowledge transfer. For example:

> It is very important to continue to share or exchange information amongst each of the groups within the division. Bi-weekly meetings were held at the Executive Committee level. Attendance included the Vice President, Associate Vice President, Project Manager, and all Chairs. Weekly meetings were held on a regular basis with two front line committee's - VIP Hospitality and Fulfillment. These meetings enabled the committees to continually evolve and share their working plans as they were developed over the three year period. Co-attendance within each of the committees (Fulfillment and VIP Hospitality) was also encouraged. This information was shared and brought back to the other committee (D3).

> ... when our management committee met every two weeks, when I met with my group ... the next group always do a rehash with what happened at that management meeting with what the issues were, whether they be with the logistics group or the venues group. So at least they had an idea of my group and it would only last for five minutes max and we would only meet on Thursdays just to let them know what was going on (P29).

> ... you know we are dealing with volunteers and the more organized and structured the meeting is the faster it goes and the more useful it is and the more participation you'll get because everybody can see that somebody is trying to get through it so we can all go home at night. Because the meetings are always at night after our full day of work and everybody pulls in the same direction and if the leader perhaps or the team is trying to get through the required topics as quickly as possible (P23).

> So we started meeting monthly three years out with every committee once a month. So that was a meeting with all of the committee chairs basically so that they could meet and then I also attended all of the committee meetings when they were writing their project charters. So sat through there project charter meetings, either myself or the AVP attended the work break down structure meetings which followed behind those. So we met monthly and then progressed to weekly 6 months out. (P28)

The formal communication processes would generally take place at a set date and time with all group members. As indicated in the examples above, many of the meetings were

dependent upon knowledge that was generated from another meeting. The managers who schedule their committee meetings after the divisional and management committee meetings ensured that current information was transferred to all groups. For many groups the formal meetings at the scheduled date and time were sufficient to transfer knowledge.

Another finding that emerged was the combination of both formal and informal transfer of knowledge tactics. Combining both formal and informal tactics empowered individuals to make decisions at any time as they were not confined to structured meetings once a month. The following data revealed this point:

> We emailed lots our committee, but we also met every two weeks and sometimes every week and just lots of … our meetings were two hours long and we always filled them so there was always that transfer of knowledge that way too. Just by the talking to each other and of course some of us knew each other in other things that we were involved in … that's right the conversations were like how are you doing with yours and so you know it was just back and forth and it's a small enough place that you ran into each other outside the meetings so there was times we were on the phone to each other (P4).

> … we relied on that more than anything and we did use just a kitchen table approach we didn't try and structure it so that were minutes although the whole organization wanted us to … in our division it was easier for us to casually talk about each issues as everybody had input. It's pretty important to remember that if you are looking at it from this standpoint it all has to be open there can't be any barriers otherwise you will miss because everyone has perspective and everyone comes from a different part of the environment (P27).

> … no typically we would get a problem to solve and we would do it as a group and well we do have a bit of a hierarchy with the leaders, rarely if ever was it ever a single person making a decision. It was a group effort everybody nodding their head and everybody was open to object or suggest alternatives. Otherwise we were given policies and procedures from other from each chapter or topics such as materials management, or security, or logistics and we would customize them. The rep would customize them and then talk about them to the rest of the group and again people could comment with regards to making changes or improvements. You know a lot of our big venue operations manual was completed for us but we customized it for our own venue and for our own team structure (P23).

Customizing the socialization process particularly through the implementation of formal and informal communication strategies met the needs and desires of the group members and enabled a continuous the transfer of knowledge. Group members were provided the opportunity to develop trusting relationships in both the formal and informal settings, which enhanced group cohesion through the socialization processes engaged by the group members.

Division and committee meetings covered a variety of old and new issues. By customizing the group communication process, all group members were able to apply their tacit knowledge to the various situations. As a group member's comfort levels increased, s/he was able to actively participate in brainstorm sessions. While brainstorming took place, each individual combined his/her knowledge with other group members. This enabled the group members to align their vision and internalize the direction that the group was going to take. For example:

> I think we have got a wonderful committee and probably the best of all of them you know, we just all get along really well … all of our meetings where everybody is throwing stuff out and some would throw stuff back and others let you know that you always had their support of the other people there even if they weren't necessarily giving you a specific thing you always knew you had their support behind you when you were doing something. Like when it came to the production of medals I went to them with the design and … you know … what do you think and that kind of feedback from the group was really important. Because it made you feel that if everybody else in the group thought it was ok then it made you feel ok them we can run with it (P4).

> We certainly had lots of opportunity to brainstorm ideas and come together and you know we got to know each other and what are skills were and we had quite a diverse range of skills. We had mainly volunteers plus then later on staff people came on to work with our division too. So yeah I think we had that opportunity for sure (P20).

> But every meeting we would go through our divisional committees and work through them and where are you stumbling what is the problem how can we collectively solve it what is a good solution? (P27).

The experiences of P4 and P20 demonstrate how two different groups were able to function efficiently and effectively at the group level by engaging all members and empowering them to make key decisions. By enabling the group members to participate in the decision-making process, each person began to integrate her/his ideas and knowledge at the same time, once again maintaining group cohesion through the socialization process.

Summary of Factors Enabling Knowledge Transfer

This section of the findings addressed research question one, what factors enable knowledge transfer processes outlined in the model and how the factors influenced the model. At both the individual and group levels factors enabled the transfer of knowledge as presented in the model (See Figure 1). Specifically at the individual level, experience of those recruited enabled knowledge transfer in the Host Society. The experience of the individuals came from education, work, and previous Games experience. At the group level the enabling factors to knowledge transfer included group cohesion and customized socialization. The empowerment of group members to make decisions assisted the development of group cohesion. Additionally entrusting the group leaders to recruit their group members many of whom they had previous relationships with, enhanced the trust within the group. Finally, collaboration by all group members solidified group relations leading to a very cohesive unit. Group leaders instituted a customized socialization process to facilitate knowledge transfer. Working together as a group to form a shared vision, through both formal and informal means of communication occurred through a variety of socialization activities. One of the most important socialization forums was the

interdependency meetings. These formal meetings provided a very structured format to transfer knowledge among all divisions in the Host Society.

Barriers to the Proposed Transfer of Knowledge Process

The findings previously discussed from this case study of the 2007 CWGHS indicated several factors that enabled knowledge transfer at the individual and group levels of the proposed TOK model. However, a substantial amount of data also revealed several barriers that impeded various TOK processes outlined in the proposed transfer of knowledge model. These barriers address the second research question, what factors inhibit the knowledge transfer processes outlined in the model and how the factors influence the model. The following section presents the barriers that existed at the individual and group levels in the transfer of knowledge model. Barriers in this case study have been segmented into three themes; structural, systemic, and cultural.

Structural Barriers

The 2007 CWGHS was comprised of a multitude of groups each with their own distinct function. The thirteen different divisions had several smaller groups within the confounds of the division. For example, in the Logistics Division the smaller groups consisted of committees for transportation, warehouse & cartage, signage & fabrication, and security. Within each of these groups there were also countless other sub-committees with varying responsibilities. For example, the Transportation group had sub-committees for the VIP Motor Pool, Airport Transfers, and Athletes. In other divisions, the number of committees or groups ranged from four (Language Services) to twenty (Marketing), and

of course there were eight venues to stage the sport and culture events. Given this organizational complexity, the most prevalent barrier related to structure was dis-integration.

Separate from the divisions and their internal sub-committees, another set of groups emerged which were the Venue Teams (v-teams). A v-team is a group of individuals recruited from various committees and divisions who plan and execute all aspects relating to a specific venue for the 2007 CWG. These groups existed at each of the venues that hosted both sporting and non-sporting events during the 2007 CWG. For example, Takini Arena was used to host both the men's and women's hockey and the ringette competitions. The v-team for this venue had a leader who reported directly to the Venues Division VP. The remaining group members came from sub-committees in other division's such as Security (Logistics Division), VIP Services (Sponsorship Division) committee, Medal Presentations (Culture, Ceremonies and Protocol), Food Services (Athlete Services), Translating (Language Services), and Volunteer Assignment (Volunteer Division). Before a v-team meeting was scheduled, each division and subsequently its sub-committees held its monthly meeting. This initiated the feed forward knowledge transfer process, as this ensured that any new knowledge from each division and division sub-committee was transferred to the v-teams. This process was then repeated in a feedback format as decisions that were made by a v-team were feed forward across to the Venues division. The Venues VP/AVPs then presented the feedback at the management committee meetings which was transferred down through the feed forward process to the other divisions and their sub-committees.

Dis-integration. Due to the large amount of independent groups and the number of workforce personnel that belong to the groups, structural barriers were very difficult to overcome. Initially dis-integration of these divisions and sub-committees began because the groups were functioning in isolation from other divisions and sub-committees, as demonstrated by the following data:

> … in effect they had a concept of operations … and then I said well where are your policies to support your concept of operations … they said we didn't want to do policies so they wrote out a book of procedures which didn't really suit each venue … it suited some operations but like I said that doesn't mean that it would fly with the Venue Team … so I personally feel they got to this level and didn't feel that they got any further … (P1).

> I think it added to your abilities to do your job every week to sit around that table … and again you could have Transportation making a decision in isolation that impacted myself on the Security or even on the policing role … so having that opportunity to sit there and say and discuss the limitations my area of the Security was experiencing and not have them reply or address their issues … it was important to be able to sit down and have those conversations … and we did and it was very successful to make sure those decisions weren't made in isolation … (P25).

> While the Medical unit participated actively in the planning stages of the Division they operated quite independently of the other units leading up and during the Games (D5).

> Aligning staff more closely to the Venue Management Model may work well. We aligned our human resources more closely to functions/committees in the end and some V-Team leaders felt a little abandoned in the last few months when workloads increased significantly (D12).

Dis-integration of the various divisions and its sub-committees as previously mentioned was a result of the absence of one central location to house all the networking of knowledge pertaining to the planning of the 2007 CWG. The physical distance that existed between divisions and even the committees within a division caused breakdowns in knowledge transfer. Specific groups such as v-teams were often excluded from

decisions when groups were functioning in isolation. The barrier to knowledge transfer when groups were functioning in isolation occurred when they had to stop planning or reset their planning process.

Silo planning. A second aspect of structural barriers that also related to disintegration is silo planning. Data indicated silo planning resulted from the domino effect of groups functioning in isolation. When divisions and sub-committees were working in isolation from their division and the division seperates itself from the other divisions, knowledge transfer stops. Although the opportunities for integration with various groups existed, by not participating in knowledge transfer forums work is duplicated. In voluntary organizations time is a precious commodity and duplicating work by operating in silos will impact organizational capacity.

Silo planning significantly impacts the process outlined in the proposed transfer of knowledge model. In this case study, silo planning refers to one division or sub-committee working on a certain task such as a newsletter, and not communicating this with any other division or sub-committee. The silo effect results from a second division or sub-committee also working on the newsletter at the same time. This creates a barrier as two sub-committees in one division (or a sub-committee from two separate divisions) could be working on the same task simultaneously which is an inefficient use of valuable time. The following are examples of the impact of silo planning upon TOK in the 2007 CWGHS:

> … the Venue Team kind of takes a standard set of principles from each Division and say Sponsorship came up with a policy that suited them … it was up to management to say no that's fine in your Division but that doesn't take into

consideration any inter-dependencies … so silo planning by that Division didn't always work … (P1).

… well I look at this as very hard for me to say because its clearly defined because [Division] its not the case … it got to the Group level and then they just kept it in their silo and they weren't willing to get to this stage … they didn't even want to do policies … (P1).

… Whether that would be the venue emergency plan, or the ticketing plan or the spectator services plan, so each chapter was aligned to a division so the division would go off and plan it with no consideration of … total silo planning and then none of them got to ratify as a group and say hang on, that doesn't make sense or that doesn't work … (P1).

… having said that I want to just make another comment around this [Knowledge Transfer Process]. It's a great ideal in reality we had 13-12 divisions and the silo effect within a host society cannot be overstated its huge (P3).

... They [Committees] weren't communicating with the Venues Teams and they weren't really communicating with staff. There is no ultimate accountability and coming from the private corporation world it doesn't work that way somebody's job is on the line at some point. So when you have that kind of accountability it gives you clear direction of I am accountable for this and you are accountable for that … so as much as I … you know we always don't want silos. There is a certain amount of silos that are necessary for people to be efficient. I found everybody was doing everybody else's job and nobody was accountable for any job (P5).

… ah that was the most difficult part … we were constantly struggling with silos and I think people probably talked about silos a whole lot. No matter what we did we tried integration we tried integrating meetings … we tried a weekend full of meetings and break out groups it always seemed to go back to we are doing this we are focused on this … and lets go along and yes there are some issues but we will deal with them on a one off rather then trying to figure it all out. The entire organization was too large for any one group to figure out where they fit all the time … (P27).

Meeting Expectations in Regards to Marketing:
There were numerous instances where the understanding and expectations of the two Divisions were not understood or communicated. This gave rise to damaged egos, silo building and unrealized revenues - particularly in the Friends of the Games local sponsorship initiative (D3)

Information needs to be centralized. It is easy to get silos and then it becomes arduous to locate the information you are looking for. (D8)

Silos fostered breakdowns in the TOK process and as a volunteer organization it was not economically feasible for the 2007 CWGHS to build or rent an office space large enough to accommodate all thirteen divisions and the numerous sub-committees. Unfortunately this presented structural barriers for the Host Society as divisions and sub-committees would meet at different times and locations which caused disintegration from other divisions and sub-committees. Divisions and sub-committees would create policies, make decisions, and share knowledge within their own divisions or sub-committees but they failed to see the "big picture" of the entire Games operations and recognize the other divisions or sub-committees that were impacted by their decisions. The lack of accountability for decisions contributed to the silo nature of the Host Society. The transfer of knowledge process had to stop and reset every time a division or sub-committee uncovered knowledge that impacted their planning that had not been previously communicated to them.

Systemic Barriers

The 2007 CWGHS was awarded the Games four years prior to the start of the event, which was the earliest a Host Society had been notified in Canada Games bid history. Unfortunately the additional time did not prevent problems for the 2007 CWGHS as they encountered four systemic barriers throughout the entire organization: workforce recruitment, workforce continuity, communication breakdown, and finally understanding the Venue Management Model (VMM). These barriers emerged from the data indicating that the systemic barriers significantly impacted the decisions or lack of decisions that were made and communicated through the entire Host Society.

Workforce Recruitment. When engaging in a large project such as the 2007 Canada Winter Games, it is imperative to recruit a workforce that is competent. Workforce members are required to have the prescribed experience, skills and connections to provide the organizing group the best opportunity to succeed. The 2007 CWGHS organizers faced difficulties in relation to workforce competence as budgetary restrictions impacted the skill level of the staff they were able to hire. For example:

> … and we were hiring at a time when our economy was booming we are certainly on the upswing and people had choices and I had a number of very capable local candidates but the salary just wasn't enough to keep them (P3).

> So with the skill set that's required the salaries that are offered don't allow you to attract the skill set that you need, not in my industry. So potentially sport people it seems are prepared to work for far less money, communications and marketing people don't because the industry pays well and if you are good at what you do, you can get a job anywhere. So I think that was a challenge … (P5).

> What I have seen and again I am not around council a lot … great kids, great to work with, not a tonne of years of experience and they are working at again … well … the pay levels I've seen … probably not a great pay level job (P5).

> Canada Games like they don't pay much. I just saw [Lydia] go by, she is a resource and with the Canada Games pay … she would never work here. She was seconded from [the Yukon Territory Government (YTG)] so we have got her skill and ability and that's great. Our IT staff manager is the same way there is no way he would take the factor 3 pay cut to work at Canada Games … its like an exciting project and everything but there is no way you can hire people for that particularly in [Information Technology (IT)]. One of the reasons we abandoned the software system they had for us is we can't afford for programmers … we can't find programmers for $20,000 a year, you can't hire a programmer for that … so that's just not going to happen (P16).

> Consider [Information Technology (IT)] staffing early on. We had a great deal of difficulty recruiting IT staff because the wages of the coordinator fit into very low paying bracket relative to what's available in the open market (especially for IT) (D8).

> The security budget for the Games ($151,100.00) was adequate for the Operations & Management portion and in fact had some slippage. What was lacking was the

> money for paid security. This was budgeted for in a responsible fashion however bids came in well over the budget. This may not be an issue in a larger center with more security companies and a larger work force. In addition allowances should be made for unplanned paid security needed during the Games and some additional funds should be set aside to address these needs should they arise (D9).

Whitehorse was in an economic upswing when it was awarded the Canada Games. As a result of that there were many employment options in the community. Many of the individuals in the community who had the skill set the Host Society was looking for secured employment that offered more competitive salaries. The 2007 Canada Games salaries were not competitive with larger markets such as Toronto or Vancouver so it was difficult to recruit individuals from outside the community. A number of divisions hired individuals with limited or no experience because they were willing to accept the salary. This created problems with transferring knowledge as these individuals did not have the intuition or the ability to interpret and integrate ideas from all group members.

The Host Society members attempted to recruit as many individuals (Senior level planning volunteers – VP and AVPs) from the bid committee as they could because they already had an increased amount of knowledge pertaining to the Games in Whitehorse and the goals and objectives of hosting the Games. Shortly after the senior planning level volunteers were recruited the Host Society began to hire the senior level staff positions for each division. Once all of the senior level management positions were filled, the division VPs, AVP's and senior staff began to recruit the planning level volunteers. The planning level volunteers were charged with the responsibility of chairing a committee to plan specific aspects within a division. For example, the Athlete Services Division required a planning volunteer to chair the Accommodation Committee. In the 2007

CWGHS systemic barriers impacted the planning process with issues pertaining to recruitment and assignment:

> … yeah the charter was what they needed to do and I think at that point in time people wanted to get their hands dirty but it was too early. So they had a hard time being general about what they needed to do and creating timelines for it because it was so far away for them. So I think some of them started to get a little upset, more of this stuff … more of this paper start stuff … (P2).

> So for the growth that they want, I think that it's probably an understaffed group and tends to be an after thought. The problem is that it actually functions a lot earlier then everybody else. So that was the other thing that I found the functional areas like Venues or Sport or Logistics start two years out and they have two years to plan then the event happens. Marketing, Merchandise, Sales and Communication start two years out and are functioning at full tilt two years out. They don't staff that way … they staff following the sport mode (P5).

> Well we were just the opposite we didn't engage 18 months out we started to get serious 12 months out. We really got going four-six months out and that wasn't early enough. So there is a balance between when is the right time to get engaged and I feel that somewhere in that 8-10 months is about right. Some of the Venue Teams I saw got stagnant early in the Games ... Others where we didn't bring members to the table early enough we found that we could have we didn't have enough background to really get rolling quickly enough right … And there is the risk of starting it too early as I said but what's worse I guess is the risk of starting to late. And in some of the venues we didn't get people in place until quite late in the games and as a result we ran out of time at which we would properly share information with them (P6).

> … it was frustrating not having policy on time and also some of the[Venue Team] reps that weren't appointed which we didn't have any control over that didn't come on until way late in the schedule. Some of these things that all inter-locked had a tremendous effect on our ability to move ahead so it was frustrating at times (P19).

> Venue Team: We did not begin the Village Venue team process early enough, and we did not have adequate representation from all of the representative functional areas (FAs). This caused some concerns nearer Games-time, as there were still some areas for which we did not have a fully developed and integrated plan of action (e.g.: parking, materials management, others). We began the Venue Team meetings one year out, and in some cases had no FA representation until two months out (D5).

Recruiting division and sub-committee members too early caused the individuals to become disengaged for a period of time. Barriers also emerged when divisions and sub-committees did not recruit their personnel in sufficient time. Division leaders were unaware of the ripple effect of poorly timed recruitment upon other divisions and v-teams. The delay in securing personnel to required positions caused many resets in the transfer of knowledge process as the divisions, sub-committees and v-teams had to integrate the newly recruited individuals and ensure that all knowledge was transferred so that the entire group had the same level of explicit knowledge.

Another interesting aspect of workforce recruitment barriers was the process after recruitment of assigning individuals to key positions in the Host Society such as v-teams. This barrier is extremely noteworthy because as the example by P6 states, his inability to recognize the importance of assigning volunteers to the v-teams in sufficient time severely impacted the transfer of knowledge process. The ripple effect of not assigning volunteers to the v-teams in sufficient time caused barriers for the v-teams. In temporary organizations this is a significant problem as timing is extremely crucial as these types of organizations only have one opportunity to run their event, project or execute their purpose.

Workforce Continuity. A second systemic barrier, workforce continuity, relates to the timing of recruitment for the workforce and workforce turnover. The combination of these two workforce issues caused breakdowns and resets in the transfer of knowledge process. At the individual level, recruiting personnel at the appropriate time is extremely important to be able to complete the required tasks of the division or committees:

> … recruitment … we lost our Chair and she kept wanting to come back and a Chair that kind of ebbed and flowed it was very difficult … (P3)
>
> … so I actually moved the staffing plan up, they planned the staffing similar to Sport where you would have people coming anywhere from three months to six months to maybe a year out … this division needs to be at full tilt from day one if you are running a website you need a website staff, if you are running publications and newsletter, you need staff to run it … (P5).
>
> Division Games time volunteer recruitment was an area that was left to the last minute for all our program areas. This is a key area that must be driven from the beginning to ensure we have the support we require. National Artist Program is a program that is a good example especially if there isn't a program where we can draw skilled volunteers from … (D2).
>
> A senior staff member recognized that security needed to be improved and that Volunteer Services needed more people as they could not re-deploy any more of their current volunteers. Recommended to revisit security overall to see if people can be reassigned (OB7).
>
> … didn't invest enough time in staffing plan with the General Manager (OB11).
>
> One division stated that the Vice President and Assistant Vice President should be in place 10 months before staff are hired (OB11).

The timing for recruiting individuals is different for every division and committee in the Host Society; however, the staffing plan for recruitment should be included in the bid to host the Games. A significant barrier arose when there were no individuals in place to bring tacit knowledge that could be shared with the other division or committee members. Without the individuals in place the work could not be completed and the transfer of knowledge process could not begin. When individuals are recruited to join the Host Society they need to be 100% engaged in their roles which can be a problem if group leaders neglect to recruit volunteers at the onset of the divisional planning stages when appropriate skills-based assignments could be completed. When staff and volunteers were put in positions that did not resonate with their goals and motivation for joining the Host Society barriers to knowledge transfer emerged. The individuals became dis-engaged and

often resigned which meant the group leaders had to reset the transfer of knowledge process each time a new staff or volunteer joined the division.

Venue teams represented one of the largest contingencies of volunteers for the 2007 CWGHS. These groups faced several barriers to the transfer of knowledge process because of difficulties in recruiting all the team members. On each venue team a representative was required from each of the 13 divisions in the Host Society and in many cases there would be more than one representative from each division. For example the Culture, Ceremonies and Protocol Division had a Medal Ceremony Representative as well as a Culture Representative for each of the Traditional Native Games at the 2007 Canada Winter Games. The following examples highlight the recruitment difficulties faced by venue teams and committees:

> ... We tried several times to organize our V-Team recruitment, training and engagement but could not seem to find a model that was working. Understanding the role of V-Team reps and finding a communications environment that had everybody 'reading off the same page' was an ongoing challenge ... V-Team Reps who had not kept aware of all aspects of their responsibilities dropped out or were less engaged as times got crucial and more was asked of them (D3).

> ... the volunteer recruitment process can be complicated and a defined plan should be in place before recruiting begins ... try to be the first committee to start recruitment so you get the team you are looking for (D3).

> Very important during recruitment to make it clear ... the demands and commitment level required by V-Team reps during Games Time. Many found that it was more than they originally expected (D4).

> Recruitment and scheduling of doping control chaperones was the biggest challenge faced during Games time ... RECOMMENDATION: recruit volunteers with flexible schedules who are not volunteering in other capacities and are not restricted by other responsibilities (work, family, etc). Failing that, be ready to recruit volunteers on-site, who meet the CCES requirements, are already accredited for that venue and can provide chaperone services for the time required (we had to do this on two occasions and train them just prior to the start of the event) (D6).

In fact, venue team recruitment was an issue for several divisions and it was exceptionally difficult because the majority of people did not understand the role of a venue team representative. As a result of not understanding the scope of the responsibilities recruiting all venue team members at the same time was impossible. Member assignments continued for some v-teams until six weeks prior to the Games which caused several resets in the TOK process. After new members were trained and finally understood what their responsibilities, they would resign which again caused a domino effect of having to reset the TOK process for their replacement. It is important to define venue team roles during the recruitment phase because unrealistic expectations lead to resignations.

The 2007 CWGHS utilized a software system to facilitate volunteer registration. Unfortunately, system difficulties inhibited as opposed to enhanced recruitment and assignment as the following quotes indicate:

> We abandoned our software system at the last moment, which did not allow us to fully understand the capabilities of our software choice prior to launch. Having a good working knowledge of your software prior to recruitment launch allows you to filter out the "not needed" information, as well as understanding how information that can be filtered and utilized for assignment purposes …Prepare hard copy registration forms as well as online forms for recruitment launch … 2007 attempted to push everything to online registration, which deterred some potential volunteers from getting involved ... (D7).

Data Management System

1. At approximately 1 month prior to recruitment launch, 2007 abandoned the Canada Games software as it was outdated and not able to meet the needs of the Host Society and the Volunteer Division. 2007 used a data management system called Viewpoint provided by Viewteam Technologies, accessed by remote server …
4. Bilingual was a major issue. System was not set up to be a bilingual site and made lots of work for staff and confusion for people registering (as there were French/English in the same textboxes) …

6. Batch Placement Reports (used to actually preview and prescreen volunteers for assignment) were messy and difficult to understand. Limited on what criteria could used to filter information.
7. It seemed that every time we wanted to run a report - the response was "it cannot be done".
8. Very little training involved with software system. When asking questions of "what could be done", the response was "what do you want to do?"
9. Not a user-friendly system, which resulted in small quantities of people actually having knowledge and access to the system (based on training as well as access security).
10. Lots of either misleading or misinterpreted capabilities during early stages of planning left us frustrated at the end. Could not do what initially thought we could, with the information collected as well as for assignment and accreditation purposes.
11. Although blamed on user error, there were many "mishaps: that occurred throughout the assignment process (deleted registrants, reports would not pick up all information, unassigned registrants, etc) that could not be explained or pinpointed (D7).

> Work on developing a larger recruitment committee that involves vast social networks. The more support you have in this area the more successful recruitment goes. 2007 Recruitment Committee Chairs (2) were not the perfect fit and shouldered the entire recruitment process on their shoulders. One chair disengaged early on and the other wanted the "right people for the job", which ended up being one person. Six months out this chair dropped off as well and the last six months of recruitment leading into Games-time was done by staff (D7).

> Volunteer recruitment and scheduling at the Venue level by the Security Reps. This was problematic and time consuming for the Security reps and in the future I would re structure this and add more support to the Security reps to help with this function (D9).

System changeover and errors meant the TOK process was either delayed, reset, or stopped altogether. The difficulties with the volunteer recruitment software emphasized the importance of having individuals within each division responsible for recruitment. Although the formal recruitment process for the 2007 CWGHS involved the software program, informal recruitment processes such as contacting friends and family did not.

When individuals do not have the required skills, experience and knowledge for their specific position, it can become very frustrating for their group leaders. If members

do not understand the technicalities of a position, such as language or computer programs, they are unable to participate in the feed forward learning process. They will be unable to interpret and integrate knowledge which will continue to add to their personal frustration and create a barrier for the transfer of knowledge process at the group level. For many individuals the feelings of frustration will be overwhelming and they will resign from the Host Society. When turnover occurred in this case study the transfer of knowledge stopped and was reset when the individual was replaced.

Every organization faces turnover on a weekly, monthly and sometimes even daily basis. The 2007 CWGHS was no exception as turnover impacted every division at different periods of the planning and operational phases of the games. Sustaining the workforce was a constant issue for the 2007 CWGHS and this impacted both the planning volunteers and the operational volunteers. Constantly replacing the workforce impacted the length of time that it took for the capacity of the organization to increase. The following examples demonstrate a variety of turnover examples:

> … we actually we had the unfortunate experience of losing two volunteers with about a year and a half to go ... They bailed and mostly because of work commitments and they weren't able to come to meetings and we were just getting further and further behind. So I actually had the uncomfortable job of saying we really want you to volunteer we really need you but we need you to come to meetings and we need a consistent approach to this because we are getting further and further behind. So both of them chose to resign their volunteer positions and then we were left with nobody and then we did some scrounging around trying to find some key volunteers that we thought could do the jobs … unfortunately now in hindsight [Denise] said, I'll do it and that hasn't worked. Because she is so busy doing other things (P8).

> … Anyway what happened was one person that we worked with very closely we actually even brought her on board and gave her some instant command training that the RCMP was providing … and did this project and then she left the Games and someone else came on board and that just disappeared (P25).

> … they didn't understand the commitment it took to plan these Games and the

> attention to detail and the number of meetings and sitting down with volunteers. It just takes longer with volunteers, and working with staff and understanding staff and the volunteer roles. So I lost both AVPs a year in … I just had to say you can't not come to meetings, you can't not work with your volunteer committees … they just said this is way more then what we thought we were signing up for (P28).

> oh yeah and one chair who was a high profile community member, business person and I had to fire him … I tried to do it nicely, we know you are busy, we know you have a lot on your platter but we really need you at the meetings we need you to lead the team … he built a team around him who had worked with him a long time … so when I basically told him that he had to go, we lost the whole committee with him they all resigned en masse (P28).

> The decision to narrow the scope of the Committee resulted in the resignations of several key members who had signed on as Games' planning volunteers specifically to work on tourism marketing related activities (D3).

The time commitment required by planning volunteers for the 2007 CWGHS was quite extensive. When the individuals were recruited as previously cited, they often were not aware of the enormous time commitment and many had a difficult time balancing family, work, and their volunteer commitment to the Host Society. When individuals could not maintain balance and would resign the transfer of knowledge process was stopped as efforts had to be switched back to recruiting new members.

The example provided by D3 involved a time when one committee worked on areas that did not pertain to the scope of its responsibilities. When the division leaders narrowed the scope of the committee's projects, members resigned. Again the resignations caused a stoppage in the TOK process as the division leaders expended energy to recruit replacement volunteers. Additional data demonstrating personnel turnover in the 2007 Host Society are listed below:

> … This was a challenging period for the Division that ultimately saw the resignation of two AVPs and two Committee Chairs due to personal and work commitments that precluded active participation at the level required (D3).

> This project initially had two co-chairs who both resigned approximately seven months prior to the Games. The Medical Coordinator took on these responsibilities with help from the Division … It would have been more efficient to find another Support Services Chair, however we did not have many options at that time (D6).
>
> As six months out approached, it was hard to keep Call Centre volunteers motivated and busy, resulting in high turnover, and the call centre program was shut down … Closure of the Call Centre was partially due to the time commitment of staff, not having found the "right" volunteers for the positions … (D7).
>
> Plan for turn-over, this happened at all levels of the organization, but just to cite the IT Division as an example, we had four chairs and co-chairs resign, all for different reasons (e.g. work conflicts, person health reasons, disagreed with our approach to IT) (D8).
>
> The Volunteer Project Manager was the only volunteer that has been a member of the Division from the beginning ie. February 2004. High turnover in the VP and AVP positions created difficult situations at times. There was no direction to give the division or the staff. The VPM was sometimes the only member of the division (D10).

Volunteers that were unaware of the commitments required by their specific division and committees often resigned as personal and/or work commitments were more important to them. Resignations of individuals who were in divisional leadership positions such as the Vice President or Assistant Vice President caused lengthy stops in the TOK process. Recruiting individuals to replace these positions required selective recruitment procedures which required time. In the absence of these leaders committees within the division were not engaged in the TOK process because key members of the process were absent. These stoppages in the transfer of knowledge significantly impacted the planning process.

Communication Breakdown. The 2007 CGWHS is a very complex organization as previously mentioned. With so many individuals involved in one organization

communication was essential to ensure that there were no breakdowns in the transfer of knowledge process. The Host Society experienced barriers to communication and had significant problems in all of the various types of groups when it came to communication. In an organization as large as this one, electronic forms of communication such as email were utilized in hopes of being an efficient mechanism for sharing information.

Information technology can be extremely beneficial when attempting to share information among a large group of people in a short amount of time. As the Games began it was imperative that the Host Society had an efficient and effective means of transferring knowledge to individuals and groups. The Host Society members chose to communicate and transfer knowledge through email and they also hosted interdependency meetings to increase cross-divisional knowledge awareness. The following are examples of communication barriers:

> A great example we had shifting from our planning process right up to our deployment to venues was lots of people, the community had lots of people using email accounts, but a lot of them had volunteers and the email accounts they were using were their work email accounts. Starting day one of the Games a lot of people are away from work so suddenly they have no more access to those email accounts any more (P16).

> There is a lot of overlap and connection there so communication broke down at times … we needed to help each other by cc'ing each other this is what I've done with this person … that was really, really important there was a bit of a challenge in that area (P21).

> … I would say the one thing we should have spent more time within the logisticis group is inter-dependency meetings very critical. I think we only had two for the overall for all the divisions. Difficult to do because you are bringing in 200-300 people but oh inter-dependencies key, key key (P22).

> Like most organizations, stove pipes exist. Each division is focused on their specific areas of responsibility. Again, this involves developing effective communication and awareness of the benefits of effective communication amongst the divisions. I would suggest more focus be placed on these types of interactive meetings at various levels within each division associated with

> interdependencies and working relationships, mainly at the committee level (D4).
>
> Communications among teams (Divisions, Committee, sub-Committees) needs to operate on the basis of interdependencies. Know your interdependencies and seriously consider the ripple effects to others when changes are contemplated. Notify those that may be affected by your decisions whenever possible (D9).

The Host Society had to deal with a significant barrier to communication when the volunteers that were using work email accounts no longer had access. Once the Games began the volunteers were not at their place of employment so there was a breakdown in the TOK process as any knowledge that was being transferred via email was not received. That loss of communication was a detriment to the knowledge transfer process as individuals were left out of the information loop because of inaccessible technology.

Communication barriers also existed when members of divisions or sub-committees did not meet on a regular basis. Communication broke down because individual group members were completing tasks or making progress on tasks and they were not communicating that to other group members. In relation to the transfer of knowledge process when individual members of a group were not receiving this information, this created "resets" in the process. Groups would have to backtrack and make adjustments when they received the newly acquired information. In order for groups to engage in the feed forward process of the model, it was imperative that the individuals within the group conveyed their progress to their leader.

Understanding the Venue Management Model. The 2007 CWGHS decided to implement the venue management model (VMM) to organize the planning process. Choosing to implement this model created a significant amount of problems for the Host Society. The VMM is very comprehensive and takes an extensive amount of time to fully

understand. Many of the key planning volunteers such as the VP's and senior staff members did not understand their role and the role of their division within the venue management model. Therefore they decided within the VMM to disengage from the process and follow their own planning process instead of taking more time to fully understand their role. The lack of understanding of the VMM created numerous problems for the Host Society.

The Host Society members, in conjunction with the Canada Games Council, held a training session where they went over the intricate details of the venue management model. This training session occurred over a weekend and a significant amount of information was covered during that time period. Several individuals left the weekend training session not fully understanding the model and this impacted how they decided to organize their division.

> I think from my perspective if I had understood the venue management model much earlier on and quite frankly if we recruited people, volunteers, senior volunteers right from the beginning understanding the venue management model it would be very helpful. The host society decides in its wisdom that it takes on the venue management model then the people who are in the lead positions need to understand that at the operational level. We do have divisions that did not buy in and to this day it continues to be a challenge (P3).

> And the thing that we really didn't and I personally will take responsibility for this and one of the other committee chairs [Brett] admitted as well, we didn't really understand the venue management model early in the Games… (P6).

> The Venue Team model was not very successful in the planning stages of the Games, mainly due to lack of buy-in from a number of key divisions. This led to lack of information and misinformation being spread to v-teams which complicated the planning process and led to a lot of wasted time and effort (D7).

Barriers were created as a result of the senior and mid level managers not fully understanding their individual role. This misunderstanding extended further as the senior and mid level managers did not understand how the divisions were supposed to interact

with one another to transfer knowledge. These barriers impacted communication which caused a stop in the transfer of knowledge process because the divisions and committees who were affected by the information were not informed.

The Host Society was divided into 13 different divisions and each division had a timeline based on when planning had to start and what information was needed. This created several problems as the divisions were all at different levels of planning and often would not have the information that another division needed to move forward:

> So like I say we were in games time all the time we were in front of people all the time telling them they need to make decisions you need to tell me how many ticket takers you need at this venue before you even know what the heck I'm doing here but I need to know do you need ticket takers. People weren't thinking at that level they were thinking oh yeah we got ticket takers, next issue. Wait, how many what are your shifts? Where are they going to be positioned? We're down in the detail when they are way up there and that caused a certain amount of angst (P3).

> So there was that gap when we had no one and then that gap was further extended before we got comfortable with each other and our role. And that is part of why we failed and I will use the word failed it might be a little strong but why we failed in the venue team is because had we had stronger staff representation who understood it [venue management model] better earlier, we might have got onboard a lot quicker (P6).

> The experiences of the VTeam Reps differed by venues. Different Venue Teams took different approaches to organization and planning, in some cases our IT reps didn't feel there time was well spent - some venue team meetings would focus for hours on sport operations and then have 3 minutes at the end for IT. This probably correctly reflected overall priorities for the VTeams, but was not an effective use of our people's time. We lost at least one VTeam Rep due to this (D8).

The Host Society executive Committee and the Canada Games Council unfortunately did not realize that the initial venue management model (VMM) training session was not very successful. As a result of senior staff and mid level managers not fully understanding their individual role and how all divisions were supposed to interact with one another,

barriers were created. Some divisions did not engage into the VMM and right up to Games time that continued to create breakdowns in the TOK process. The lack of understanding caused other divisions TOK process to stop as they had to wait for knowledge to be transferred from other divisions.

Cultural Barriers

The individuals who belong to any organization, group or team are often recruited as a result of their experiences, skills and knowledge. However, the experience, skills and knowledge that the individuals highlight on their resumes or application forms do not provide employers with adequate information to speculate how they will interact with other personnel. The findings from this case study indicated that there were two cultural barriers involving the individuals recruited for the Host Society and these barriers impacted the groups and committees. The two specific barriers that emerged are workforce relations between volunteers and staff and the lack of socialization. Data will be presented to highlight the intricate cultural barriers the 2007 CWGHS had to deal with.

Workforce Relations between Volunteers and Staff. The barrier with the most fundamental impact on the TOK of the entire Host Society was workforce relations, between the volunteers and staff of the 2007 CWGHS. Because these two groups were unable to cooperate and work with each other, there was a breakdown in communication which impacted the transfer of knowledge process. As a result of the lack of communication between staff and volunteers each group functioned in isolation and did

not relay important information to each other. This created several setbacks and resets in the transfer of knowledge process.

As previously mentioned, the Host Society had both volunteers and staff working on the planning and operational aspects of the 2007 CWGHS. The Host Society was a volunteer run organization with minimal support from staff members (several hundred volunteers to less than 50 paid staff). The relationship between the volunteers and staff was infested with conflict and this created a barrier for the transfer of knowledge. The tension that existed between the volunteers and staff generated an antagonistic culture that led to structural silos and strained relationships.

The tension between the staff and volunteers existed within each level of the organization, including the senior planning level. The staff and volunteers did not feel comfortable with one another even at Games time and the uneasiness reinforced barriers between the two groups. The following examples demonstrated the tension that existed between volunteers and staff from the 2007 CWGHS:

> Yeah I think that the differentiation between staff and volunteers was very damaging … when I came here I couldn't believe that the term workforce wasn't used and I am not even talking about differentiation between planning and doing. I'm actually talking about now. If I want to go to a volunteer lounge and get a coke just because I am staff, I shouldn't be turned away … (P1).

> … every week or two weeks there was a management meeting … that's volunteer management. Senior managers were there, we weren't even allowed to sit at the table, we sat at the back of the room and we weren't allowed to speak. And you see it now at Games time, the senior staff who actually run this sit at the back of the room and we don't speak and volunteers who have day jobs and sometimes show up and sometimes don't, speak and run the Games. But they are functioning with extremely limited actual knowledge of what is going on (P5).

> … it's always communicated that these Games are run by volunteers and staff are here to serve the volunteers (P5).

> … I think with this organization there is a huge potential for problem … this split

> between staff and volunteers. We are almost directing staff and in a lot of cases we are directing staff. Like I just saw [Shawn] go through here he is one of our IT techs I have seen him a few times at venues and I have told him we got to get a printer in that room or whatever. But I am a volunteer and I have no business doing that, he does not report to me he reports to [Toby] who is our staff manager. And he doesn't report to us either, he reports to [Michael] and so it's weird (P16).

> ... one of the interesting things with the Games staff is that they are not from here ... where as we are and we will continue to live here so those volunteers, senior volunteers are people that we will deal with and see everyday ... so we are a little more aware of some of the dynamics there (P26).

> ... yeah and that's frankly where the conflict came because some people had thought when they signed on, that we are running the merchandise program. When they found out they were not going to run it, not do the planning which is the sexy part, going through the catalogues, making decisions that is the sexy part of the job ... they thought staff were basically going to get the grunt jobs. So when they found out they weren't doing that sexy part, making purchasing decisions and those sorts of things they lost interest. So they said do it on your own so it created some conflict (P28).

In the 2007 CWGHS, a "staff serve volunteers" culture existed. That mindset had a negative impact on individuals as staff felt uncomfortable in the same room as volunteers, threatened, and believed their opinions and knowledge were not required. If the term workforce had been utilized more frequently the discomfort may have been avoided. The underlying issue between the volunteers and staff is that they did not view their relationship as collaborative. Therefore in relation to the TOK process, at the group level volunteers and staff would not socialize with one another which would enable them to transfer knowledge and interpret new knowledge. This created a breakdown in the TOK process as relevant knowledge was not transferred to all division members.

Senior level management also exhibited examples of the dysfunctional relationship between volunteers and staff. At the senior level both volunteers and staff should work harmoniously in order to transfer knowledge rather than work as independent groups. The continuous deterioration between the leaders of both the

volunteers and staff increased the emotional strain when individuals worked together. As a result of the overall HS workforce tension the knowledge that volunteers held was not relayed in an environment conducive to knowledge transfer. Therefore the knowledge was not necessarily received in the proper context causing a breakdown in the TOK process.

In addition to staff-volunteer tension, another barrier challenge by the dysfunctional relationship between the volunteers and staff was a culture of "elitism" within the host society. Although the tension resulted in the exclusion of staff by volunteers, elitism caused the opposite to occur where staff acted exclusively. The following data demonstrate how are differences between staff and volunteers and the lack of staff respect for the individuals in the community of Whitehorse contributed to this culture:

> … because what happens when you don't do that [communicate] is what we ran into … which is I'd get down to the committee level and one of the staff would say P5 can you come and help … they are planning this we don't have any budget I don't know where it came from … and I would go to talk to them and they would say we don't have to listen to you we are the volunteers and we are running this so away we go … (P5).

> … But the sport manager is the manager … don't worry about our officials like what's going on. If there is a problem let me know but you are stepping into something that you don't know everything about. You are meeting with people and talking about stuff you don't know anything about. So manage the show and let each chair of whatever in your division deal with what they are doing and if we have a problem we'll go to ya. But it seemed like it was going in reverse. They were discussing a problem we didn't even know about and then saying oh by the way here is an answer … (P17).

> I think more of our problems came from the staff level who were very enthusiastic and very eager but they come in with maybe 2 or 3 months experience with another Games. I try to be very patient and I like working with young people and learning from young people but you know they have to understand that sometimes their attitude was that they were dealing with people that had no experience. So when you look around at our team there is a huge

> amount of experience in all kinds of different areas, you need to be prepared that you don't open your mouth before you realize that you don't really know who you are talking to. I am not just talking about me I am talking about all the people here that have huge experience. My guy in charge of security was a super-intendent in the RCMP and you can't just go around we have a major knowledge base (P19).
>
> ... the person [staff] concerned felt that her job was being taken away from her and that she was not valued, maturity plays into a lot of this ... (P21).
>
> While we happily welcomed staff at our volunteer lounge, recognizing their dedication and long hours, a number of our volunteers indicated that they did not appreciate the attitude of some staff that were assigned to help at the Village on the final departure day and complained about having to do so. We were all tired by that point and had all worked hard and these complaints did not help support volunteer morale or the team spirit we worked hard to build over the two weeks (D7).
>
> Staff are young and older volunteers are harder to manage (OB9).

At the inception of the Host Society, volunteers were responsible for Games planning and the initiation of the transfer of knowledge process. The staff members were recruited from three years prior to the Games up until a few weeks before the Games began. Consequently, the volunteers developed a sense of ownership over certain areas of the Games and did not feel they had to transfer knowledge to the staff. This breakdown in the TOK process caused several resets.

Finding an acceptable approach to dealing with maturity levels of individuals can be very tricky. The example that P19 dealt with – experienced RCMP super-intendent and in-experienced game staff not recognizing the experience - emphasizes how individuals were offended when other group members were unaware of previous experience. If the individuals become offended and feel like they are not valued, they will disengage from the socialization process creating a stoppage in the transfer of knowledge. When the transfer of knowledge process is stopped in one division it can impact another division that is waiting for information. The animosity that emerged between the staff and

volunteers created a variety of breakdowns in the TOK process which impacted the frequency of socialization opportunities for both groups to integrate knowledge and enhance the level of explicit knowledge of the entire Host Society.

Game organizers that use a volunteer approach where the staff members support the volunteers can often be faced with numerous challenges. For the 2007 CWGHS the challenge was the lack of clarification in regards to the roles and responsibilities for both the staff and volunteers. On one hand, the 2007 CWGHS had full time Games staff therefore during working hours they were focused on executing tasks related to the Games. On the other hand volunteers focused on their jobs or responsibilities outside of the Games and even though they dedicated a lot of time to the Games it was not as much as the Games staff.

Volunteers were only able to devote a majority of their time and energy to the Games after they had completed all of their outside obligations. This often left the staff harbouring feelings of resentment towards volunteers. The following examples identified the cultural issues that emerged due to the lack of clarification of the roles and responsibilities of both staff and volunteers and the different availability of the two groups:

> … I'm not convinced our division was all that successful in working with volunteers. You know in some cases they would take on more and they would drive it … and areas where we really thought why are we doing all that work when it can be done in a simpler way. In some cases you just let it go, it's a tough model because if staff step up too much … then it's so easy for them to just do it because the speed of things happening in the organization is so fast that you know if you offer to do something then no one is going to stop you (P3).

> … you had 450 planning volunteers bossing 30 staff around which just work wise wasn't feasible either. I mean the committees would say we are going to make a tourism fulfillment book and I would look at them and go ok who is going to do that. Well you guys [paid staff] will , well no there is five of us and we are

> running a website and we are doing this and we're doing this and so I think there is an unrealistic expectation there … (P5).
>
> … in the end perhaps only superficially. I think because things here were changing so quickly that as a volunteer not being here and on the ground all the time. Staff were required to make a lot of the decisions and actually probably do more of the management of the project then we thought that they were going to have to initially (P14).
>
> There were times when it became muddy particularly the volunteers versus staff role because when you have volunteers working with paid staff when is it their job and when is it my job to do things? I found that tricky at times, wasn't sure that I was always meeting the expectations of the paid staff people. And then there is the reverse are they meeting … you know … your expectations (P20).
>
> Committee/Staff delineation of duties:
> This is an area where we needed to communicate more effectively. Staff tended to take on many of the duties, as they were dedicated full time to the Games, while volunteers had work, family and other commitments. This worked fine until Games time drew near. And then the staff became overwhelmed with the amount of work and committee members felt unsure of how to help (D2).
>
> In general, the overall structure works well. However, several Divisions were handicapped by ineffective VPs and/or AVPs that were left in place for far too long. Whatever political considerations were made in filling some of these positions … must give way sooner rather than later to the needs of the organization. If someone at that level is not performing – ie not even attending their own Division meetings, let alone collaborative working sessions – they must be replaced. Failing to do so risks the loss of other volunteers in the Divisions, losses that are hard enough to bear when they are unavoidable, doubly so when avoidable (D11).

The workforce process that the 2007 CWGHS utilized was a volunteer process and as stated by P3 (above) it was a difficult process for staff and volunteers to feel comfortable with. P3 discussed the workload where a volunteer would take charge of a task and s/he would work in isolation when s/he had the time. He continued by stating that the staff were able to identify more efficient means of completing the task but as a result of the lack of clarification of workforce roles, the staff would not intervene. This particular issue critically impacted the TOK process because the length of time that it took the

volunteers to complete a task was significantly longer than if staff stepped in and offered suggestions. Increasing the length of time that it took to complete a task created a stoppage in the TOK process.

The role confusion also impacted how decisions were made during the planning phase (as stated by P5 above). Without clear roles and responsibilities both staff and volunteers were unsure if they were meeting their requirements. As a result of the build-up of tension and uneasiness about the separation of duties, volunteers did not feel comfortable assisting the staff members as Games time approached. This role confusion created a significant cultural barrier to the transfer of knowledge process during the final months prior to the start of the Games. This was an extremely important time period as last minute tasks emerged and the workload increased.

As a volunteer run organization, all of the planning volunteers were required to manage their full time jobs as well as their obligations to the Host Society. When the volunteers were unavailable to the divisions or committee due to their other commitments, staff members found it difficult to not step up too much. During the period prior to the Games the volunteers were comfortable with the staff members stepping in to take more of the workload. However as the relationship between the two groups deteriorated and the staff became overwhelmed with the workload closer to Games time, the volunteers were unsure how to work with the staff. This particular issue created a breakdown in the TOK process as the tasks that had to be completed continued to accumulate and the knowledge from those tasks that impacted other committees and divisions was not transferred. The TOK breakdowns throughout the Host Society significantly impeded the TOK process' ability to maintain forward momentum.

Lack of Socialization. The second aspect of cultural barriers for the 2007 CWGHS was the lack of socialization among and between divisions and sub-committees. Knowledge transfer occurs through both formal and informal forums where group members can socialize and integrate knowledge. The lack of socialization between divisions and sub-committees is due to the cultural barrier – workforce relations between staff and volunteers – and the silos that existed in the 2007 Host Society.

With volunteers and staff working on the Games, it was difficult to ensure that the socialization process was functioning. Volunteers don't have a copious amount of time to dedicate to the Games; therefore, socializing with staff and other volunteers was limited. If all Host Society members exchanged information through the socialization process, the transfer of knowledge process would not need to reset each time new information is uncovered. The Host Society had several examples where the lack of socialization impacted the TOK process:

> … we had some committees that met with no staff people, that would go and meet and we would have no idea what they were doing (P5).

> We had [Daniel] initially and he helped but he was also very busy, he did both [Division] and [Division]. Really the feedback that we got from him and he gave us some information of course no doubt about it … but most of the feedback we got from him was … well you guys know what you are doing you are doing fine. And that was based on those of us who had the experience with Arctic Winter Games and who had by summer of 05 had attended Regina as observers. We had had our own interpretation and our own intuition for instance of what was involved. But frankly we didn't have it all by a long shot (P6).

> I'd say it was more top down. We tried to involve from our perspective we tried to involve the committee in some of the planning and process development it was very difficult based on logistics of trying to get everybody together (P13).

> … and the AVP wasn't as connected as I thought, like really, doesn't have a deep understanding of what is going on, yet is in a position where the AVP is out there

> either having to report it at management committee meetings or to other people. And I felt that there were some big gaps there that so the AVP wasn't really as plugged in as I think that person could have been (P15).
>
> We had some issues sometimes where information sharing between Canada Games Council and the Sport Manager and it went between those two and I kept saying … hey we're the service for officials and you guys talking isn't helping us because we don't get that information. We may get it at some point … oh yeah we were talking and we made this decision and we would find that out a week later. So that information sharing sometimes was a detriment because we didn't get the information to know of the plan or what the change was until after the fact and we are not part of that decisions making and we could have told them the negatives … (P17).
>
> … the VP of our bid committee [Sarah] … was the VP to start and she is not a marketer and doesn't do marketing and really she just didn't have any passion for it and then she just got really busy at work. So they didn't have any staff they hadn't recruited any committees, they were the division that was six months behind in planning … I came into a division that had two volunteers three years out. They only had two sort of planning volunteers in place, that was it there was no, so literally had to recruit the entire division in volunteers (P28).

At the group level socialization was a key component to promote knowledge transfer amongst all key groups involved with a specific task. Unfortunately due to the independent hierarchical structure within each division, key group representatives (staff) often chose not to participate or were excluded from socialization activities. These key representatives were often the link between sub-committees and other divisions and their exclusion from socialization forums created barriers to knowledge transfer. Additionally, not all individuals were able to be present at socialization forums and the knowledge transfer process had to reset when the individuals rejoined their group.

An issue that all divisions faced was that each Senior Level Planning Volunteer (the VP's and AVP's) had a full time job. The obligations for a full time job can be very time consuming and when coupled with the responsibilities of leading a division for the Host Society, many VP's and AVP's could not find a way to balance the two. When this

occurred there was a breakdown in the socialization process which impacted the feed forward and feedback learning processes.

Summary of Key Findings for Barriers to the Transfer of Knowledge Process

This section of the findings identified the factors that inhibited knowledge transfer processes outlined in the model. Specifically, the findings that emerged from the data identified barriers to the Individual and Group level of the proposed transfer of knowledge process. The barriers were divided into three key themes: structural, systemic and cultural. The structural barriers discussed the impact of divisions and committees functioning in isolation and as a result the lack of engagement by personnel. The systemic barriers uncovered issues related to workforce competence, workforce continuity, a lack of communication and a lack of understanding of the Venue Management Model. Finally the cultural barriers at the group level (workforce relations) explored the dysfunctional relationship between volunteers and staff and how that impacted the transfer of knowledge process and ultimately organizational capacity.

Chapter 5: A Revised Knowledge Management Model for Major Games Host Organizations

The findings discussed in the previous chapter focused upon the two key research questions that directed this study.

1. a) What factors enable the knowledge transfer processes outlined in the model?

   b) How do the factors influence the model?

2. a) What factors inhibit the knowledge transfer processes outlined in the model?

   b) How do the factors influence the model?

This chapter presents a revised model for intra-organizational KT within a host society. Data for both the enabling and inhibiting themes were considered. Specifically, the aspects of the model that were supported from the data relating to research question one remained within the model and are not discussed. However, processes explained in the model that were inhibited, or ineffective, are addressed through modifications. The modifications to the model are explained based upon the results of the case study and supported by literature. In some instances literature presented earlier in the thesis is revisited but new literature is also incorporated in order to elaborate upon the modification to the model.

The structural, systemic and cultural barriers identified in the previous section inhibit the processes outlined in the transfer of knowledge model. The barriers address issues unique to a volunteer non-profit sport organization as well as issues common to large-scale organizations which require revisions to the existing TOK model. In addition,

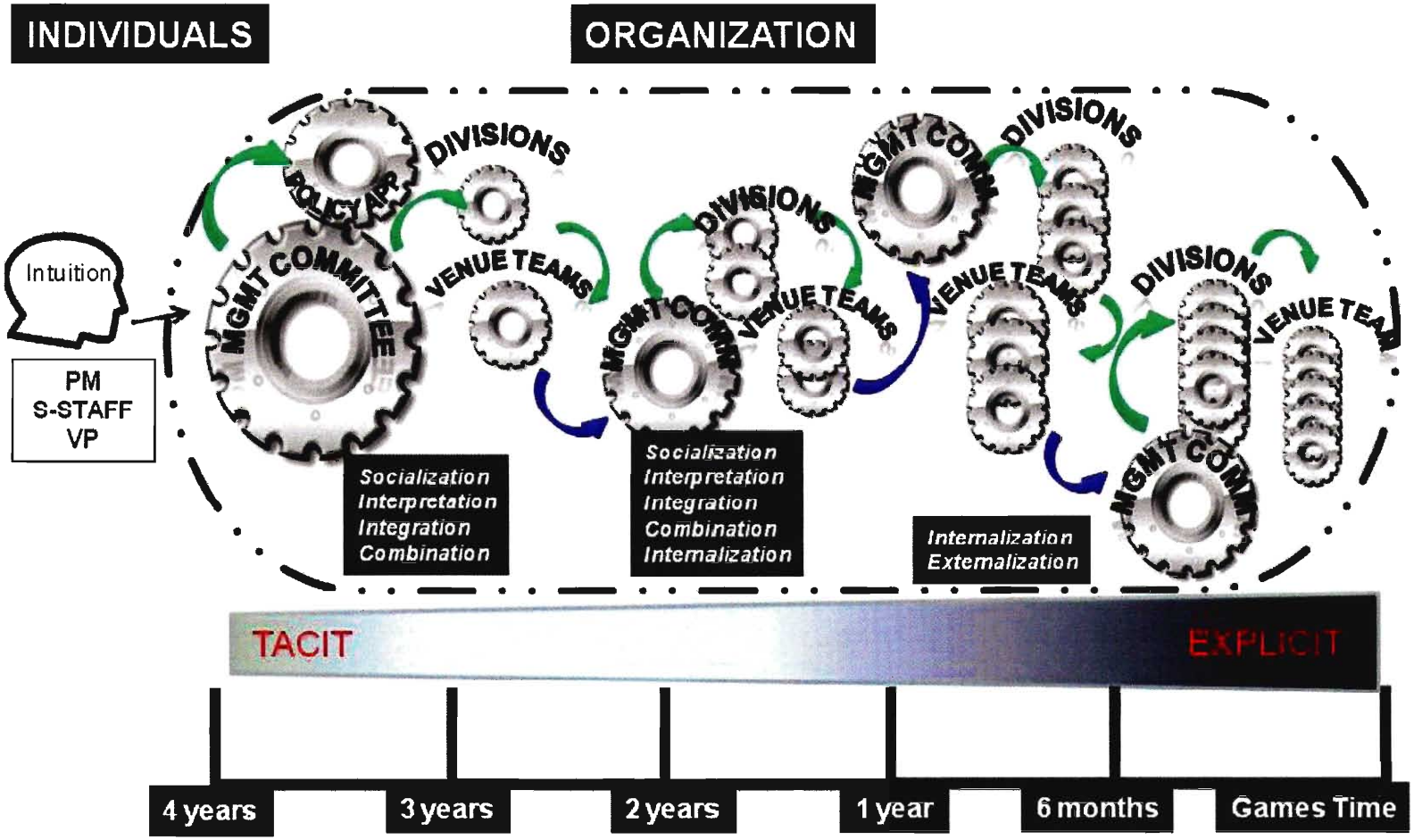
the barriers significantly impact the TOK process and overall capacity of the 2007 CWGHS. As a result of the barriers impeding knowledge transfer a revised transfer of knowledge model (see Figure 6) is introduced. Three specific modifications were made to the knowledge transfer model based on the findings including: direction of knowledge flow, timing of the knowledge transfer process, and finally group inter-relations. Each revision will be introduced and discussed by linking the appropriate research question and by identifying which of the three barriers or combination of the barriers impeded knowledge transfer and how this occurred. The discussion will conclude by linking each revision to knowledge management literature.

Modification #1 - Direction of Knowledge Flow

The first fundamental change to the TOK process relates to the direction of knowledge flow. In the original TOK model knowledge transfer flowed vertically insinuating that KT would peak at the upper hierarchical level of the organization. The revision to the knowledge flow involves a change from a vertical to a horizontal knowledge flow, similar to Nonaka's (2002) knowledge spiral where knowledge moved across an organization. The findings from this study indicated the original hierarchical direction of knowledge flow was problematic because knowledge flowed vertically as opposed to horizontally and did not move across the organization. The revision addresses the structural barrier findings (research question #2) which impeded knowledge transfer in the 2007 CWGHS, dis-integration, silo planning, and organizational knowledge flows.

Figure 7

Transfer of Knowledge Process for Major Games Organizing Committees



Dis-integration. According to Reige (2005) "hierarchical organisation structure inhibits or slows down most sharing practices" (p. 26). Furthermore, Seidler-de Alwis and Hartmann (2008) found that "organization structure often hinders tacit knowledge sharing by establishing wrong authorities" (p. 143). The hierarchical organizational structures of top-down and bottom-up management styles make it extremely difficult for "individuals and groups from different organizational levels to interact with each other ..." (Aramburu, Saenz and Rivera, 2006, p. 158). The hierarchical structures only enable communication along prescribed channels which causes dis-integration among individuals (Hedlund, 1994). The findings related to structural barriers indicated that the theme dis-integration occurred and impeded knowledge transfer as a result of the physical distances that existed between the various divisions and committees of the Host Society. Reige argued that "at an organisational level, barriers tend to be linked to, for instance ... lack of infrastructure and resources, the accessibility of formal and informal meeting spaces, and the physical environment" (p. 23). Findings suggested that the lack of a common meeting place for the Host Society meant group members functioned in isolation and felt alienated. This is supported by Seidler-de Alwis & Hartmann who argued "the physical layout of offices can act as a barrier" (p. 143).

The structural barrier findings revealed that in the 2007 CWGHS the structure did not encourage knowledge transfer across the organization and individuals felt alienated and distanced from the organization as a whole. When dis-integration festers amongst divisions and committees in the organization "those who contribute to the knowledge process lose their vision of the whole and concern themselves almost exclusively with their specialty" (Laswell, 1971, p. 440). This can be attributed to the fact that "a gap

between management and professionals [leads] to a situation where a common understanding concerning organizational vision, strategies and customer relationship management [does] not prevailing" (Natti & Ojasalo, 2008, p. 219). The gap between management and professionals or in the case of the 2007 Host Society, staff and volunteers, can be termed, "loose coupling …one factor that may cause organizational fragmentation …" (Natti & Ojasalo, p. 217). Loose coupling is a result of the individualism of the workers within an organization. The expert work of individuals is not transferred or shared with co-workers which results in knowledge hoarding in an organization. The structural design of an organization with hierarchical levels contributes to loose coupling because of the limited communication between the organization's units (Natti & Ojasalo).

Organizational Silos. The 2007 CWGHS organizational design was extremely complex and hierarchical. Organizations like this are often "bureaucratic, divided into layers, divisions, departments, and areas; accounting procedures treat every unit as separate and independent; and people, often grouped by specialization or function, are divided by invisible boundaries" (Addelson, Brumburgh, & Chawla, 2008, p. 27). As a result of the dis-integration in the Host Society the structural barrier findings revealed that organizational silos developed creating another structural barrier to knowledge transfer. Mohamed, Stankosky and Murray (2004) found that "... rigid functional silos and undue compartmentalization may generate critical barriers that isolate various departments into disconnected islands with little beneficial communication between them. Such hierarchical organizations slow down change, lengthen the decision making

process and imprison innovation" (p.129). The silos in the Host Society caused knowledge transfer to stop as divisions and/or committees ceased communication with other groups in the organization.

The findings revealed that the difficulties that the Host Society faced with structural barriers to knowledge transfer created issues for many of the divisions/committees once the silos developed. Palmer and Richards (1999) categorized knowledge networks in a variety of organizations similar to the 2007 CWGHS as an island node:

> The Island Nodes profile is characterised by high fragmentation of usually highly intelligent resources. Self-organisation of the parts is evident and emerges from the discretionary style. However because people are left to do their own thing, the organisation does not always add up to a sum that is greater than the parts. This type of organisation may be slow to spot an adaptive challenge at the enterprise level. Whilst potentially this model is highly re-configurable, cross-capability platforms and initiatives often fail to develop. This is often due to the absence of integrating processes and a culture that is person-centred without being connective (p. 195).

In order to combat the structural barriers to knowledge transfer the direction of knowledge flow depicted in the model was revised from a hierarchical vertical flow to an unordered, unranked horizontal flow with a strong emphasis on connectivity among Host Society divisions/committees.

Organizational Knowledge Flow. A horizontal communication flow system "forces individuals and groups away from the silo mentality and [enables them] to begin learning to communicate horizontally" (Goh,2002, p. 26). This design encourages:

> cross-functional teams and teamwork in the organization. A company can design tasks that require cross-functional collaboration to succeed … A strong and pervasive culture of co-operation and collaboration has to exist. It is developed through work practices that encourage and allow individuals and groups to work together on projects and problems. Teamwork is strongly emphasized and cross-functional work teams are formed regularly in the organization (Goh, 2002, p. 26-29).

In order for this type of an organizational structure to be successful, sharing and transferring knowledge must be balanced. This can occur "through structured processes such as sharing best practices, and through less structured processes like mentoring, personal intranets/Websites, group dialogue and reflection sessions, for example, during post project reviews" (Goh, p.29). Creating a flat organizational structure where communication can flow in multiple directions will encourage knowledge sharing between various divisions/committees (Reige, 2005).

According to Reige (2005) a knowledge sharing culture will be successful if the following structure is implemented in an organization:

> ... flat and open organisational structures that facilitate transparent knowledge flows, processes and resources that provide a continuous learning organisational culture, clear communication of company goals and strategy linking knowledge

> sharing practices and benefits to them, and leaders who lead by example and provide clear directions and feedback processes ... (p. 31)

Operating with a flatter organizational structure "minimizes cross-functional boundaries and opens the necessary channels for exchanging ideas and sharing knowledge" (Mohamed, Stankosky, and Murray, 2004, p. 129). Van Beveren (2003) suggested a flat structure opens the communication channels and assists in the successful transfer and creation of knowledge.

In a flat organization "the cross-functional teams of the horizontal company do not require the same level of formal managerial control because their work is aligned with customers' needs and "controlled" by a judgment of the final result" (Mohamed, Stankosky, and Murray, 2004, p. 127). Relinquishing the control from the management level is essential as "... the real power now must shift not only to those who acquire the knowledge, but more importantly to those who possess the talent for leveraging knowledge (Mohamed, Stankosky, and Murray, p. 129). Hedlund (1994) used the term heterarchy to describe an organizational structure that had numerous strategic apexes which not only shifted continuously over time but also had "several ordering principles at work" (p. 87). Empowering the individuals within a Canada Games Host Society to transfer knowledge in a horizontal flow across the organization will create opportunities for both formal and informal KT among all organizational members.

Modification #2 - Timing of the Knowledge Transfer Process

The second significant modification to the original TOK process involved a time dynamic. This modification addresses the second research question that focused on

barriers to knowledge transfer. The findings revealed that the impact of the systemic barriers of workforce recruitment and workforce continuity upon KT in the 2007 CWGHS could be reduced with the addition of an organizational timeline. Within the knowledge management literature there has been little research conducted regarding the importance of treating knowledge management as a time bounded concept that requires a heightened sense of importance and urgency. The literature addressing barriers to knowledge transfer focus on breakdowns in the TOK process not the issue of time in relation to knowledge transfer. The original TOK model did not indicate the stage in the organizational life cycle at which the various components of knowledge transfer should occur and what individuals and/or groups were required to facilitate the process. The exclusion of a timeline implied that knowledge transfer could begin and end at any point, that it was a one-time process, and that any number of individuals or groups could participate in the process. As a result of the systemic barrier findings the revised model includes an organizational lifespan timeline that indicates when specific individual and group positions are required along the timeline. By adding a timeline that outlines the organizations' lifespan and plots specific hiring points, the revised model counters the systemic barriers associated with workforce recruitment and workforce continuity revealed by the data.

Timeline. The timing of knowledge transfer did not exist in the original model. The revised model treats knowledge transfer as a time bounded concept contributing to the institution of a timeline in order to address the systemic barrier finding of workforce recruitment. The systemic barrier findings specifically the theme related to the timing of

workforce recruitment, indicated that a timeline that includes hiring timeframes as well as a start and finish point that identify when key positions must be filled in order to facilitate KT. The systemic barrier of workforce continuity had a significant negative impact upon the 2007 CWGHS because the data revealed that key personnel positions remained vacant and prevented knowledge transfer. A final modification involving timing is the acknowledgement of knowledge transfer as a continual process. Previously, knowledge transfer appeared to occur on a one-time basis in an organization. The findings unveiled the systemic barrier of poor understanding of the Venue Management Model (VMM) which supported a revision to include multiple KT cycles within the timeframe. By treating knowledge management as a time bounded concept and developing a sense of importance and urgency, the revisions to the TOK model combat the systemic barriers of workforce recruitment and workforce continuity.

The 2007 CWGHS was a temporary organization which existed for approximately seven years. During the first two years the organization functioned as a Games bid committee, the next four years it functioned as the Host Society, and during the final year it transitioned from an operational to non-operational entity. The Host Society was responsible for bringing the initial concept of the Games to life through the management of numerous projects. Turner and Muller (2003) define a project as "a temporary organisation to which resources are assigned to undertake a unique, novel and transient endeavour managing the inherent uncertainty and need for integration in order to deliver beneficial objectives of change" (p.7). Hallgren and Wilson (2007) further distinguish the temporary organization as one with an action orientation that is "built around the constructs of task, time, team and transition" (p. 94). The construct of time was

overlooked in the previous model and as such implied the knowledge transfer process could take as little or as long as the organization allowed.

The modifications to the knowledge transfer process include a specific timeline for the organizations lifespan. Within the organizational timeline, the data indicated that the systemic barriers identified that hiring points for key positions in the knowledge transfer process as well as time periods when key groups should recruit new members is essential to successful KT. Two of the systemic barriers - workforce recruitment and workforce continuity - significantly impeded knowledge transfer. A recruitment issue for the Host Society included the lack of key personnel at the required time and a continuity issue included high turnover which created additional recruitment issues throughout the entire lifespan of the organization. It is imperative for organizations to recruit "personnel with existing knowledge, and also with the ability to acquire and internalise explicit industry knowledge" (Ward, 2007, p. 26) in order to successfully implement a knowledge transfer process.

An organization like a Host Society requires leadership to initiate knowledge transfer in the organization, and consequently it must have the individuals in place at the right time to be successful. When time bound organizations recruit a workforce they will encounter barriers to knowledge transfer because "time restrictions are also a reason why people may potentially hoard their knowledge rather than spend time to share knowledge with others" (Reige, 2005, p.24). If the individuals become knowledge hoarders as a result of the short time span before an event or project concludes, TOK will breakdown. Therefore, recruiting individuals with the right skill set for the specific position at the right time is essential for successful knowledge transfer. Goh (2002) stated "the level of

skills and competencies among employees needs to be relatively consistent ..." (p. 29). Recruiting and retaining competent individuals was a very difficult and time consuming task for the 2007 CWGHS.

The volunteer placement program for the Host Society was originally designed through its application form and computer database program. The program enabled organizers to identify the skills and abilities of each volunteer and assign them according to interest and skill. The data indicated that the absence of a hiring timeframe forced the Host Society in Whitehorse to fill positions with any individual regardless of his/hers individual competency level - when vacancies or newly created positions arose. Singh (2008) believed that "the organization needs to make better use of the special talents available in a diverse workforce ... The organization needs to identify potential leaders in its ranks and prepare them to move up ... The organization needs to identify and recruit top talent" (p. 296). In a temporary organization such as a Canada Games organizing committee, there is not enough time to recognize potential leaders during the organizations lifespan. In some cases, a volunteer may decline a leadership role because of the increased responsibility. This forces a Host Society to place less competent individuals in key roles resulting in breakdowns in the TOK process.

Specifying the hiring time, role and responsibility for a position provide an individual with the greatest possibility for succeeding in the position. Williamson (2005) noted that roles and responsibilities are "essential for effective working" (p. 496) relationships. If there is not enough attention allocated to the development and clarification of the roles and responsibilities of each employee, the employees will be unaware of expectations and it often emerges that they are incapable of performing their

duties. When this occurs the end result is often an increase in turnover in the organization. The systemic barrier data related to workforce continuity identified issues for knowledge transfer when individuals were not recruited to fill positions at a point in time when the knowledge transfer process needed them most.

Workforce turnover creates a number of issues in knowledge organizations and in an organization with a specific lifespan the issues are intensified. According to Guidice, Heames and Wang (2009) "turnover, specifically that of an organization's knowledge workers, affects not only the balance and location of experience within an organization, but also its learning and innovation capabilities and accomplishments" (p. 146). High turnover impacts the interpreting, integrating, and institutional learning in an organization which threatens the absorptive capacity of the organization by the continual resetting of the knowledge transfer process (Guidice, Heames and Wang). Turnover can be detrimental to an organization as it:

> can obscure an organization's knowledge stock and bring about a significant breakdown in its intuiting, interpreting, and integrating abilities ... With a high rate of turnover, it is expected that remaining knowledge workers as well as new hires will have to spend considerable time and energy becoming familiar with the amended social structure and initiating the process of developing new network connections from which to create, exchange, and combine knowledge (Guidice, Heames and Wang, 2009, p. 150).

As a result of the lost time and cost to an organization with high turnover, it is extremely important to understand why turnover occurs and how it can be overcome (DeConinck and Bachmann, 1994). The data revealed that turnover in the Host Society must be

acknowledged therefore a revision was made to account for on-going turnover in a temporary Host Society. Turnover is unavoidable however, if the key positions are in place at the appropriate time periods then the initiation of knowledge transfer, turnover should decrease as will its impact on the KT process.

The entire TOK process in the modified model is encased in an oval with breaks in the outer line. This revision was made as a result of the findings in order to depict that knowledge transfer moves similar to a production line however it is not a closed process. The breaks in the line account for the continual barrier of workforce continuity and turnover and the constant need to replace individuals. The Host Society is always changing as individuals resign, which is represented through the breaks in the lower level of the model. As individuals flow out of the organization, and new individuals are recruited and flow into the organization, which is represented through the breaks on the upper level of the oval as individuals. The discontinuity barrier can occur at anytime through the lifespan of the organizing committee however if the organizing committee acknowledges this from the onset, it is better prepared to handle the TOK interruptions when they arise.

Knowledge Transfer – A Continual Process. Recognizing that knowledge transfer is a continual and not optimal process is essential for transfer of knowledge success. Knowledge transfer is not a one-time phenomenon it is an on-going and continual process. The continual process revision to the knowledge transfer process illustrated in the model addresses the second research question involving the factors that inhibited the knowledge transfer process. In the previous model the knowledge transfer

process appeared to begin at the bottom with the individual level and progress in an upwards motion to the organizational level (See Figure 1). The TOK process was then fed back to the group level and appeared to end after only one cycle. The initial model did not pinpoint the key groups involved in the knowledge transfer process which contributed to the systemic barrier that disrupted the TOK process. In addition, the Venue Management Model (VMM) was excluded from the original knowledge transfer model even though it is a key part of a Host Society knowledge transfer process. As a result of the findings, a revision to the TOK model incorporated the specific groups involved in the process. This includes the management committee, the divisions, and the committees. It was also found that as the lifespan of the organization evolves, the groups involved in the TOK process increase in size as the workforce membership increases.

Given this, an organization must consider the importance of a continual KT process that is capable of reacting in real-time. According to Dawson (2000) "it is far more useful to think in terms of developing the organisation's dynamic knowledge capabilities than about knowledge as a static asset which needs to be managed" (p. 323). The changes that have taken place in work environments are "... interactive and dynamic" and organizations have to behave "fundamentally differently than the past arm's length static system and requires fundamentally different management approaches" (Preiss, 1999, p. 41). Organizations must consider how to manage in real-time instead of taking long periods of time to make decisions.

As Preiss (1999) states "we have moved from a system of companies managed in isolation and assumed to behave in a static manner, to a system of realtime interactive companies or interprises, in a dynamic system" (p. 38). Organizations have to be able to

adapt to changes in the environment and process changes by making quick decisions to enhance the TOK process. "When new issues surface that were unknown in advance (unknowables) and these issues require identification, interpretation, articulation, and resolution, the knowledge management task becomes complex" (El Sawy & Majchrzak, 2004, p. 21) and organizations must be prepared to handle these dynamic situations. Organizations that "have a real-time view of operations internally, of the partners in the supply chain, of its customer's interest and of the competition ..." (Vogels, 2004, p. 100) will remain more competitive.

El Sawy and Majchrzak (2004) presented a concept called "real-time knowledge management (RT-KM)" (p. 22) which recognizes the importance of time in knowledge transfer. Real-time knowledge management (RT-KM) is a zone that occurs "when information provision, cycle times, and action become faster to the point of being near-real-time, [and enables an organization to] enter into a knowledge management zone where traditional methods for knowledge management require rethinking" (El Sawy and Majchrzak, 2004, p. 22). Ensuring that the knowledge capabilities of the organization are continually developing and evolving to handle the dynamic changes in the workplace environment will prevent a lack of competitiveness. Dawson (2000) noted that "it is imperative for organisations to focus on developing their knowledge capabilities on an ongoing basis, or they will face extinction. Organisational development must be centered on the continual enhancement of knowledge capabilities, as the foundation of organisational effectiveness in all fields" (p. 324). Organizational development must also consider the three components required for a real-time enterprise; internal monitoring and information collection process, organization readiness to acquire and respond to external

events, and real-time processing for partners and customers (Vogels, 2004). Operating as a real-time enterprise will enable an organization to make faster and better decisions as well as ehance its agility and adaptability (Malhotra, 2005).

The revised TOK model for this study has several modifications to accommodate the need for real-time decision making in an organization. With temporary organizations that have a fixed timeframe of operation it is imperative to recognize that knowledge transfer cycles occur faster, more frequently, and simultaneously. As the organization progresses through its prescribed timeframe the frequency and number of individuals and groups involved in the TOK processes increase. In the revised model the knowledge transfer cycle between the management committee, the divisions, and the venue teams occurs numerous times throughout the four year timeframe of the Host Society. Over time the number of individuals in each of the three groups increases which is demonstrated by the addition of more gears in the model. These modifications address the systemic barrier associated to the lack of understanding of the venue management model by evolving from a static one-time phenomenon for knowledge transfer to a dynamic real-time process that can accommodate the rapidly changing work environment.

In order for the various groups with a Host Society to facilitate knowledge transfer, the socialization process must be initiated. This follows the literature presented earlier as Nissen & Levitt (2004) discuss that, "socialization denotes members of a team sharing experiences and perspectives ..." (p. 171). Interestingly socialization and integration occur simultaneously. Socialization provides an opportunity for group members to initiate integration as they merge their tacit knowledge with the tacit knowledge of other group members and develop a shared vision. The 2007 CWGHS was

successful with socialization because organizers utilized collaboration among group members and all members were able to participate and combine their ideas. Wright (2005) found that the collaborative approach was preferred among group members in order to share information. In the modified TOK model socialization, interpretation, integration, combination, and internalization are placed inside a box below the divisions in order to acknowledge that they occur within each of the 13 divisions of the Host Society.

Feed forward learning occurs as a result of the organizational level socialization and integration. During the feed forward process, the individual group members begin combining the new knowledge they have acquired and the "new knowledge is explored by importing, experimenting, and integrating such knowledge into organizational capabilities" (Janczak, 2004, p. 211). The group members must begin to combine explicit knowledge from all group members. The process of combination is the second node of Nonaka's (2002) "4 node's of conversion". According to Desouza and Awazu (2006) combination can be defined as "the act of synthesizing explicit pieces of knowledge" (p. 35). In order to facilitate the combination of knowledge, telephone conversations and meetings are common transfer strategies. The resulting conversations are extremely important to knowledge transfer as they encourage individual's to reconfigure "existing information through the sorting, adding, recategorizing, and recontextualizing of explicit knowledge" (Nonaka, 2002, p. 442).

Organizational capacity is enhanced when the individuals are able to increase their explicit knowledge through interpretation during the socialization process. As an individual interprets the new knowledge that is generated in his/her groups,

internalization occurs. Internalization is the third node of Nonaka's (2002) 4 "node's of conversion" and:

> "... denotes diverse members in the organization applying the combined knowledge from above – often through trial and error – and in turn translating such knowledge into tacit form at the organizational level; the term learning by doing is used to describe the trigger for knowledge internalization" (p. 171).

Through the practice of socialization activities, individuals are able to internalize knowledge and move to the fourth node of conversion, externalization. The socialization, integration, combination, interpretation, internalization, and externalization processes are continual and occur several times throughout the lifespan of the host society. Incorporating these processes throughout the revised TOK model ensures that the tacit-explicit knowledge continuum continues to evolve and enhance the organizational explicit knowledge for the lifespan of the Host Society.

Modification # 3 - Group Inter-relations

The third and final revision to the transfer of knowledge model addressed the second research question about factors that inhibit knowledge transfer and it relates to the findings directed at the cultural barrier, group inter-relations. Given that the knowledge management literature identified five processes that occur in group situations (socialization, integration, combination, interpretation and internalization) a group level was added to the TOK model in order to recognize that group processes require more than one individual for initiation. In the previous TOK model the organizational level was initially created as a way to identify and distinguish the management committee from

other divisions and groups. Upon completion of the data analysis it became evident from the data that the Host Society management committee was actually just another group in the overall organization that worked hand-in-hand with all divisions. As a result of the findings involving cultural barriers, the group-interrelations modification includes collapsing the group and organizational level, identified in the old model into one level, simply titled 'organization', in the revised model. This change supports an organization wide view of the TOK process. The specific aspects of each level (socialization, interpretation, integration, combination, internalization and externalization) were plotted along the timeline to illustrate when they should take place in the pre-Games planning process.

The data revealed that cultural barriers impeded knowledge transfer for the 2007 CWGHS and the repercussions of these barriers included numerous resets and stoppages in the TOK process. The cultural barrier between volunteers and staff created several stoppages in the transfer of knowledge process. In order to overcome one aspect of the difficult workforce relationship between volunteers and staff, the data indicated the need to recruit senior leaders for the Host Society at the onset of the organization in order to establish an organizational vision.

Organizational Vision. In the original TOK model organizational vision was not included or acknowledged. The findings revealed that recruiting key senior leaders is essential at the onset of the Host Society as organizational vision is created and developed at that time in order to combat the cultural barrier of workforce relations. The three types of senior leaders who are responsible for initiating the knowledge transfer

process in the Host Society are the Vice Presidents, Senior Staff, and Project Managers. Recruiting the key senior management staff and volunteers for the Host Society at the same time will assist in the development of a united management group that shares the vision of the Games from the onset of the planning process.

The data unveiled that the 2007 CWGHS did not have a shared organizational vision of the Games amongst the three senior leadership position categories. Mason and Pauleen (2003) discovered that internal factors are the most prevalent barriers to knowledge transfer, specifically "a lack of awareness about vision and knowledge management" (p. 45). The data also indicated that individuals hired for these positions were recruited at various stages of the planning of the 2007 Canada Winter Games and the absence of an orientation process for the new recruits contributed to the cultural barriers. The senior leaders worked within their specific divisions and did not integrate knowledge with other key divisions which caused an increase in silo planning in the Host Society. The communication breakdowns that resulted from the cultural barriers significantly impacted knowledge transfer.

Communication is the key to organizational advancement, success and knowledge transfer. Without communication there is no vehicle to transfer knowledge within an organization. Misunderstandings often occur because of "… differences in communication styles, planning and decision-making process, negotiation strategies, and leadership practices" (Shelton, Hall and Darling, 2003, 315). In the Host Society the differences in communication styles or in some cases lack of communication created barriers to knowledge transfer. If knowledge was not transferred to individuals decisions could not be made and the TOK process had to stop until the knowledge was received. If

a decision was made without the proper knowledge the TOK process often had to reset once the knowledge was transferred as the decision that had been made was incorrect.

Communication between all levels in an organization is extremely important to maintain the on-going continual knowledge transfer process. Communication between and amongst individuals, groups, divisions, and committees has to be clear, concise, and to the point. Lefton (1988) stated that "unless a meeting has a clear cut objective, nobody can tell whether its synergistic or not. But a startling number of meetings either have no objective at all or such a vague goal that nobody's sure what it is" (p. 21). The data revealed that in the 2007 CWGHS there were numerous meetings during which participants felt there time was wasted. The disenchantment from pointless meetings resulted in resignations and stoppages in the TOK process.

The data identified that the short-term temporary nature of the 2007 CWGHS was a direct result of two additional communication issues - the lack of self-critique and the failure to cycle downward (Lefton, 1988). The lack of self-critique is a communication barrier as "most teams fail to do regular, systematic critiques of themselves: their operations, strengths, weaknesses and areas needing improvement. These teams take teamwork for granted" (p. 21). If all teams had an opportunity to critique themselves it would be extremely beneficial to the organization as its efficiency and effectiveness would improve. Unfortunately in temporary organizations such as the 2007 CWGHS, the limited time conditions makes it very difficult if not impossible for teams to have self-critique meetings. In the Host Society most teams and groups struggled to get together often enough to go through the planning of the Games. Additional meetings likely would have resulted in increased absenteeism and turnover. Despite the difficulties of staging

additional meetings, they are crucial to the TOK process because they provide opportunities to cycle information downward and enhance the feedback process. As Lefton suggested:

> many a good decision has died because the team failed to cycle it downward – explain it to all the people whose collaboration will be needed to make it succeed. A decision made at one level thus may never filter down to lower levels, even though those levels are indispensable to the decision's success (p. 21).

The failure to cycle downward is directly related to the transfer of knowledge process. As previously discussed, failing to transfer knowledge to the individuals, groups, or divisions in the Host Society directly impacts the TOK process. Decisions are made without the correct information and TOK resets and stoppages result.

The communication process continually faces barriers which disrupt the information flow from one point to another within an organization. Athanasios (2005) identified five issues in the communication process: limited time, language, ability of perception, negative attitude, and external factors. The limited time to communication knowledge impacts the quality and quantity of knowledge that is communicated. The language in which communication is transferred must be understood by the recipient in order for the transfer to be successfully completed. An individuals' ability to understand and perceive the knowledge that has been communicated significantly impacts the TOK process. Knowledge may be successfully transferred according to the sender, but if the recipient is unable to receive it in the same manner in which it was sent, the communication process will fail. In addition a negative attitude involving either the sender or recipient may cause the knowledge transfer to fail regardless of the

communication process. Finally there are always outside external factors to consider when communicating and transferring knowledge.

Overcoming the obstacles to the communication process are critical for successful knowledge transfer within an organization. In addition Athanasios (2005) stated:

> Effective communication is a prerequisite for the coordination of any group; the development of good personal relationships and trust within the team; the creation of a positive environment within and around the team; leading the team's efforts to the achievement of its goals (p.252).

Communication breakdowns between individuals and groups create negative attitudes and impact personal relationships. In this study, the data uncovered that the communication breakdowns between the volunteers and staff significantly impacted the vision for all Host Society members.

In the revised model specifying the recruitment of the senior leaders at the onset of the Host Society's timeframe will provide an opportunity for a shared organizational vision. According to Aramburu, Saenz, and Rivera (2006):

> The existence of a knowledge vision: to create value by means of knowledge generation activities, the organization needs a vision which gears it all towards the type of knowledge it has to acquire and which may generate spontaneous bonding on the part of individuals and groups involved in knowledge creation (p. 158).

If all key leaders are recruited during the same time period then knowledge creation amongst leaders can occur and bonds will be formed. In order for an organizational vision to prosper, it is necessary to select partners, or members, who allow the vision to flourish

(Matthews, 1997). Recruiting individuals who have the capacity to grow with the dynamic work environment of a Host Society is essential for knowledge transfer success.

Recruiting senior leaders who have the capabilities, desires, and most importantly the drive to carry out the organizational vision is essential. According to Hedlund (1994) "a clear vision of broad long term developments regarding both final products and internal competences is perhaps the most important integrative tool. This means that top management must know the substance of the business, and not only its results in financial or other equally abstract terms" (p. 85). In the 2007 CWGHS the importance of working as a united group (volunteers and staff) from the top down and across the organization is extremely important. When both the staff and volunteer managers share the same vision from the onset of the planning process of the Games, transferring knowledge can potentially flow without interruption.

Heightened Importance of Middle Managers. The original knowledge transfer model did not indicate the various levels of management in the Host Society. The data suggested that distinguishing the difference between the levels of management is extremely important. The senior managers are responsible for establishing the organizational vision and the middle managers are charged with the overwhelming task of instilling the vision in all divisions and committee members. The data implicated that the cultural barrier of poor workforce relations between volunteers and staff created an abundance of resets and stoppages in the TOK process. In relation to the lack of importance for the middle managers the 2007 CWGHS dealt with subcultures and organizational fragmentation. A recruitment time schedule and recognition that Intuition

Managers are required for the middle management positions are essential to combat the cultural barriers to knowledge transfer.

The 2007 CWGHS was a volunteer organization that involved a "staff serve volunteers" culture. The data showed that the volunteers were recruited early in the Host Society lifecycle but staff members were recruited at a later date. As a result, the senior leaders did not have a shared organizational vision and volunteers and staff members were working in silos that festered ongoing communication breakdowns. This cultural barrier had a negative impact on knowledge transfer as volunteers feared losing control of their organization to the professional staff and there was "a reluctance on the part of volunteers to give up the authority necessary for meaningful decision making" (Amis & Slack, 1996, p. 84). As a result of the issues between the volunteers and staff subcultures developed within the Host Society. Subcultures continued to emerge throughout the entire four year planning process of the 2007 CWG. Kaweevisultrakul & Chang (2007) define subcultures as "distinct sets of values, norms, and practices exhibited by specific groups or units in an organization. Subcultures have characteristics that distinguish them from the firm's overall culture, as well as from other subcultures" (p. 304). Subcultures in organizations cause fragmentation which creates barriers to knowledge transfer.

In organizations as complex as the 2007 CWGHS overcoming fragmentation was a difficult task. According to Grubbs (2000) cultural fragmentation:

> features a cultural division between subject groups, or the appearance of `imagined communities' ... the outcome is an entrenchment between the subject groups, a sense of alienation on the part of group members, and a complete refusal to engage with others in the interorganizational change (p. 230).

Fragmentation of divisions and groups in organizations falsely implies to its workers that they are on their own. Organizations have to work meticulously to remind their workers that "knowledge work is never 'individual'. People have to work together, and their ability to interact and share their knowledge is crucial to their work" (Addelson, Brumburgh, & Chawla, 2005, p. 28). In the 2007 CWGHS raising the awareness and the importance of knowledge transfer between divisions and committees was a constant struggle. In organizations similar to the Host Society (temporary, large in scope, and very complex) the ability to communicate messages to all workers is very difficult. One of the reasons that knowledge transfer is difficult in fragmented organizations is that "professionals are of the opinion that they have the right to ignore management decisions when these conflict with their professional standards ..." (Vermaak & Weggeman, 1999, p. 33). In the Host Society this type of behaviour was constant between volunteers and staff of the same and different divisions.

The data indicated that ongoing conflict between the volunteers and staff in the Host Society significantly influenced the development of counter cultures. Coyler (2000) suggested "counter cultures may generate conflict as a result of the competing values within an organization that reduce its ability to be effective in achieving its desired outcomes" (p. 338). The conflict that existed between the volunteer and staff groups within the 2007 Host Society workforce was the driving force behind the creation of the subcultures and the lack of co-operation and collaboration in the overall organization. As Kaweevisultrakul & Chang, (2007) stated "the existence of a strong co-operative and collaborative culture is an important prerequisite to knowledge transfer between individuals and groups" (p. 305). These subcultures had negative attitudes towards each

other which created barriers to communication and knowledge transfer. As a result, they would not collaborate or co-operate with one another for the overall benefit of the Host Society.

Utilizing middle managers to overcome the negative impacts of subcultures in an organization is an important tool. Husted & Michailova (2002) suggested "in organizations with strong hostility, managers should aim at forcing employees to start sharing knowledge instead of implementing ideals models for knowledge- sharing" (p.72). Likewise Kaweevisultrakul & Chang (2007) believed organizations "should focus on encouraging managerial involvement, creating organizational collaboration and a trusting culture …" (p. 308). Middle managers are extremely important in organizations as large as the 2007 CWGHS because they are "the ones who play a key role as links between the upper and lower organizational levels" (Aramburu, Saenz & Rivera, 2006, p. 158).

In the revised TOK model developed in this study the data signified the importance of hiring middle managers who demonstrate skills of an Intuition Manager as being vital to knowledge transfer success. According to Andersen (2000) an Intuitive Manager is extremely effective because s/he focuses upon new possibilities and future opportunities. The Host Society needs to recruit a number of individuals who exemplify the qualities of an Intuition Manager to combat cultural barriers. Intuition managers are able to develop new insights, recognize their tacit knowledge, and integrate the knowledge into situations in their divisions or committees. Middle managers utilize their intuition to collectively solve problems by linking managers from different levels or groups in face-to-face dialogue (Janczak, 2004). According to Hedlund (1994) "any

good knowledge management system must elicit knowledge from many nodes, often distant from each other. The primary focus is on the middle levels, senior enough to be competent and trusted, but not so senior as to be out of touch, and perhaps energy" (p. 84). Middle managers take information and knowledge to all levels of management in order to create organization-wide knowledge management strategies.

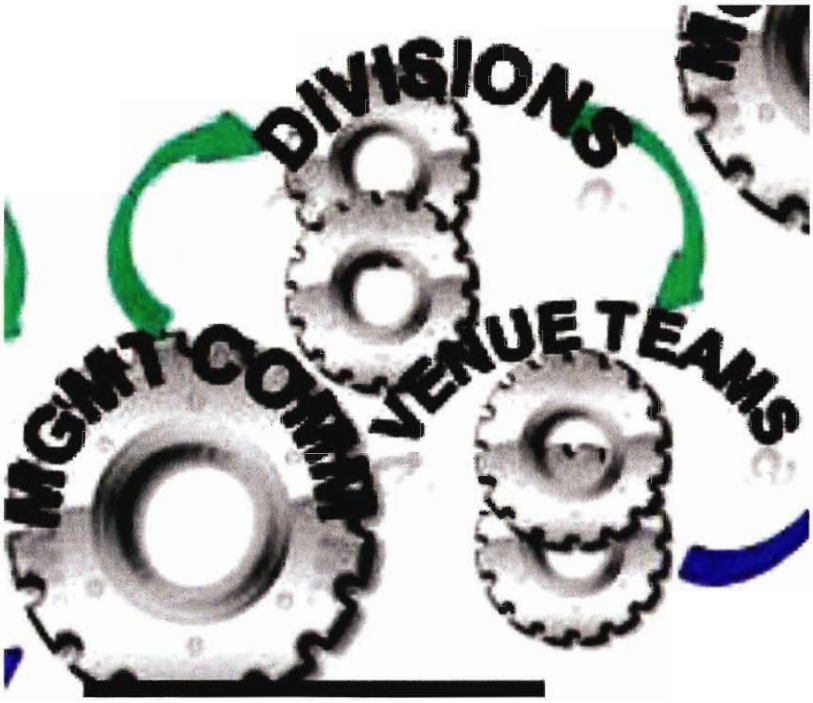
The importance of the role of middle managers is evident in the revised TOK model with the introduction of knowledge transfer pods (see Figure. 7). These transfer pods demonstrate the ongoing process of knowledge transfer in a non-profit sport organization. Transfer pods reflect how the exchange of knowledge continues several times during the lifecycle of the Host Society. As Games-time approaches the numbers and size of groupings where knowledge is exchanged, or transfer pods, expands. The recognition of the transfer pods as a knowledge management component supports the concept of continual knowledge transfer over the organization's life cycle because in order for these knowledge transfer pods to be successful the organization must have:

> A strong and pervasive culture of co-operation and collaboration has to exist. It is developed through work practices that encourage and allow individuals and groups to work together on projects and problems. Teamwork is strongly emphasized and cross-functional work teams are formed regularly in the organization (Goh, 2002, p. 29).

The teamwork of cross-divisional work teams in the knowledge transfer pods ensures that there is "regular contact between partner employees" and a "sharing of information" (Khamseh and Jolly, 2008, p. 48) throughout the life cycle of the organization. As the

Figure 8

Knowledge Transfer Pod



knowledge transfer pods continue to increase, expand, and foster growth in the organization, the frequency of knowledge transfer over time increases which ensures that the capacity of a non-profit sport organization will remain stable.

The ability of the individuals to utilize their skills and apply it to a Canada Games situation supports the use of cultured intuition which is a skill evident in highly productive personnel such as middle managers (Wright, 2005). Throughout the course of one's life, various experiences contribute to the development of new skills and increase intuition. Intuition is not a formal process and is highly personal to each individual (Williams, 2006), therefore intuition can be demonstrated by "following hunches, experiencing sudden insights, choosing directions without really knowing why, or having uncanny feelings that turn out to be of great importance ..." (Welling, 2005, p. 19). Individuals with intuition support the TOK process postulated in this study as well as Marunchuk's (2006) claim that individuals increase an organization's capacity.

In order for the individuals to have a positive impact on the organization's capacity, the Host Society leaders must carefully determine how many individuals they will need and what skills or experience are required. Once they have recruited their selected individuals they must develop a workforce structure, continue to motivate the workforce, and sustain the workforce (Donahue et al. 2000). The experience that individuals bring to an organization has a direct impact on the ability of knowledge to move from tacit to explicit in the transfer of knowledge process. The ability of the individual to take what s/he learned, share it with others, and absorb new knowledge from others in his/her group is called *absorptive capacity* (Tsai, 2001). As the number of individuals with absorptive capacity grows in an organization and their ability to respond

to the new knowledge that is generated manifests, *adaptive capacity* becomes evident (Ebrahim, 2003). The adaptive capacity of the individual and her/his division or group ensures that the feedforward learning process outlined in the revised TOK model occurs.

In the 2007 CWGHS, the middle managers are the leaders of the Policy Approval Group (PAG) and the Venue Teams which have both been added into the revised model as suggested by the findings. These two groups are extremely important for a successful transfer of knowledge process. Strong middle managers who demonstrate the ability to utilize their intuition, absorptive capacity, and adaptive capacity to ensure that feedforward and feedback learning are essential for both the Policy Approval Group and the Venue Teams. The Policy Approval Group should be created at the onset of the Host Society and inter-related with the management committee and the various divisions. Creating a strong relationship among these groups at the onset of the Host Society is important. Both senior and middle management leaders must develop trust with the PAG so that they engage in knowledge transfer when necessary throughout the entire lifecycle of the organization.

The Venue Teams were excluded from the previous model. Given that the Venue Teams are the key component for successful knowledge transfer within a Canada Games Host Society, the data implied that their importance must be established immediately following the creation of the divisions or no later than three years into the lifecycle of the Host Society. The managers of the Venue Teams are middle managers and they hold the most pivotal position in the entire TOK process. The Venue Team leaders are responsible for transferring knowledge *back* into their teams as well as *forward* to the Venues division Vice President. If the individual in this role is not capable of fulfilling these

duties then s/he will not be able to instill the organizations' vision in all committee members and knowledge transfer will encounter barriers. It is the job of middle managers to:

> "take the values and the vision generated by top level management and articulate it using concepts and images which may effectively guide the knowledge creation process. Middle managers work as producers of knowledge in the interests of recreating reality or generating new knowledge according to the particular vision of the company (Aramburu, Saenz and Rivera, 2006, p. 159).

Recruiting middle managers who have the intuition to function in these critical positions will better enable a shared vision and facilitate the successful transfer of knowledge among all divisions and committees in the Host Society.

Key Theoretical Implications

The purpose of this qualitative case study was to examine the transfer of knowledge process of a major games Host Society. The 2007 Canada Winter Games Host Society provided the case context for this research. Two theoretical implications emerged that are important to acknowledge for successful knowledge transfer in organizations. The two implications are based upon the analysis provided in the preceding two sections on factors that supported the model and factors that inhibited the model because they capture key theoretical findings. The first implication is the valuable role of an Intuition Manager to a successful knowledge transfer process which arises from the data associated with the third modification -group-interrelations. The second implication is the need to incorporate time and organizational levels in a knowledge management model which

arises from data associated with the second modification - timing of the knowledge transfer process.

The Importance of the Intuition Manager for Successful Knowledge Transfer. Intuition has emerged as a necessary qualification of the key senior and middle management level personnel. The data from this case study concur with the knowledge management literature. Intuition requires individuals to be able to make decisions and the literature identified a close link between intuition and individuals, as intuition is "an element in the problem-solving and decision-making process" (Andersen, 2000, p. 46). Individuals must be able to use their intuition to recognize the "pattern of possibility" (Crossan, Lane & White, 1999, p. 525) in order to remain effective in their position. According to Andersen, "intuition in managers is three times as strongly related to effectiveness compared with other dominant functions that managers have" (p. 60). The data in this case study identified the importance of recruiting Intuition 'middle' Managers from the formation of a Canada Games Host Society in order to ensure effective TOK during the entire Games preparation stage. Unfortunately the literature pertaining to intuition and Intuition Managers does not consider recruitment strategies to acquire knowledge orientated individuals or the importance of formalizing Intuition Manager's roles early in the knowledge management process.

The 2007 Canada Winter Games Host Society relied heavily upon the social network of both volunteers and staff within senior and middle management for the recruitment of individuals. This type of recruitment can be successful because trusting relationships already exist between individuals as a result of the strong social ties among

the persons who are hired. Although trust is a key element for group cohesion it is not a guarantee that an individual will have the necessary skill set to lead the division or committee. In a temporary organization such as the 2007 CWGHS recruiting an individual who has the qualities of an Intuition Manager is essential for knowledge transfer success. Specifically, the individual must be able to follow hunches, experience sudden insights, and choose "directions without really knowing why, or having uncanny feelings that turn out to be of great importance ..." (Welling, 2005, p. 19).

The skills of an Intuition Manager must be developed and cultivated over time through a variety of experiences. This implies that the individual will be older, mature and have many life and work experiences from which to draw knowledge. According to Crossan, Lane and White (1999) expert levels of intuition can take up to ten years to achieve as intuition "requires the acquisition of 50,000 chunks of data" (p.526). Once an expert gains significant experience what was once a challenge and required deliberation becomes tacit knowledge and as such "the expert no longer has to think consciously about action. Having been in the same, or similar, situations and recognizing the pattern, the expert knows, almost spontaneously, what to do" (Crossan et. al., p. 526). A Major Games Organizing Committee requires individuals with intuition in order to facilitate knowledge transfer during the limited Games preparation period.

The intuition managers must also have the leadership ability to facilitate strong relations with their subordinates. The relationship between the leader and subordinate relates to the leader member exchange theory (LMX) which "talks about a high degree of mutual influence and obligation between superiors and subordinates, and asserts that such a relationship will result in several important positive outcomes such as lower turnover,

higher subordinate performance, citizenship behaviour, commitment, and satisfaction" (Raj, 2009, p. 63). According to Tse and Mitchell (2010) the LMX relationship is extremely important because it will assist with the facilitation of the knowledge-creation process. In an organization as large and complex as a Canada Games Host Society it is important to have LMX relationships that encourage "lateral interpersonal relationship development among team members" (Tse & Mitchell, 2010, p.91). As conduits for knowledge among sub-groups within the organization, Intuition Managers, be they individuals at the upper or middle management levels of the host society, play an important role in cultivating high quality exchange relationships. If the LMX relationships are strong and facilitate lateral communication in the organization, knowledge- creation, knowledge sharing and knowledge transfer will occur.

Once a Major Games Organizing Committee recruits an individual who demonstrates the skills of a strong leader and an Intuition Manager, it must formalize her/his role, duties, and responsibilities. In the 2007 CWGHS individuals were recruited for specific positions but once they accepted the role and became a member of the Host Society, they often received no further direction from the Executive and Management Committee until a crisis situation. In the 2007 CWGHS there was no apparent visionary leader and in order for an Intuition Manager to successfully facilitate TOK in a Host Society s/he must be provided with a job description. Failure to provide job descriptions may encourage "entrepreneurial intuition" where individuals make novel connections and generate new possibilities (Crossan, Lane and White, 1999, p. 526). In a temporary organization where timelines are under pressure, the use of entrepreneurial intuition in a context where one's role and duties are unclear will lead a group in an entirely different

or inappropriate direction. This may negatively impact the host society by utilizing valuable time to reset the TOK process. If an Intuition Manager is recruited early in the planning process as explained in the modified knowledge transfer process, sufficient time will be provided for role definition.

The Importance of Time and Organizational Levels in Successful Knowledge Management. Knowledge management literature is generally dominated by concepts such as intuition, interpretation, integration and institutionalization which comprise the 4 I's coined by Bontis, Crossan, and Hulland (2002). However, the 4I's concept provides little insight into how knowledge management and more importantly knowledge transfer relate to time and organizational levels. Nonaka (2002) and Crossan and Hulland (1997) are exceptions because they each introduce the concept of progression in knowledge transfer and suggest the progression of KT moves from the individual level to a group level and finally to the organization level. Nonaka (2002) integrates the four node's of conversion (Socialization, Combination, Internalization, Externalization) and expands the 4I's in terms of progress from one node to the next node. Nonaka integrated the four node's of conversion into a horizontal knowledge spiral which identified the tacit-explicit knowledge continuum across organizational levels.

In other words, his suggestion that knowledge progresses from the individual to the group to the organization and then finally to the inter-organization acknowledges the importance of organizational levels. Unfortunately the knowledge spiral offers no indication of time in the knowledge transfer process. Crossan and Hulland (1997) combined the 4I framework which identified intuiting, interpreting, integrating, and

institutionalizing as key processes for knowledge transfer and the three levels (individual, group and organization) with the concepts of feed-forward and feed-back learning (the SLAM framework). However, the SLAM framework also fails to identify time as a component to knowledge transfer. The exclusion of a timeframe by both Nonaka (2002) and Crossan and Hulland implies that organizations have no time limits for knowledge transfer and also that once the knowledge has reached the organizational level, knowledge transfer is complete.

The assumption of Nonaka (2002) and others views is that once an organization reaches the externalization phase (or knowledge transfer arrives at the organizational level) the spiral is complete and the organization has successfully achieved optimal knowledge management practices. There is no indication from Nonaka or others what the organization should do once it reaches this phase of knowledge transfer. The reality of organizational operations is that there are ongoing challenges to an "optimal knowledge management state" and these challenges create instability. In other words this work assumes the optimal knowledge management state is sustainable however, the reality of organizational life indicates such a state may not sustainable.

A sustained optimal knowledge management state is questionable for a number of reasons that can be attributed to both internal and external factors. Internally the organization may have turnover amongst the key individuals who were involved in reaching the optimal state. The turnover can be attributed to the characteristics of individuals who dedicate their careers to working in knowledge orientated organizations. For example, Yigitcanlar, Baum, and Horton (2007) argued that "… knowledge workers expect to change jobs, if not occupation, relatively frequently. They thus favour

knowledge cities and regions with a ''thick labour market'' offering ready opportunity to advance their careers by moving between employers" (p.7). This suggests that succession and transition plans must be ongoing in order for optimal KT to be sustained.

Further, the organization may have new additions to the leadership team who are not informed of the specific knowledge management strategies of the organization and therefore are unable to immediately direct their team in the same manner as the predecessor. According to Reige (2007) organizations that have to deal with frequent turnover should "acknowledge user time pressures and allocate purposeful 'slack' time for knowledge transfer, e.g. set aside one hour per week to facilitate sharing initiatives" (p. 52). A knowledge transfer forum provides opportunities for new personnel to become aware of the specific knowledge management strategies of the organization. If the organization has individuals who are apprehensive about sharing knowledge it is up to the organization to "provide training and information programs so that employees not only realise the value of their possessed knowledge but also can identify to whom it may be beneficial" (Riege, 2007, p. 53). Knowledge transfer between individuals will continue to be influenced by the specific type of the knowledge transferred, the nature of the source of the knowledge, the characteristics of the recipient of the knowledge, and finally, the context in which the knowledge is transferred (Szulanski, 1996). Therefore, a Canada Games Host Society must emphasize the benefits of knowledge transfer in order to facilitate a continuous optimal knowledge management state. The host society must also acknowledge that while striving to achieve the optimal knowledge management state constant change in both internal and external factors will mean a new optimal state will always be required.

External factors can also impact the knowledge management strategies of a Host Society. According to Chang and Lee (2008) an organization must "keep control of, and predict the changing directions of different variables within [its] environment, and [it] must thoroughly understand the effects of the environment on [the] firms" (p. 4). An organization must initiate interactions with other organizations within its external environment in order to obtain current and up-to-date information on trends in the industry and their potential impact. When an organization "interact[s] with other agents or the environment, [it] puts [its] mental models to test. Because of their intrinsic drive to improve their ability and performance, agents make structural changes to their models, a process known as adaptation" (Sheriff, 2006, p. 75). In order for organizations to be prepared for the environmentally-driven adaptations to its knowledge management strategies they must "have an appropriate method of selecting, obtaining, expanding and storing knowledge. The organization must also adopt a good method of knowledge accumulation activities so as to be able to demonstrate their good performance and technique of administrative innovation" (Chang and Lee, p.6). Although these internal and external factors are not exclusive it is important for the organization to consider as many options as possible to adapt to the factors when implementing knowledge management strategies.

The revised Transfer of Knowledge Process For Major Games Organizing Committees accounts for many of the internal and external factors that can prevent an organization from maintaining an optimal knowledge management state. First and most importantly the revised model accounts for the entry and exit of personnel for the organizing committee. This includes not only the Intuition Managers but also the senior

level planning managers, committee leaders, venue team leaders, planning volunteers and finally Games-time operational volunteers.

While the data indicate that Host Society organizational members did not manage workforce turnover effectively, from a knowledge management perspective it did demonstrate the importance of 'resetting' the knowledge transfer process. In fact, a 'reset' should have happened several times during the four years leading up to the Games but unfortunately it did not. The assumption was that the structures and systems put in place at the beginning of the Host Society operations were adequate for knowledge transfer. This view falls victim to the assumptions listed above where the literature suggests once knowledge management processes are set in motion the process is complete, and will ultimately lead to an "optimal state". Unfortunately, such a belief fails to recognize the dynamic nature of knowledge transfer within an organization and the need for organizations, particularly the Intuition Managers, to constantly 'reset' or revisit knowledge transfer mechanisms.

The revised Transfer of Knowledge Process for a Major Games Organizing Committee will assist future organizing committees by enhancing their ability to achieve and sustain effective knowledge management. This model specifically applies to non-profit sport organizations as it accounts for volunteer run operations where funding is not available to increase the staff-volunteer ratio. The acknowledgement of this factor will direct future organizing committees to recruit their key staff and volunteer planning personnel at the onset of the planning process. This will increase the potential for a shared vision between staff and volunteers throughout the entire lifecycle of the

organization. Maintaining a shared vision by all personnel is key for obtaining organizational capacity in the non-profit sport organizations.

As Marunchuk (2006) discovered the individual plays a critical role in building organizational capacity within a Major Games host committee context. This finding supports Donahue, Selden, and Ingraham's (2000) claim that the components of human resources which are important to capacity because it relates to organizational members. Donahue et. al's (2000) components include workforce planning, hiring the workforce, sustaining the workforce, motivating workforce, and workforce structure. In non-profit sport organizations specifically those that are temporary, it is extremely important to hire individuals with the appropriate qualifications and skills for a job. In the revised TOK model the inclusion of the Intuition Manager accounts for this. By recruiting the appropriate personnel from the onset of the organization's life cycle the capacity of the organization will be improved because KT is better facilitated.

Chapter 6: Conclusions and Recommendations

The purpose of this qualitative case study was to examine the transfer of knowledge process within a Major Games Host Society. Two specific research goals were created to guide this study: the first goal was to develop a model to explain a knowledge transfer process in a non-profit major games host organization, and the second goal was to examine the relevance of the knowledge transfer model to a Canada Games Host Society (CGHS). Two research questions enabled the researcher to achieve both of the research goals:

1 a) What factors enable the knowledge transfer processes outlined in the model?

b) How do the factors influence the model?

2 a) What factors inhibit the knowledge transfer processes outlined in the model?

b) How do the factors influence the model?

The work of Nonaka (2002), Crossan et al. (1999) and Bontis et al. (2002) contributed to the theory development process of this study. Nonaka discussed modes of knowledge conversion from tacit to explicit and the essential concepts required to ensure the conversion took place: socialization, externalization, combination, and internalization. Nonaka also introduced the spiral of organizational knowledge creation which incorporated organizational levels, modes of knowledge conversion, and the tacit – explicit knowledge relationship. Crossan et. al introduced the 4I framework which incorporates four processes (intuiting, interpreting, integrating, and institutionalizing) through three organizational levels (individual, group, and organizational) and

organizational learning as a dynamic process that included feedback and feed forward learning. Finally, Bontis et. al. elaborated and built upon the 4I framework and the SLAM (strategic learning assessment map) framework. The SLAM framework utilizes the organizational levels combined with the inclusion of both the feedback and feed forward learning processes.

Independently each of these researchers discussed important concepts related to knowledge transfer. By bridging the concepts from this work into one knowledge transfer model (see Figure 1) geared towards a non-profit major games host organization, the first research goal was met. During the data collection process the interview guide was based on a priori codes (see Figure 4) from the knowledge transfer model. Utilizing these a priori codes was a basis for theory testing to meet the second research goal of examining the relevance of the knowledge transfer model in a Canada Games Host Society. The findings related to the first and second research questions provided an in-depth analysis of factors that enabled and inhibited the knowledge transfer process based on the model.

Through the data analysis process, a number of new codes emerged specifically related to the barriers of knowledge transfer (see Figure 5). The emergent barriers identified that the theory (knowledge transfer model) was inadequate to meet the second research goal- examining the relevance of the knowledge transfer model in a Canada Games Host Society. Once it was determined that the model was not relevant for a CGHS, the researcher added elements to a revised model as a response to the knowledge transfer barriers identified in the data (see Figure 6). The development of the two models that were developed in this thesis contributes to the body of knowledge transfer literature in a new way. This qualitative case study tested a theory (original model) in the field,

identified enabling and inhibiting factors and then further developed a theory by creating a more relevant model specific to the case of study.

Research studies that test a theory often conclude by identifying if the theory was a success or failure. In this study the researcher furthered this specific knowledge transfer theory by identifying the factors that contributed to the inapplicability of the theory to the empirical context – a Canada Games host society – and subsequently revising the theory. The theory development of models for knowledge transfer was a tool that the researcher utilized to visualize and conceptualize a knowledge transfer process in order to determine how it might enhance organizational capacity. The first model in Figure 1 was developed based on a priori factors for a general knowledge transfer process. The final revised model is a theory that can be utilized in further testing of knowledge transfer processes in a variety of settings. Although many of the factors for knowledge transfer that are included in the revised model are specific to this case, organizational elements can be changed to meet a number of other situations because the knowledge transfer concepts and processes are general in nature.

A conclusion from this study was that there were five specific factors that were identified as being extremely important to the knowledge transfer process: capturing change and adaptation, horizontal view of knowledge transfer, concept of time in knowledge transfer, turnover, and finally importance of individuals. The first factor, capturing change and adaptation refers to the on-going changes that occur in organizations. In any organizational setting factors constantly change, whether that is the goal of a project, people working on the team, the timeline to complete the goal, or access to required resources. If organizations are unprepared to make changes to their

knowledge transfer process as quickly as they do for other important organizational processes, then they may become unsuccessful. In the revised model for this study, the identification of specific groups (management committee, divisions, venue teams) and the increase in group members towards the end of the time frame accounts for the constant change in the knowledge transfer process.

The second factor, the horizontal view of the knowledge transfer process was an adaptation that was made as a result of the findings from this study. In the first model (see Figure 1) the knowledge transfer process was a vertical process that appeared to peak at the top of the organizational hierarchy and stop, which essentially reflected a one-time process. In the revised model the knowledge transfer process became horizontal similar to Nonaka's (2002) knowledge spiral. When knowledge transfer is viewed as a horizontal process there is not a distinct end point. In comparison, the first KT model appears to only account for one process whereas the second horizontal KT model has several TOK processes because timing in knowledge transfer is indeterminate not determinate. The absence of an implied peak in TOK incorporates the constant change and adaptation that is required to meet the organizations on-going knowledge transfer needs.

The time dynamic that is essential for knowledge transfer is an area that is lacking in current literature in the field. While previous studies on KT may imply time they under-estimate its importance when discussing knowledge transfer. This study identified the importance of instituting specific timelines for the knowledge transfer process. Knowledge transfer occurs in a variety of situations in both profit and non-profit organizations, permanent and temporary organizations, and professional and volunteer organizations. If timelines are not communicated, knowledge transfer may be

unsuccessful. For example, if a project team in an organization has six months to complete its goal, organizations that do not provide a guideline as to what stage of the project various aspects of knowledge transfer should occur, a six month time period may be inadequate to complete the project. In the second model, the findings from this study identified specific time periods where the 'people and processes' of KT should be implemented. The incorporation of those factors into the new model, if tested in another setting, provide a starting point for organization members to achieve successful knowledge transfer.

The fourth important factor in the knowledge transfer process is an organization's ability to account for turnover. In the knowledge transfer literature turnover is recognized but the literature does not identify how it impacts knowledge transfer in the organization. In all types of organizations turnover occurs on a daily, weekly, monthly, and annual basis. If organizations do not account for this turnover in the knowledge transfer process, they will have to endure significant set-backs on the path to reaching their goal. Specifically in organizations similar to the 2007 CWGHS where a high volunteer percentage of organizational members occurs, frequent turnover must be accounted for in the knowledge transfer process. In the revised model the oval shape that encases the project has small breaks in the line. This graphic represents the on-going entry and exit of organizational members. Knowledge transfer pods (see Figure 8) and the frequency of these pods in the TOK process will assist organizations in overcoming the difficulties when turnover occurs.

Finally one of the most significant key factors in regards to knowledge transfer is the importance of key individuals in the organization. The middle manager and intuition

manager qualities that were identified in this study are a significant area in knowledge savvy organizations. Knowledge transfer begins and ends with individuals and if organizations do not recruit the right people for the key leadership positions in the knowledge transfer process, successful knowledge transfer may become difficult. The experience that intuition managers are able to bring to an organization can offer insight into factors unknown to other members of the organization. The leadership of intuition managers will enable them to work towards recruiting individuals to fill all positions that meet the requirements of the organization based on past experiences. Organizations that are knowledge transfer dependent should recruit individuals who have worked in similar environments in order to have the most insight and intuition for the unique aspects of the organization. In events like the Canada Games if the host societies are able to recruit individuals from previous games they will have experience from previous games which will provide the insight and intuition that is required for individuals in the key leadership positions.

Knowledge transfer is extremely important in order to enhance organizational capacity in organizations. The five factors mentioned above emerged from this case study and provided insight into the importance of a successful knowledge transfer process in an organization. If these five factors are not present in an organization's knowledge transfer process it will be difficult to enhance its capacity. As Ebrahim (2003) stated "knowledge is not enough; learning also involves the use of knowledge to influence organizational practices" (p. 14). Recruiting individuals who are able to utilize knowledge to influence organizational capacity builds upon the work of Marunchuk (2006) who investigated the 2005 Canada Games Host Society and found the existence of an "emphasis on human

resources as a connecting element" (p. 127) for organizational capacity. The individuals with intuition who are in key leadership positions also have what Tsai (2001) calls absorptive capacity. Absorptive capacity is a cumulative process that builds upon the knowledge that an individual brings with them to the organization.

The first factor that is important to knowledge transfer capturing change and adaptation closely relates to adaptive capacity. According to Ebrahim (2003) adaptive capacity is "the ability of a non-profit organization to monitor, assess, and respond to internal and external changes" (p. 14) and suggests the concept of adaptive capacity refers to an organization's ability to "reflect upon and respond to changes in the external and internal environment" (p. 14). Adaptive capacity is extremely relevant to the dynamics of an organization that encounters constant change such as the host society of a major games organizing committee. The external and internal factors that a host society is faced with in its lifetime require a TOK process that adapts to different situations in order to enhance the organization's capacity.

Knowledge transfer in organizations is recognized as a process that should be implemented in order to effectively manage organizational knowledge. Unfortunately the importance of knowledge transfer can be under-estimated in non-profit sport organizations as leaders do not focus and manage knowledge as successfully as they could. Knowledge hoarding occurs in organizations and this prevents knowledge from being shared and that impacts the organizations ability to enhance its capacity when the most efficient and effective ways of operating the business are not being transferred among all members. Organizations are beginning to hire Chief Knowledge Officers (CKO) because "they promote stability during environmental turbulence; they enable

speedy delivery of productions or services; they create high efficiency in the knowledge value chain by sharing resources synergistically; they enable the separation of work so that specialization is feasible" (Bontis, p. 30). The CKOs take the strain of managing the knowledge process away from the middle managers in organizations. This enables the CKO to monitor the TOK process constantly and ensure that it is functioning at optimal capacity.

This case study is one example of how to bridge the knowledge transfer – organizational capacity connection. A large gap between these two areas exists within the current literature as scholars have not yet recognized the importance of one upon the other, and the need to connect the concepts. In order to fully understand how capacity can be enhanced in organizations the knowledge transfer process must be investigated to identify the idiosyncrasies of the specific organization. The first TOK model in this study assisted in theory testing and the second model furthered the theory by addressing the factors specific to this case of a Canada Games Host Society. The first model identified numerous factors that inhibited knowledge transfer which ultimately impacted organizational capacity. By addressing these factors the new model can now be tested in future host societies to gain further understanding of the TOK process and its ability to impact organizational capacity.

Recommendations

Recommendations: Practical

The 2007 CWGHS faced ongoing challenges with the Venue Management Model (VMM) which resulted in several of the structural, systemic and cultural barriers to

knowledge transfer. Despite these barriers the host was able to stage a successful Games from the athletes and spectators perspective. Future Host Societies should continue to recruit individuals with educational, work, and Games experience because the combination of these expertises enables knowledge transfer and enhances organizational capacity. Future Host Societies should also continue to strive to achieve group cohesion while acknowledging the importance of customizing the socialization process for each specific group within the organization. Systems barriers, such as workforce competence and workforce continuity, coupled with the cultural barriers, such as workforce relations between volunteers and staff, generate flaws that negatively impact the TOK processes of a Host Society. The CGC should enhance its role with the host society at the onset of its lifecycle. The experience of the CGC staff is invaluable for helping host Society leaders screen potential key senior managers to ensure that Intuition Manager-like individuals are recruited.

The CGC has made significant improvements over the last two years in securing logos, broadcast and sponsor deals. However, it is now time that organizers begin to focus on the internal issues regarding absorptive capacity as it applies to TOK within a Host Society. The Canada Games is 40 years old and has not yet uncovered the most efficient and effective means to transfer knowledge. There is still tremendous potential for the Canada Games movement to become the leader in knowledge savvy sport organizations.

A thorough analysis of data unveiled several issues that the Host Societies and the Canada Games Council should consider for future Games. The Canada Games Council recommendations will be presented first followed by the host society recommendations.

In order to achieve and sustain effective TOK, the Canada Games Council should:

- Implement a knowledge transfer model at the onset of the Host Society.
- Hire a Chief Knowledge Officer (CKO) or dedicate a position on its staff solely to knowledge transfer.
- Ensure that the President and CKO understand and implement organizational vision and strategy
- Hire an information technology company to manage all computer databases to maintain consistency from host to host.
- Hire a consultant to review previous host societies final reports and create a standardized manual for host societies:
    - Create a shortened version of the final reports to capture key points for future hosts.
- Adjust budgets to ensure that Host Societies can hire senior planning staff at the inception of the life cycle of the organization:
    - Increase overall budget for staff to ensure that qualified staff are hired as they are crucial to success.
- Provide the organizational structure that the Host Society is required to use (the Venue Management Model)
    - Ensure that they fully understand the model.
- Develop relationships with all senior level planning volunteers through frequent site visits.
- Facilitate host-to-host knowledge transfer sessions at each Games.

The recommendations for hiring specific positions (Chief Knowledge Officer, Information Technology company, and a consultant) are extremely important for the Canada Games Council (CGC). Currently the CGC operates with a skeleton staff and does not have a specific position dedicated to the facilitation of knowledge transfer. Since knowledge transfer is identified as a key component for future Games success, knowledge transfer staffing is an important addition for the CGC. An information technology firm dedicated to manage the host societies databases, would enable the host society information technologists and Volunteer Division staff and volunteers to have more time to focus on other aspects of planning and staging for the Games. Maintaining a consistent database administrator would increase the successful transition of the database from one host to the next. If the CGC hired a consultant to prepare a start-up manual for

all host societies, it would enable the host societies to initiate the recruitment and planning phases more efficiently. The consultant could also review the final reports from each host society and adjust the manual at the completion of each Games.

The CGC needs to adjust the Host Society budgets to ensure that all Senior Staff members can be hired at the inception of the host society. The CGC can adjust the budget by increasing the amount of funding for staff positions at the onset of the host society. The adjusted budget is also required to increase funds for paid staff as they are critical to the success of the Games. Once the Senior Staff and Senior Volunteer Managers have been selected it is extremely important that the CGC provide the organizational structure that the Host Society will be required to use. This includes ensuring that all Host Society members understand the importance of the Venue Management Model and how each Division fits into the model. The CGC can ensure that this is happening through frequent site visits which will continue to develop relationships with the key planning staff and volunteers. While visiting the site the CGC should continue to facilitate knowledge transfer sessions.

The Host Society should:

- Hire senior level staff earlier in the planning process
- Hire staff and recruit as many volunteers from previous Games as possible
- Implement a buddy system for leadership roles in the divisional planning committees
- Create job descriptions so that all organizational members know and understand their roles
- Ensure the adoption of the Venue Management Model by the entire host society
- Cultivate a culture where volunteers and staff are one united group
- Increase the frequency of interdependency meetings
- Maintain open lines of communication with all levels in the organization
- Rent an office space to house the Host Society to increase the frequency of knowledge transfer.

The recommendations for the Host Society include the importance of hiring Senior Staff early in the planning process. When hiring the Senior Staff the Host Society should try and recruit as many staff and volunteers who have previous Major Games experience. Providing each staff and volunteer with a job description will increase awareness of job/role responsibilities in the Host Society. If senior staff members are hired earlier in the planning process then they will have a thorough understanding of the VMM and her/his role in the knowledge transfer process. This will assist in creating a culture where the staff and volunteers are united as one group. Increasing the frequency of the interdependency meetings will assist in the facilitation of knowledge transfer and maintaining open lines of communication with all groups and levels in the organization. Finally, if the Host Society is able to rent an office space to house as many divisions and committees as possible, knowledge transfer frequency will increase because of the close proximity of all organization members.

Recommendations: Methodology

The research approach that was utilized in this study had three data collection methods: interviews, observations, and document analysis. While all interviews were extremely useful, the pilot interviews in the field were especially helpful to make adjustments and focus upon the specific topic. Conducting at least one interview from senior management and senior staff, as well as one from middle management, provided different perspectives that would have remained uncovered if fewer participants were recruited. In the future, I would recommend a qualitative longitudinal study. In a longitudinal study of senior managers including both volunteer and staff, I would

recommend a three part interview series. An initial interview six months before the Games begin would develop a relationship and help the researcher better understand the issues facing each division during the pre-Games planning stages. A Games time interview would provide up-to-date information on during-Games issues and how knowledge transfer benefited or hindered the experiences of organizational member to that point in time. I would also highly recommend a post-Games interview two-three months after the Games ended. The follow-up interview would provide an interview participant with the chance to reflect on the entire Games management process. This would hopefully enable the participant to see both the positive and negative experiences and speak to best practices and recommendations for knowledge transfer within future host societies. A longitudinal study would allow a researcher to identify on-going issues and improvements that the host society has made.

Direct observations when in the field are extremely insightful and should be used as frequently as possible. In this case, direct observations were not utilized as frequently as they should have been while in the field. I often found myself thinking I would write observations down when I returned to my residence each evening and this rarely happened. In the future I would recommend using both a small notebook to carry and a small tape recorder. The tape recorder would be the most convenient way to quickly record thoughts based on observations in real-time as they happen. Observations was the biggest missed opportunity in this case and looking back if I had listened to my advisors and possibly conducted some practice observations prior to going in the field, I would have had more 'rich' field data to utilize.

Document analysis in this case proved to be an insignificant tool as most documents were final reports from the divisions in the Host Society. These documents were a secondary source of the information that came from the interviews. In the future I would recommend having an increase of documentation from the Canada Games Council (or main organization for other cases). Documentation that would come from a different source would contain information offering differing perspectives on issues that may not have emerged from interviews or observations. These documents would also come from individuals or committees that were not part of the interview or observation process and the information could provide new insights into ongoing and new issues from the organizational level.

Recommendations: Future Research

Future research on organizational capacity within a Major Games Organizing Committee should continue to investigate knowledge transfer, its importance and mechanisms. These elements could have a significant impact on future host societies as well as other temporary non-profit organizations. Specifically future research should investigate the barriers to knowledge transfer in a non-profit sport organization. Strategies for combating these barriers should be explored and further examined in a future Host Society where "best practices" are evident. The importance of the Intuition Manager for successful knowledge management strategies should continue to be examined. As Marunchuk (2006) claimed, individuals in the host organization are critical to organizational capacity and this may be an avenue to build a link between knowledge management and organizational capacity.

A gap in literature still exist between knowledge transfer and organizational capacity. Although knowledge transfer literature is an area of growth, knowledge transfer and sporting organizations and/or events, knowledge transfer and short term temporary organizations, and knowledge transfer and non-profit organizations have not been explored to the same degree as other areas. Increasing the amount of literature in these three areas will enhance our understanding of knowledge transfer in short term, non-profit, and non-traditional organizations and how knowledge transfer can impact organizational capacity. Enhancing capacity within organizations such as these is important as time and finances play a crucial role in achieving organizational goals.

In conclusion this study indicates knowledge transfer is an important organizational practice however it is a difficult area to manage effectively. While research highlights this difficulty by identifying barriers to knowledge transfer, the need for research on how to overcome these barriers still exists. This study addresses that gap by examining both barriers and enablers to knowledge transfer through empirically testing the proposed knowledge transfer model. Therefore this study builds upon the theoretical understanding of knowledge management within an amateur sport organization. In addition this research examines knowledge transfer in a rare context of Canadian amateur sport where the need to capitalize on managing the knowledge transfer process in critical. As leaders in Canadian sport continue to formulate and implement capacity building strategies it is important that they consider knowledge transfer.

REFERENCES

Abou-Zeid, E. (2005). A culturally aware model of inter-organizational knowledge transfer. *Knowledge Management Research & Practice*, *3*, 146-155.

Addelson, M., Brumburgh, S. and Chawla, S. (2008). From fragmentation to aligning: organizational coaching and ten conversations for organizing knowledge work. *Reflections*, *6*(6/7), 25-39.

Amis, J. and Slack, T. (1996). The size-structure relationship in voluntary sport organizations. *Journal of Sport Management*, *10*(3), 76-86.

Andersen, J. A. (2000). Intuition in managers. Are intuitive managers more effective? *Journal of Managerial Psychology*, *15*(1), 46-67.

Andrikopoulos, A. (2005). Using intellectual capital statements to determine value drivers and priorities for organization change: a portfolio selection approach. *Knowledge Management Research & Practice*, *3*, 166-172.

Appleyard, M. M. (2002). How does knowledge flow? Interfirm patterns in the semiconductor industry. In C. Choo & N. Bontis (Eds.). *The strategic management of intellectual capital and organizational knowledge* (pp. 537-545). New York: Oxford University Press.

Aramburu, N., Saenz, J. and Olga, R. (2006). Fostering innovation and knowledge creation: the role of management context. *Journal of Knowledge Management*,*10*(3), 157-168.

Arnaert, A. & Delesie, L. (2005). Information visualization: a holistic tool to discover knowledge. Case study – what video-telephone care? What elderly? *Knowledge Management Research & Practice*, *3*, 3-9.

Athanasios, L. (2005). Communication problems in professional sports: The case of Greece. *Corporate Communications*, *10*(3), 252-256.

Backer, T.E. (2001). *Strengthening nonprofits: Foundation initiatives for nonprofit organizations.* In C. De Vita & C. Fleming (Eds.). Building Capacity in Nonprofit Organizations. The Urban Institute.

Baskerville, R. & Dulipovici, A. (2006). The theoretical foundations of knowledge management. *Knowledge Management Research & Practice*, *4*, 83-105.

Beijerse, R.P. (1999). ''Questions in knowledge management: defining and conceptualising a phenomenon,'' *Journal of Knowledge Management*, *3*(2), 94-110.

Berg, B. L. (2001). *Qualitative research methods for the social sciences*, (4th ed). United States of America: Allyn and Bacon.

Bhardwaj, M. & Monin, J. (2006). Tacit to explicit: An interplay shaping organization knowledge. *Journal of Knowledge Management*, *10*(3), 72-85.

Boisot, M. (2002). The creation and sharing of knowledge. In C. Choo & N. Bontis (Eds.). *The strategic management of intellectual capital and organizational knowledge* (pp. 65-77). New York: Oxford University Press.

Bollinger, A. S. And Smith, R. D. (2001). Managing organizational knowledge as a strategic asset. *Journal of Knowledge Management*, *5*(1), 8-18.

Bontis, N. (2001). Assessing knowledge assets: A review of models used to measure intellectual capital. *International Journal of Management Reviews*, *3*(1), 41-60.

Bontis, N. (2001). CKO wanted – Evangelical skills necessary: A review of the chief knowledge officer position. *Knowledge and Process Management*, *8*(1), 29-38.

Bontis, N., Crossan, M., & Hulland, J. (2002). Managing an organizational learning system by aligning stocks and flows. *Journal of Management Studies*, *39*(4), 437-469.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: toward a unified view of working, learning and innovation. In Nahapiet, J., and Ghoshal, S. (2002). Social capital, intellectual capital, and the organizational advantage. In C. Choo & N. Bontis (Eds). *The strategic management of intellectual capital and organizational knowledge* (pp. 673-698). New York, NY: Oxford University Press.

Canada. (2002). *Canadian Sport Policy*. Ministry of Public Works and Government Service: Ottawa, ON.

Canada Games Council. (2006a). *Host society.* Retrieved December 10, 2006 from http://www.2007canadagames.ca/en/aboutus/hostsociety.php

Canada Games Council. (2006b). *History.* Retrieved December 10, 2006 from http://www.2007canadagames.ca/en/aboutus/history.php

Canada Games Council. (2006c). *About our torches.* Retrieved December 10, 2006 from http://www.2007canadagames.ca/en/aboutus/abouttorches.php

Canada Games Council. (2007a). Retrieved February 7, 2007 from http://www.canadagames.ca/Content/Organization/Strategic%20Plan.asp?langid=1

Cegarra-Navarro, J. G., and Rodrigo-Moya, B. (2005). Learning facilitating factors of teamwork on intellectual capital creation. *Knowledge and Process Management*, *12*(1), 32-42.

Chang, S. and Lee. M. (2008). The linkage between knowledge accumulation capability and organizational innovation. *Journal of Knowledge Management*, *12*(1), 3-20.

Choo, C., W. (2002). Sensemaking, knowledge creation, and decision making: Organizational knowing as emergent strategy. In C. Choo & N. Bontis (Eds.), *The strategic management of intellectual capital and organizational knowledge* (pp. 79-88). New York: Oxford University Press.

Cooper, H. (1984). *The integrative research review: A systematic approach*. Newbury Park, CA: Sage Publications.

Coyler, S. (2000). Organizational culture in selected western Australian sport organizations. *Journal of Sport Management*, *14*(4), 321-341.

Crawford, C. B. (2005). Effects of transformational leadership and organizational position on knowledge management. *Journal of Knowledge Management*, *9*(6), 6-16.

Cresswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches, 2nd edition*. Thousand Oaks, CA: Sage Publications.

Crossan, M. M., Lane, H. W. & White, R. E. (1999). An organizational learning framework: From intuition to institution. *The Academy of Management Review*, *24*(3), 522-537.

Davakos, H. (2006). An integral part of strategic planning for sport organizations: Training employees. *International Journal Sport Management and Marketing*, *1*(4), 390-399.

Davenport, T. and Prusak, L. (1998). Working knowledge. *Executive Excellence*, *15*(9), 10.

Dawson, R. (2000). Knowledge capabilities as the focus of organizational development and strategy. *Journal of Knowledge Management*, *4*(4), 320-327.

DeConinck, J. B., and Bachmann, D. P. (1994). Organizational commitment and turnover intentions of marketing managers. *Journal of Applied Business Research*, *10*(3), 87-95.

Demarest, M. (1997). Understanding knowledge management. *Long Range Planning*, *30*(3), 374–384.

Desouza, K. C. & Awazu, Y. (2006). Knowledge management at SMEs: five pecuiliarities. *Journal of Knowledge Management*, *10*(1), 32-43.

Donahue, A., K., Selden, S., C., and Ingraham, P., W. (2000). *Journal of Public Administration Research and Theory*, *10*(2), 381-411.

Ebrahim, A. (2003). Building analytical and adaptive capacity: Lessons from northern and southern NGOs. *Unpublished Manuscript*.

Eisenger, P. (2002). Organizational capacity and organizational effectiveness among street-level food assistance programs. *Nonprofit and Voluntary Sector Quarterly*, *31*(1), 115-130.

El Sawy, O. A., and Majchrzak, A. (2004). Critical issues in research on real-time knowledge management in enterprises. *Journal of Knowledge Management*, *8*(4), 21-37.

English, M. and Baker, W. (2006). *Winning the knowledge transfer race*. New York, NY: McGraw-Hill.

Ford, D. P. & Chan, Y. E. (2003). Knowledge sharing in a multi-cultural setting: a case study. *Knowledge Management Research & Practice*, 1, 11-27.

Gaston, T. E. & Smith, B. H. (1988). *The research paper: A common-sense approach.* Englewood Cliffs, NJ: Prentice Hall.

Goh, S. C. (2002). Managing effective knowledge transfer: An integrative framework and some practice implications. *Journal of Knowledge Management*, *6*(1), 23-30.

Goh, A. L, S. (2005). Harnessing knowledge for innovation: An integrated management framework. *Journal of Knowledge Management*, *9*(4), 6-18.

Gourlay, S. (2006). Towards conceptual clarity for 'tacit knowledge': a review of empirical studies. *Knowledge Management Research & Practice*, 4, 60-69.

Grant, R., M. (2002). The knowledge-based view of the firm. In C. Choo & N. Bontis (Eds.), *The strategic management of intellectual capital and organizational knowledge* (pp. 133-149). New York: Oxford University Press.

Grubbs, J. W. (2000). Cultural imperialism: A critical theory of inter-organizational change. *Journal of Organization Change*, *13*(3), 221, 234.

Guidice, R. M., Heames, J. T., and Wang, S. (2009). The indirect relationship between organizational-level knowledge worker turnover and innovation. *The Learning Organization*, *16*(2), 143-167.

Guzman, G. A. A., and Wilson, J. (2005). The 'soft' dimension of organizational knowledge transfer. *Journal of Knowledge Management*, *9*(2), 59-74.

Hackett, B. (2002). Beyond knowledge management: New ways to work. In C. Choo & N. Bontis (Eds.). *The strategic management of intellectual capital and organizational knowledge* (pp. 725-738). New York: Oxford University Press.

Halbwirth, S., & Toohey, K. (2001). The Olympic Games and knowledge management: A case study of the Sydney organizing committee of the Olympic Games.

European Sport Management Quarterly, 1, 91-111.

Hallgren, M. and Wilson, T. L. (2007). Mini-muddling: Learning from project plan deviations. *Journal of Workplace Learning*, *19*(2), 92-107.

Hedland, G. (1994). A model of knowledge management and the n-form corporation. *Strategic Management Journal*, 15, 73-90.

Huberman, M., A. & Miles, M., B. (1994). Data management and analysis methods. In N., K. Denzin & Y., S. Lincoln (Eds). *Handbook of qualitative research.* Thousand Oaks, CA: Sage, 1994.

Husted, K. and Milchailova, S. (2002). Diagnosing and fighting knowledge-sharing hostility. *Organizational Dynamics*, *31*(1), 60-73.

Janczak, S. (2004). How middle managers integrate knowledge within projects. *Knowledge and Process Management*, *11*(3), 210-224.

Kakabadse, N. K., Kouzmin, A. & Kakabadse, A. (2001). From tacit knowledge to knowledge management: Leveraging invisible assets. *Knowledge and Process Management*, *8*(3), 137-154.

Kalpic, B. & Bernus, P. Business process modeling through the knowledge management perspective. *Journal of Knowledge Management*, *10*(3), 40-56.

Khamseh, H. M., and Jolly, D. R. (2008). Knowledge transfer in alliances: determinant factors. *Journal of Knowledge Management*, *12*(1), 37-50.

Kaweevisultrakul, T. and Chang, P. (2007). Impact of cultural barriers on knowledge management implementation: evidence from Thailand. *Journal of American Academy of Business, Cambridge*, *11*(1), 303-308.

Kogut, B., & Zander, U. (1996). What firms do? Coordination, identity, and learning.

Organization Science, *7*(5), 502-518.

Laswell, H. D. (1971). From fragmentation to configuration. *Policy Sciences*, 2, 439-446.

Lefton, R. E. (1988). Communication: The eight barriers to teamwork. *Personnel Journal*, *67*(1), 18-21.

Leonard, D., & Sensiper, S. (2002). The role of tacit knowledge in group innovation. In C. Choo & N. Bontis (Eds.). *The strategic management of intellectual capital and organizational knowledge* (pp. 485-500). New York: Oxford University Press.

Leonard, D., & Swap, W. (2004). Deep smarts. *Harvard Business Review*, *82*(9), 88–97.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry.* Thousand Oaks, CA: Sage Publications, Inc.

Mackay, R. & Horton, D. (2002). *Capacity development in planning, monitoring, and evaluation: Results of an evaluation.* The Hague, Netherlands: International Service for National Agricultural Research.

Malhotra, Y. (2005). Integrating knowledge management technologies in organizational business processes: getting real-time enterprises to deliver real business performance. *Journal of Knowledge Management*, *9*(1), 7-28.

Mallen, C., and Adams, L. (2008). *Sport, recreation and tourism event management: Theoretical and practical dimensions*. Burlington, MA: Butterworth-Heinemann.

Marunchuk, K. *Capacity and transformational development within the 2005 Canada Summer Games host society.* St. Catharines, Ont. : Brock University, Faculty of Applied Health Sciences, (2006).

Mason, D. and Pauleen, D. J. (2003). Perceptions of knowledge management: A qualitative analysis. *Journal of Knowledge Management*, *7*(4), 38-48.

Matthews, P. (1997). What lies beyond knowledge management: Wisdom creation and versatility. *Journal of Knowledge Management*, *1*(3), 207-214.

Maula, M. (2000). Three parallel knowledge processes. *Knowledge and Process Management*, *7*(1), 55-59.

Maykut, P.S. & Morehouse, R. (1994). *Beginning qualitative research: A philosophic and practical guide.* Washington, DC: Falmer Press.

McKenzie, J. (2005). How to share knowledge between companies. *Knowledge Management Review*, *8*(5), 16-19.

McKnight, B. & Bontis, N. (2002). E-improvisation: Collaborative groupware technology expands the reach and effectiveness of organizational improvisation. *Knowledge and Process Management*, *9*(4), 219-227.

Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Mohamed, M., Stankosky, M. and Murray, A. (2004). Applying knowledge management principals to enhance cross-functional team performance. *Journal of Knowledge Management*, *8*(3), 127-142.

Morgan, G. (1986). *Images of organization* (2nd ed.). Newbury Park, CA: Sage Publications.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1 (2), Article 2. Retrieved November 4, 2006 from http://www.ualberta.ca/~ijqm/

Nahapiet, J., and Ghoshal, S. (2002). Social capital, intellectual capital, and the

organizational advantage. In C. Choo & N. Bontis (Eds.). *The strategic management of intellectual capital and organizational knowledge* (pp. 673-698). New York: Oxford University Press.

Natti, S. and Ojasalo, J. (2008). Loose coupling as an inhibitor of internal customer knowledge transfer: findings from an empirical study in B-to-B professional services. *Journal of Business & Industrial Marketing*, *23*(3), 213-223.

Nissen, M. E. & Levitt, R. E. (2004). Agent-base modeling of knowledge dynamics. *Knowledge Management Research & Practice*, 2, 169-183.

Nonaka, I. (2002). A dynamic theory of organizational knowledge creation. In C. Choo & N. Bontis (Eds.). *The strategic management of intellectual capital and organizational knowledge* (pp. 437-462). New York: Oxford University Press.

Nonaka, I., & Takeuci, H. (2007). In Mallen, C., and Adams, L. (2008). *Sport, recreation and tourism event management: Theoretical and practical dimensions*. Burlington, MA: Butterworth-Heinemann.

O'Reilly, N. J., & Knight, P. (2007). Knowledge management best practices in national sport organizations. *International Journal Sport Management and Marketing*, *2*(3), 264-280.

Palmer, J. and Richards, I. (1999). Get netted: Network behavior in the new economy. *Journal of Knowledge Management*, *3*(3), 191-202.

Panel on Accountability and Governance in the Voluntary Sector. *Building on strength: Improving governance and accountability in Canada's voluntary sector: Final report.* [Electronic document]. Retrieved December 7, 2006 from http://vsrtrsb.net/pagvs/Book.pdf.

Parent, M. M., & Seguin, B. (2007). Factors that led to the drowning of a world championship organizing committee: A stakeholder approach. *European Sport Management Quarterly*, *7*(2), 187-212.

Patton, M.Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Polanyi, M. (1958). *Personal knowledge*. Chicago, IL: University of Chicago Press.

Preiss, K. (1999). Modelling of knowledge flows and their impact. *Journal of Knowledge Management*, *3*(1), 36-46.

Pretz, J. E, & Sentman Totz, K. (2007). Measuring individual differences in affective, heuristic, and holistic intuition. *Personality and Individual Differences*, 43, 1247-1257.

Preuss, H., & Solberg, H. A. (2006). Attracting major sporting events: The role of local residents. *European Sport Management Quarterly*, *6*(4), 391-411.

Rai, H. (2009). Gender differences: Ingratiation and leader member exchange quality. *Singapore Management Review, 31(1)*, 63-72.

Reay, T., Golden-Biddle, K. and German, K. (2006). Legitimizing a new role: Small wins and microprocesses of change. *Academy of Management Journal, 49*(5), 977–998.

Reige, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, *9*(3), 18-35.

Reige, A. (2007). Actions to overcome knowledge transfer barriers in MNCs. *Journal of Knowledge Management*, *11*(1), 48-67.

Rijinders, S. & Boer, H. (2004). A typology of continuous improvement implementation processes. *Knowledge and Process Management*, *11*(4), 283-296.

Sanderson, I. (2001). Performance management, evaluation and learning in 'modern' local government. *Public Administration*, *79*(2), 297-313.

Schou, B. (2007). Understanding your knowledge profile. *Knowledge Management Review*, *10*(2), 24-27.

Seidler-de Alwis, R. and Hartmann, E. (2008). The use of tacit knowledge within innovative companies: knowledge management in innovative enterprises. *Journal of Knowledge Management*, *12*(1), 133-147.

Skyrme, D. and Amidon, D. (1997), ''The knowledge agenda'', *Journal of Knowledge Management*, *1*(1), 27-37.

Shelton, C. D., Hall, R. F., and Darling, J. R. (2003). When cultures collide: the challenge of global integration. *European Business Review*, *15*(5), 312-323.

Sherif, K. (2006). An adaptive strategy for managing knowledge in organizations. *Journal of Knowledge Management*, *10*(4), 72-80.

Singh, K. (2008). Emotional intelligence and work place effectiveness. *The Indian Journal of Industrial Relations*, *44*(2), 292-302.

Stake, R.E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage Publications.

Stake, R. E. (1998). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds). *Strategies of qualitative inquiry.* (pp. 86-109). Thousand Oaks, CA: Sage Publications.

Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17, 27-43.

Taylor, T., & McGraw, P. (2006). Exploring human resources management practices in nonprofit sport organizations. *Sport Management Review*, 9, 229-251.

Thompson, M., P, A., and Walsham, G. (2004). Placing knowledge management in context. *Journal of Management Studies*, *41*(5), 725-747.

Tsai, W. (2001). Knowledge transfer in interorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal*, *44*(5), 996-1004.

Tse, H, H., & Mitchell, R. J. (2010). A theoretical model of transformational leadership and knowledge creation: The role of open-mindedness norms and leader-member exchange. *Journal of Management and Organization, 16*, 83-99.

Tsoukas, H. (1996). The firm as a distributed knowledge system: A constructionist approach. *Strategic Management Journal*, 17 (Winter Issue), 109-122.

Turner, R. J. and Muller, R. (2003). On the nature of the project as a temporary organization. *International Journal of Project Management*, 21, 1-8.

Van Bevern, J. (2003). Does health care for knowledge management. *Journal of Knowledge Management*, *7*(1), 90-95.

Vermaack, H. and Weggeman, M. (1999). Conspiring fruitfully with professionals: New management roles for professional organizations. *Management Decision*, *37*(1), 29-44.

Vogels, W. (2004). Technology challenges for the global real-time enterprise. *Journal of Knowledge Management*, *8*(4), 100-104.

Ward, M. (2007). How knowledge companies succeed. *Journal of Knowledge Management*, *11*(6), 16-27).

Watson, S., & Hewett, K. (2006). A multi-theoretical model of knowledge transfer in organizations: Determinants of knowledge contribution and knowledge reuse.

Journal of Management Studies, *43*(2), 141-173.

Welling, H. (2005). The intuitive process: The case of psychotherapy. *Journal of Psychotherapy Integration*, *15*(1), 19-47.

Williams, R. (2006). Narratives of knowledge and intelligence … beyond the tacit and explicit. *Journal of Knowledge Management*, *10*(4), 81-99.

Willimason, T. (2005). Work-based learning: a leadership development example from an action research study of shared governance implementation. *Journal of Nursing Management*, 13, 490-499.

Wing, K., T. (2004). Assessing the effectiveness of capacity-building initiative: Seven issues for the field. *Nonprofit and Voluntary Sector Quarterly*, *33*(1), 153-160.

Wright, K. (2005). Personal knowledge management: supporting individual knowledge worker performance. *Knowledge Management Research & Practice*, 3, 156-165.

Woolhouse, L. S., & Bayne, R. (2000). Personality and the use of intuition: Individual differences in strategy and performance on an implicit learning task. *European Journal of Personality*, 14, 157-169.

Yigitcanlar, T., Baum, S., and Horton, S. (2007). Attracting and retaining knowledge workers in knowledge cities. *Journal of Knowledge Management*, *11*(5), 6-17.

Yin, R.K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Appendix A

Snapshot Interview Guide

Demographics and Background

1. Do you have any educational experience that has been relevant to your position?
2. What work experiences have been useful for situations that you have encountered?

Organizational Capacity

DEFINITION:

[The] assets, strengths, qualities or characteristics that enable a voluntary organization or the sector as a whole to survive while addressing ongoing challenges and to grown and thrive while meeting new opportunities. In addition to 'hard' infrastructure, such as funding, technology, and human resources, capacity entails knowledge and understanding (Panel on Accountability and Governance in the Voluntary Sector, 1999, p. 14).

Knowledge

DEFINITION

an integrated, systematic approach to identifying, managing, and sharing all of an enterprise's information assets, including databases, documents, policies, and procedures as well as previously unarticulated expertise held by individual workers. Fundamentally, it is about making the collective information and experience of an enterprise available to the individual knowledge worker, who is responsible for using it wisely and for replenishing the stock. This ongoing cycle encourages a learning organization, stimulates collaboration, and empowers people to continually enhance the way they perform work (Hackett,2002, p.727).

Individual

3. What knowledge were you able to bring to the host society and your divisions respectively?
4. Were you able to share your knowledge with others in your divisions or other divisions?

5. Do you feel that your knowledge was valued?
6. Were you provided with any information from the previous host to assist you in the transition to your position? If so what?
7. Were you encouraged to engage in relations with other volunteers from this host or previous host when searching for information?
8. Who do you report to?
9. If you have questions that your supervisor is unable to answer where are you directed to go to find the information?
10. When you first took on your position, were able to contact any individual, or have access to any information to assist you in the start-up phase who and what would they be?
11. The experience that you have had to this point must have included many challenging and frustrating moments, if you could pass along any advice to the person in PEI who will hold the same position as you what would that be?

Group

12. What strategies did you use to transfer knowledge between yourself and other individuals?
13. Were you able to combine knowledge of individuals and implement new strategies?
14. Did others share their knowledge with you?

Organization

15. After meetings or conversations with others where knowledge was shared and new strategies were suggested, do you feel that the strategies were institutionalized within the host society?
16. Can you discuss business with other divisions?
17. How would you define your organizational culture?

Appendix B

Proposed Sensitizing Framework for During-Games Observations

1) How many people actively participate at the meeting?
2) Is communication one-way or two-way between staff and volunteers and within the different level of volunteers?
3) What technology is utilized for communication?
4) Does the chain of command help/hinder decision making? How?
5) Who makes on-the-spot decisions?
6) What resources are available to planning volunteers? Staff?
7) Is the technology up-to-date and easy to use for participants?
8) Is interaction encouraged with other divisions?
9) Is knowledge recorded? How? What form?

Appendix C

Informed Consent Form

February 6, 2007

Principal Investigator: Melody Rioux, MA Candidate
Faculty of Applied Health Science
Department of Sport Management
Brock University
500 Glenridge Ave
(905) 688-5550 ext 4481
melody.rioux@brocku.ca

Invitation
You are invited to participate in a study that involves research. The purpose this research project is the purpose of the qualitative case study is to analyze the relationship between knowledge transfer strategies and organizational capacity within a temporary non-profit sport organization.

What's Involved
The participant will be required to participate in 1 interview approximately 10 – 15 minutes in duration.

Risks
Participation in this interview poses no anticipated risks.

Confidentiality
The information you provide will be kept confidential. Your name will not appear in any written report as a result of this interview, unless you have given consent to do so. After the interview I will transcribe our recorded conversation and send it to you, in order to ensure accuracy in the transcription and to provide you with an opportunity to add any other information which you feel is pertinent to this study. Data will be stored in a residence off the university campus in a locked, fire proof safe. The data will be kept for two years after which time it will be destroyed. Access to the data will be restricted to the primary researcher, Julie Stevens.

Voluntary Participation
Participation in this study is voluntary and if you wish you may choose to decline to answer any questions throughout the interview. You may also decide to withdraw from this study at any time without suffering penalty.

Contact Information and Ethics Clearance
If you have any questions about this study or require further information, please contact the Principal Investigator using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 ext 3035, reb@brocku.ca

Consent Form
I agree to participate in this study described above. I have made the decision based on the information I have read in the information-consent form. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name:_____

Signature:_____ Date:_____

Appendix D

LETTER OF INVITATION

February 6th, 2007

Title of Study: Organizational Capacity and Knowledge Transfer Strategies: A Qualitative Case Study of the 2007 Canada Winter Games Host Society

Principal Investigator: Melody Rioux, MA candidate, Department of Sport Management, Brock University

Faculty Supervisor: Julie Stevens, Professor, Department of Sport Management, Brock University

I, Melody Rioux, MA candidate, from the Department of Sport Management, Brock University, invite you to participate in a research project entitled Organizational Capacity and Knowledge Transfer Strategies: A Qualitative Case Study of the 2007 Canada Winter Games Host Society.

The purpose of this research project is the purpose of the qualitative case study is to analyze the relationship between knowledge transfer strategies and organizational capacity within a temporary non-profit sport organization.

The expected duration of each interview is 10 – 15 minutes in length.

This research should benefit future host societies in the preparation and transfer of knowledge strategies. This research will also benefit temporary non-profit volunteer sport organizations.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you have any questions, please feel free to contact me.
Thank you

Melody Rioux

Melody Rioux
MA Candidate
1-905-984-6049
melody.rioux@brocku.ca

Julie Stevens
Professor
1-905-688-5550 ext. 4668
julie.stevens@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board (file # XXX]

Appendix E

Framework for Sources of Documentation

Media Related Documents

1) Have any newspaper articles been published related to the Canada Games?

Organizational Based Documentation

1) What type of documents are utilized by the executive, volunteer, and staff personnel?

2) What are the content areas?

3) How comprehensive are theses documents?

4) Are the documents updated for the new Games?

5) Are any documents available to the public or are they only for the individuals involved with the planning?

6) Are minutes stored from any of the executive, volunteer, or staff meetings kept?

7) What types of issues are identified in the minuets?

8) Have these issues been addressed since the last meeting?

9) Who controls/stores the document?

10) Who has access to the document?

11) Does the content reflect explicit or tacit knowledge?