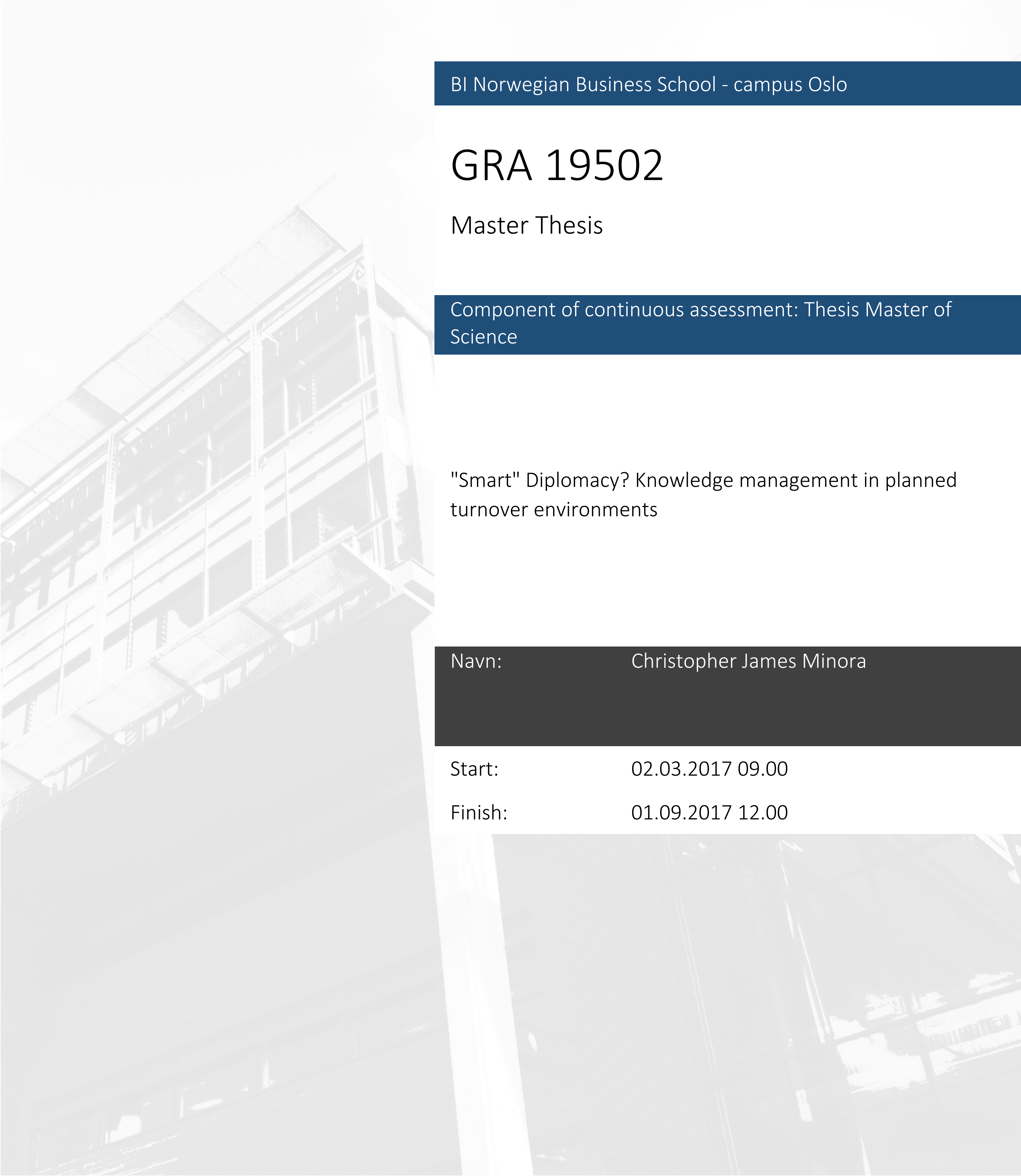

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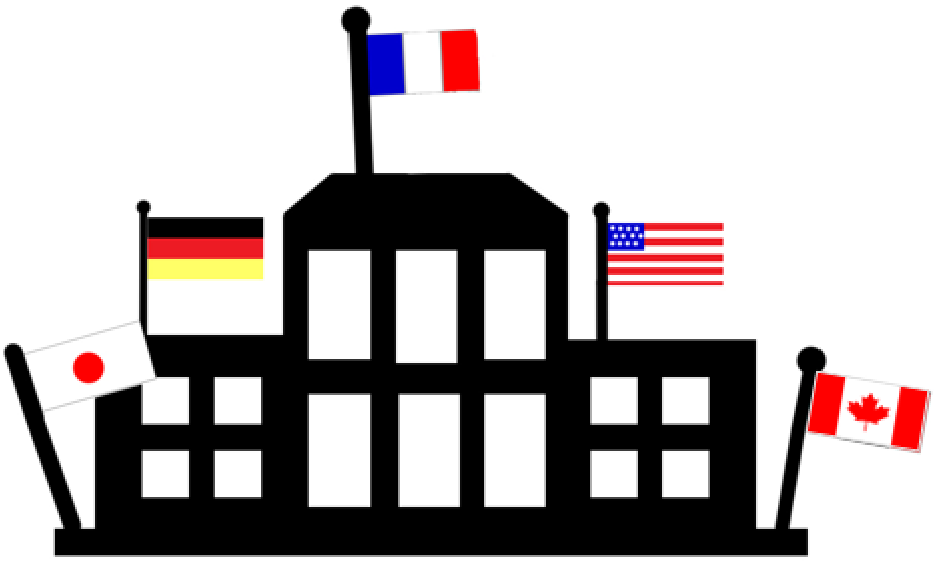

"Smart" Diplomacy? Knowledge management in planned turnover environments

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[1] Flags on cover image are not indicative of foreign missions participating in this study.

Summary

Modern communication has ended much of traditional diplomacy. As national leaders and analysts can connect directly with other foreign nations from inside their own boundaries, embassies and consulates have taken on a new primary task – export promotion and development of the home nation’s business interests abroad. This leads to the question: *if embassies are taking on business roles, are they also being run like a business?* Billions of tax dollars are spent on diplomatic programs each year, and citizens deserve effective steering of that money. Those in charge of these staggering budgets are often diplomats who are rotated to different work posts throughout the global embassy system every few years. With only two or three years per rotation, these diplomats receive extensive training and are expected to hit the ground running in their new rotation. Local knowledge, however, is vital to understanding how both business promotion and traditional diplomatic and consular work should be accomplished within the new cultural environment.

With that in mind, this thesis will explore how embassies are managing the knowledge that comes in and out of their doors. Do these new diplomats have the benefit to learn from their predecessors? What systems are in place to avoid costly relearning of local knowledge once a skilled diplomat moves to his or her next post? Knowledge can be seen as both tacit and explicit, and both are vital to an organization’s success. To get a full picture of the knowledge management processes within foreign missions, this thesis will explore both.

1. Introduction

Knowledge management is a central organizational practice that directly impacts organizational effectiveness (Zheng, Yang, & McLean, 2010). It is also a means through which culture, structure, and strategy can indirectly shape the organization. For the vast majority of organizations, their value propositions could not be fulfilled without understanding internal knowledge resources and executing a plan to manage them. For organizations engaging in international operations across multiple cultures, knowledge management takes on an additional relevance (Rugman & Verbeke, 2001). In these multinational cases, employees must not only understand their core capabilities as expressed by the headquarters but also adapt that understanding to a culturally new operating environment. When individuals are rotated throughout an organization's geographic footprint, this inter-office turnover hinders the successful management of locally-generated knowledge (Inkpen and Tsang, 2005). An employee's exit signals a departure of both tacit knowledge and of developed interpersonal relationships which can facilitate knowledge exchange.

Knowledge management retains additional significance in organizations that deliver services, because the intangible nature of services makes objective quality assessments difficult (Sarvary, 1999). Workflows in service industries also depend upon relationships between the client and organization. Strong interfirm relations and an understanding of the client's preferences and business can result in future collaborations (Johnson, Sohi, & Grewal, 2004).

All of these factors are present within the operations of professional service-based industries such as information technology, management consulting, or law firms. These industries, however, have been studied on numerous occasions in terms of knowledge management processes (Morris & Empson, 1998; Sarvary, 1999; Dunford, 2000; Beaverstock, 2004; Le-Nguyen, Harindranath, & Dyerson, 2014). This study therefore endeavors to explore knowledge management within a research setting where the concept is extremely relevant but yet to be studied. This setting is the diplomatic operations of a nation's foreign missions (i.e. its embassies and consulates). Like professional service firms, foreign missions are globally dispersed, service-oriented, and experience regular turnover of staff. For the sake of clarity, this master thesis will employ the term of "foreign mission" throughout (unless referring to a specific embassy) as the study's participants were invited to share experiences with knowledge management from both embassies and consulates. Further, the term “foreign mission” includes any nation’s official embassy, consulate, or permanent mission in a foreign country (Menon, 2001).

Operationally, a nation’s ministry of foreign affairs typically includes a diverse geographic footprint of foreign missions, which promote the home nation’s interests locally (Menon, 2001). These foreign missions can be characterized as “high turnover”, because diplomatic staff rotate through different global positions after two or three years in one location (McCulloch & Turban, 2007; U.S. Department of State, 2017(a); U.K Civil Service, 2017). From an activities standpoint, employees of foreign missions council their ministry on local political, societal, and economic conditions in addition to providing personal, consular, and business services for nationals in the foreign nation (Menon, 2001). For example, a foreign mission may facilitate adoptions, assist a citizen in legal trouble, issue new passports or visas, and promote the exports of home nation businesses.

In 2016, the U.S. Department of State requested a budget of $10.8 billion dedicated to diplomatic programs and embassy security and maintenance (US Department of State, 2017(b)). In the same year, Norway’s Utenriksdepartement requested 6.8 billion NOK for diplomatic programs (Det kongelig utenriksdepartement, 2017). In today’s era of advanced communications, key foreign policy decisions are often made at home and communicated abroad (Rose, 2007). Consular and citizen services alone do not justify the huge expense of a foreign mission. Rather, the most important role of a nation’s foreign mission in today’s interconnected world has become developing home nation business interests in the host country, a service known as “commercial diplomacy.” Mandates of foreign missions from the United States, United Kingdom, Canada, Australia, and Germany all include goals and activities, which enhance their country’s business interests abroad (U.S. Department of State, 2017(c); U.S. Commercial Service, 2017; U.K. Foreign Department of International Trade, 2017; Global Affairs Canada, 2017; Australian Department of Foreign Affairs and Trade, 2017; German Federal Foreign Office, 2017). With such focus now being placed on the foreign missions’ ability to consult, guide, and promote home-nation businesses interests in the host nation, retaining the local knowledge and contacts of departing diplomats who provided these services should be a top priority.

1.1 Relevance of the study

Knowledge management refers to an organization's understanding, focus, and approach toward building, renewing, applying, and leveraging knowledge in a way that helps the organization achieve its goals (Wiig, 1997; Von Krogh, 1998). When it comes to knowledge management within an organization's boundaries, people are more effective conduits than tools or tasks themselves, because they can adapt their knowledge regarding tools and tasks to different contexts (Argote & Ingram, 2000). Personnel turnover often negatively affects intra-organizational knowledge management, because an employee's departure hinders the establishment of interpersonal relationships, rapport, trust, and friendship, all of which can facilitate knowledge exchange (Inkpen and Tsang, 2005).

Personnel turnover is especially harmful to the productivity of organizations that engage in high-involvement work practices (Guthrie, 2001). As these organizations invest in developing their skilled workforce, they become more and more dependent upon their employees' unique knowledge. When employees leave due to resignation, firing, or the end of a temporary work contract, their exit creates a knowledge gap that impedes the organization's productivity and effectiveness.

Organizations which regularly hire temporary contractors and consultants especially expose themselves to turnover-based loss of intellectual capital. These organizations may engage temporary employees in order to save on wages for unskilled labor, cover periodic workload increases, and/or hire for specialized services (Taylor & Abraham, 1996). The engagements of these contractors typically expire faster than those of permanent employees who decide to quit voluntarily (Pfeffer, 2001). Thus, organizations who regularly engage a temporary workforce exacerbate the internal negativities of personnel turnover by virtually guaranteeing 100% turnover of the contracted part of their labor force. The direct cost savings of the contracted employees may be erased by reduced productivity and the loss of investment and knowledge that occurs when a contractor leaves the organization (Stovel & Bontis, 2002). In one study at Applied Materials, a California-based semiconductor firm, contractors nearing the end of their employment withheld skills and knowledge from colleagues and replacements when neither a permanent offer nor a new contract materialized (Pfeffer, 2001).

Many authors have proposed and refined processes for managing knowledge, but these strategies are often general and not in response to personnel turnover situations (i.e. Hansen, Nohria, & Tierney, 1999; Scheepers, Venkitachalam, & Gibbs, 2004). Several studies have explored knowledge management within the context of voluntary turnover (i.e. permanent employee resignations) (Dess & Shaw, 2001; Stovel & Bontis, 2002) or unplanned rotations (Kane, Argote, & Levine, 2005) but not in a situation where planned personnel turnover is an inherent aspect of the business model. Likewise, many researchers have studied knowledge management in temporary projects (i.e. Lindner & Wald, 2011; Huemann, Keegan, & Turner, 2007; DeFillippi & Arthur, 1998), but fewer have studied it within a context of permanent organizations using temporary employees. Additionally, knowledge management processes have been explored within nontraditional non-business contexts such as non-profits (Lettieri, Borga, & Savoldelli, 2004), healthcare (Mura, Lettieri, Radaelli, & Spiller, 2016), and other segments of government (Pee & Kankanhalli, 2016; Liebowitz, 2012; Rubenstein-Montano, Buchwalter, & Liebowitz, 2001); however, very few subjects of strategic management, including knowledge management, have been studied within the context of diplomatic operations (Ruël & Zuidema, 2012). Thus, a research gap appears to exist between knowledge management practices and organizations with planned workforce turnover. This research gap widens when one explores knowledge management processes within the context of diplomatic operations.

Exploration of knowledge management in environments where high levels of personnel turnover are intentional and planned requires a very specific research setting. Consulting firms, staffing agencies, and the companies that regularly hire them are all involved in regular personnel turnover (Taylor & Abraham, 1996; Stovel & Bontis, 2002). It is fair to assume all of these businesses would like to improve their knowledge management throughout the turnover process; however, as Sir Francis Bacon famously said, “Knowledge is power”, and this famous line is equally applicable to businesses as it is to non-profits or public entities.

With that in mind, this thesis’ exploration of knowledge management processes in planned turnover environments will occur within foreign missions, because foreign missions have high turnover and utilize temporary staff. Like firms who hire consultants and contractors with temporary agreements, foreign ministries can also plan and coordinate the personnel turnover at their foreign missions via diplomatic rotations (Menon, 2001). Diplomatic staff of the United States Foreign Service, for example, are redeployed to a new international assignment every two to three years (US Department of State, 2017(c)). Diplomatic Civil Servants in the United Kingdom are similarly rotated to a new foreign office every three years (UK Civil Service, 2016). Participants in this study shared that diplomatic rotations can even be shorter if circumstances require. They also explained how ministries strategically coordinate rotations to prevent an entirely new diplomatic workforce from staffing a given foreign mission or department.

In the United States, only 3% of those who take the foreign service entrance exam ever find work in diplomacy (Chen, 2015). Those who get through receive six weeks of diplomacy class plus weeks or months of deployment-specific language, culture, and political training before each new rotation. Pre-deployment training for diplomats is common among foreign ministries. Heavy investments are thus remade each time a diplomat rotates to another foreign mission.

Autonomous, skillful diplomats who lead their foreign mission’s commercial services have been considered the most important factor of successful export promotion (Hogan, Keesing, Singer, & Mundial, 1991). These diplomats typically have a combination of academic and practical training within the host country. Knowledge of the local market’s preferences, the host country’s marketing and financing techniques, and important contacts provides these diplomats with the tools to promote business interests (Ruël & Zuidema, 2012). Knowledge in commercial diplomacy thus comes from experience and is not always easy to share. Therefore, processes to manage the knowledge of highly skilled, temporary diplomats are critical to successful commercial diplomacy within a foreign mission.

1.2 Goals of the study

According to theory, the short rotations of foreign missions’ diplomatic staff should hinder traditional knowledge management (i.e. Inkpen & Tsai, 2005). Thus, processes for knowledge management should be highly important to foreign missions given their extensive geographic footprint, need for local knowledge, high rotation-based turnover, and service-oriented activities. Yet, there is a gap in the academic literature exploring this exact topic.

Knowledge management processes themselves have never been explored academically within foreign missions, despite studies which highlight the importance of knowledge to effectiveness in commercial diplomacy (i.e. Ruël & Zuidema, 2012). Further, foreign ministries publicly acknowledge the importance of knowledge to their operations on their websites and in reports (U.S. Department of State, 2017(d); U.K. Foreign & Commonwealth Office, 2016), yet outside research has not been done to explore the knowledge management processes in place. Thus, knowledge management emerged as the focus of this study, because (1) a gap in the literature exists; (2) the relevance of the topic to my research pool could increase my access to these tightly sealed foreign missions; and (3) the findings had potential to be of use to the individuals who participated in the study.

By identifying not only *what* knowledge management practices exist but also *how* the foreign mission implements them, this paper's propositions and implications for practice can close the research gap that exists between knowledge management and diplomatic operations. Likewise, the results of this study can also reduce the research gap between knowledge management and environments of planned staff turnover, because diplomatic operations represent one example of organizations with "planned staff turnover".

Drawing on Hansen et. al. (1999), this thesis reviews both tacit and explicit knowledge management processes in order to achieve a full picture of the procedures in place. The term knowledge management used here includes creation, transfer, retention, and application of knowledge (Argote, McEvily, & Reagans, 2003; Alavi & Leidner, 2001). The paper thus sheds light on the relationship between two concepts, knowledge management processes and personnel turnover, within the understudied diplomatic context. From this foundation, the goal of this thesis is to answer the following the research question:

How do foreign missions manage (i.e. create, transfer, retain, and apply) the local knowledge and expertise of diplomats who are, by design, rotated to a new post every few years?

Since the aim of this thesis is to uncover how knowledge is managed at foreign missions, the propositions and will describe the knowledge management processes in place. The goal of this study is not to go "in-depth" regarding IT systems or confidential data storage techniques utilized within the foreign mission. This study will not reveal any type of "knowledge" or classified information, because the study's focus is on the knowledge management process, not the content.

An additional goal of this study is to subtly add to the conversation on how government should be run by providing readers with insight into how foreign missions actually operate. Though it is often an unfair comparison, the sentence "government should be run like a business" is a mantra that elicits ideals of slashing through bureaucracy and optimizing services (Beckett, 2000). Private and public institutions, however, are dissimilar on many levels, and among other scholars, Mintzberg (1996) has challenged the notion of running government like business. Studying a strategic management concept like knowledge management in a government institution, which actually engages in commercial activities like these foreign missions, may however add to this philosophical debate.

1.3 Structure of this thesis

This paper begins by surveying the literature on knowledge management and turnover that is relevant to the research question. Here, connections will be made to the limited literature on the services provided by foreign missions, when applicable.

Next, the paper will present how the research was conducted and analyzed. Here, the practical aspects of data collection and analysis will be covered in addition to the theoretical concepts that structured the thesis' research method. This will be followed by an in-depth description of the foreign mission research setting.

After explaining the research and analysis method, the propositions of the study will be presented and discussed. Here, the knowledge management practices described will focus on the overall comparative takeaways from the different foreign missions' approaches. These propositions will then be analyzed given the current theory on knowledge management and turnover to highlight the theoretical implications of the foreign missions' current knowledge management practices

Based on the theoretical implications, a section of practical implications will provide insights for practitioners. Finally, this thesis will offer a conclusion, which highlights both the study's theoretical contributions and potential for future research. The conclusion will also review some of the study's limitations.

2. Literature Review

The research question involves theory from knowledge management and personnel turnover. This literature review will dive into each concept individually while also exploring their interconnectedness when possible.

2.1 "Knowledge" within the field of strategic management

A foundational assumption of the resource-based view is that an organization's resources are unique and valuable and thus can create a comparative advantage (Barney, 1991). These resources include all assets, capabilities, processes, knowledge, etc. that the organization controls and utilizes toward improving efficiency. From this, the knowledge-based view has emerged based on a set of assumptions that knowledge is: transferable intra- and inter-organization; able to be aggregated; not directly appropriable; requiring specialization at the cost of breadth; and utilized in the production of all goods and services (Grant, 1996). Plato defines knowledge as "justified true belief", and in pioneering the knowledge based view of the firm, Robert Grant (1996) neither challenged nor added to that definition.

Alavi and Leidner (1999), however, took Plato's definition one step further by defining knowledge as "*a justified belief that increases an entity's capacity for taking effective action.*" In this definition, the "entity" includes both individuals and collective groups, like organizations. The "action" refers to physical skills, cognitive intellectual capabilities, and any combination of the two. Alavi and Leidner's (1999) definition implies that in order for knowledge to be useful for others, it must be first personalized within an individual and subsequently expressed in a manner that receivers find useful for taking action.

Knowledge has been viewed from several different perspectives, including as a state of mind, a capability, an object, a condition of having access to information, and a process, and each of these has different implications for knowledge management (Alavi & Leidner, 2001; McQueen, 1998). Under the state of mind perspective, knowledge is the state of knowing and understanding facts and information (Schubert, Lincke, & Schmid, 1998; McQueen, 1998). Here, an individual's knowledge can be expanded through study and experience, and then utilized to serve their organization. Knowledge management processes under the state of mind perspective should focus around providing individuals with access to sources of knowledge from which they can personally learn.

The viewpoint of knowledge as a capability connects the level of knowledge in a person or organization to that person or organization's potential to skillfully influence future action (Nonaka & Von Krogh, 2009). Knowledge management, in turn, entails the development of core competencies and intellectual capital that can then be utilized in successful decision making (Alavi and Leidner, 2001). For example, under the "knowledge as capability" perspective, one could argue that a manager's "knowledge" depends upon that manager's ability to prioritize relevant information and make an important strategic decision.

The "object" perspective of knowledge describes it as a unit which can be transferred, shared, codified, stored in a database, and even lost (Ibert, 2007). Knowledge management processes under this perspective center around developing and managing a central inventory of knowledge, because knowledge can be controlled and preserved. The knowledge as an object perspective is enhanced by the school of thought linking knowledge to access to information (McQueen, 1998). Here, knowledge is not an object itself but rather a condition based upon the quality and accessibility of information and data. Knowledge management processes under the access to information school of thought focus on developing relevant search terms and retrieval mechanisms in order to facilitate greater access to information.

The "process" perspective of knowledge, on the other hand, directly counters the "object" approach, and it posits that knowledge is the process and flow of entities applying expertise through activities such as knowledge creation, sharing, retention, application and distribution (Carlsson, 2003). Under the process approach, knowledge emerges through the process of "knowing." Knowledge management systems should focus on deeply linking sources of knowledge in order to foster activities such as creating new knowledge, effectively organizing and retaining relevant knowledge, and employing existing knowledge to solve problems, make decisions, and take action. Organizational effectiveness comes from the design and structure of the knowledge processes that support the organization's "knowing" rather than the knowledge "unit" itself. Knowledge here is possessed in the mind of individuals. Databases of knowledge are not useful if individuals or groups cannot actively process, reflect, and learn from what is stored. For the purposes of this thesis, knowledge will be viewed as a "process", because this approach matches the study's research question and goals of describing how foreign missions manage the knowledge of their temporary diplomatic staff.

2.1.1 Distinguishing knowledge from data and information

Though many organizations view them as such, knowledge, data, and information are not interchangeable concepts (Boisot & Canals, 2004). Misunderstandings about what knowledge, information, and data actually are have resulted in tremendous amounts of wasteful expenditures by organizations. For knowledge-based service organizations, success depends upon understanding which of knowledge, data, or information the organization has, which type it needs, and the limits of all three's application (Davenport & Prusak, 1998). These organizations must understand the unique characteristics of knowledge, data, and information in addition to understand how to move from one to the other.

Data has been defined as "discrete, objective facts about events", which for organizations are usually seen as structured records of transactions (Davenport & Prusak, 1998). Data alone cannot explain questions of "why" or "how" something happened but rather part of "what" has happened. Without context, data serves no purpose. Still, data is important for organizations, because it serves as the essential resource used in the creation of information. For individuals, all incoming stimuli could potentially be registered as data; however, individuals expend energy to perceive a stimulus as relevant data (Boisot & Canals, 2004). This perceptive step limits the amount of data individuals use in their creation of information.

Information then becomes an extraction from the data the individual or organization retains (Boisoit & Canals, 2004). The data deemed relevant in the creation of information has passed scrutiny from cognitive filters that are shaped by the individual or organization's knowledge and past experience. Individuals and organizations generate information by identifying and forming different interconnections within the relevant data set (Bellinger, Castro, & Mills, 2004). Examples of interconnections include contexts, categories, calculations, and summarizations (Davenport & Prusak, 1998). It is also important to note that, like a message, information has a sender and receiver. Whether the receiver understands the sender's information as the sender intends it to be received depends upon the shared knowledge base between both parties (Alavi & Leidner, 2001). For example, a technical paper written by one engineer may convey the intended information to another engineer, while a law student reading the same technical paper may view the content as concepts outside of his or her understanding.

In terms of data and information, knowledge has been defined as information possessed in the mind of individuals that may or may not be unique, useful, or even accurate (Alavi & Leidner, 2001). Individuals receive information from other individuals or groups through interpersonal interactions and structured media such as texts and presentations (Davenport & Prusak, 1998). The individual's mix of framed experiences, values, contexts, and insights provides a basis for accepting, analyzing, and evaluating new information and experiences. For organizations, the accumulated knowledge of its employees may be stored in databases and manuals but also embedded in the culture, technology, and structures that shape organizational life.

The relationship between data, information, and knowledge has often been oversimplified as a hierarchy, where data becomes information through building relationships in the data, and information becomes knowledge through identifying patterns in the information (Stenmark, 2002). This simplification has been criticized, because it suggests a linear hierarchy where the distance between data and information matches the distance between information and knowledge. A new piece of information, however, does not automatically become "new knowledge" within the recipient. Rather, based on the recipient's current knowledge and experience, the processed information shifts the individual's overall knowledge stock. Furthermore, this one-directional hierarchy defines information in terms of data and knowledge in terms of information even though all three are interwoven. For example, knowledge can become information or data once it is expressed in texts, graphics, words, and other representations (Alavi & Leidner, 2001).

In a reverse model, Tuomi (1999) argues that the hierarchy works opposite, and that knowledge must exist as a pre-requisite before information can be expressed. Data thus emerges last, because the information expressed requires a fixed structure and representation to describe it. This model has been criticized due to its assumption that knowledge can exist outside of its owner's context (Alavi & Leidner, 2001). Tuomi's (1999) critics argue that an individual's needs and original stock of knowledge shape which information that individual cognitively processes into his or her knowledge base.

From here, several models have emerged which capture the interrelated and overlapping nature of data, information, and knowledge. Bosoit and Canals (2004) acknowledge that an individual's perceptive filters shape which stimuli become relevant data for information processing. Cognitive filters based on existing knowledge, values, and experience shape how the information becomes integrated into knowledge. The process, however, does not stop here. The updated knowledge base alters the individual's filters, potentially changing both the type and quantity of data and information utilized in future knowledge creation processes. Likewise, the updated knowledge base may even alter the individual's behavior in the physical world, which may change the type and quantity of stimuli received altogether.

2.1.2 Knowledge taxonomies

Two main types of knowledge relevant to organizations have emerged: tacit and explicit (Grant, 1996; Smith, 2001). Tacit knowledge, or "know-how", is personally accumulated, subconsciously applied, and difficult to articulate. Tacit knowledge resides in the individual's cognition and values and results in a subconscious understanding of which skills should be applied in which context (Nonaka, 1994). Explicit knowledge, or "know-what", on the other hand, can be precisely expressed in language and documentation (Smith, 2001). An organization generates durable advantages from tacit knowledge, because it is private and difficult to imitate, while explicit is available, explainable, and more easily copied (McEvily & Chakravarthy, 2002). Few authors tend to challenge this notion that tacit knowledge provides greater value than explicit; however, the two are interlinked (Alavi & Leidner, 2001). One could not interpret, structure, and articulate explicit knowledge without an adequate foundation of tacit knowledge.

Several authors have, however, taken aim at the stringent tacit versus explicit dichotomy. Cowan, David, & Foray (2000) argue that the term tacit knowledge has been too loosely utilized in practice and in literature and that additional distinctions between tacit versus explicit should be drawn. The authors suggest an additional label to the tacit-explicit dichotomy by highlighting knowledge which is “codifiable”. Codifiable knowledge can be articulated but may not be codified into an organization’s systems at a particular point in time. Others disagree with the dichotomy altogether on the basis that any knowledge can be codified to an extent, but it is seldom that knowledge can be fully codified without losing some of its original characteristics (Johnson, Lorenz, & Lundvall, 2002).

A different taxonomy altogether provides a refined set of categories that are largely based within the classic tacit versus explicit distinction (Blackler, 1995). Categories here such as “embrained” (knowledge based on cognitive skills and abilities that is so high level it becomes a behavioral adjustment) and “embodied” (action-oriented knowledge gained through personal experience) fall closer to the tacit side. Bridging the gap between tacit and explicit knowledge in this taxonomy is “encultered” knowledge (used to achieve shared understanding; heavily dependent upon both written language and social interaction). Finally, the categories of “embedded” (knowledge that resides in formal rules, routines, procedures) and “encoded” (knowledge which can be conveyed in signs and symbols through books and manuals) more closely match explicit.

The focus on the classic tacit-explicit dichotomy does not mean that other classifications of knowledge do not exist altogether. One system classifies knowledge in terms of its context and distinguishes types of knowledge as declarative (“know-about” & “know-what”), procedural (“know-how”), causal (“know-when”), conditional (“know-when” & “know-where”), and relational (“know-whom”) (Zack, 1999; Alexander & Judy, 1988). Another standard distinguishes knowledge type based on the “knower” (Nonaka, 1994). Here, individual knowledge is created by the individual and inherent within cognition. This can be an individual’s takeaways from completion of a project, for example (Alavi & Leidner, 2001). Organizational knowledge is created by and inherent within the collective actions of a group of individuals (Nonaka, 1994). Individuals are the primary actors in the creation of organizational knowledge, but moving from personal knowledge to organizational knowledge requires social interaction. Collaboration between individuals in a self-organizing team can serve as the basis for organizational knowledge, because it develops the tacit personal knowledge via new perspectives (Gold, Malhotra, & Segars, 2001). Still before, a group's collective knowledge can become "organizational", it must be "crystallized" within a product or system, justified within an organization's value system/strategy, and finally integrated into the organization's existing knowledge base (Nonaka, 1994). The "new" organizational knowledge does not exist within the organization as an additional unit but rather develops the organization's knowledge base as a whole.

Still, regardless of how these categories are named, an organization's ability and willingness to effectively classify its knowledge will lend itself to better management of that knowledge (Zack, 1999). In doing so, the organization can take better stock of its intellectual capital in terms of the requirements of customers and other stakeholders. In this thesis, processes for managing both tacit and explicit knowledge will be reviewed as both are relevant to a foreign mission. Likewise, it is not possible to study how foreign missions manage individual knowledge without considering processes that integrate it into departmental and organizational knowledge. Thus, the procedures studied in this thesis will include how foreign missions manage knowledge at both an individual and group level.

2.1.3 The role of knowledge management systems

The practice of knowledge management is not simply an action but rather a process that requires support from the organization's people and systems (Matayong & Mahmood, 2013). An organization's "knowledge management system" typically consists of both social and technological infrastructure that support the development of knowledge and the creation of value (Šajeva, 2010). Information technology can support knowledge management through codifying and centralizing best practices in a user friendly database, creating corporate knowledge directories that emphasize who has the required knowledge, and developing knowledge networks like simplified chat solutions that connect colleagues easier (Alavi & Leidner, 2001). The design of the information technology systems should be closely linked to the type and nature of the organization's knowledge.

It is important to note, however, that information management tools alone are not robust enough to facilitate knowledge management (Kebede, 2010). While flows of information support knowledge creation, for example, it is hands-on experience, debate, and discussion centered around that information which develop tacit knowledge. Social practices such as flat organizational hierarchy, team-oriented corporate culture, and even open office design aid knowledge management processes by enabling human interaction (Alavi, Kayworth and Leidner, 2005).

A positive relationship between a highly functioning organizational culture and successfully managing organizational knowledge has been identified in several studies. Shared goals have been found to promote trust among colleagues, which in turn leads to knowledge sharing (Chan & Chow, 2008). On the other hand, hierarchical office cultures that promote competition among staff have been found to breed mistrust and negatively impact knowledge sharing (De Long & Fahey, 2000). Mistrust in a colleague's benevolence and his or her competence have also been found to impede knowledge sharing (Levin & Cross, 2004). Organizations whose cultures lack trust may therefore struggle at managing knowledge despite having well-constructed IT knowledge management systems (Lee & Choi, 2003).

Still, organizations tend to favor implementation of IT-based knowledge management initiatives over those which require human intervention, because they are easier to implement and measure in terms of value creation (Kruger & Johnson, 2010). By overlooking the humanistic components of knowledge management, organizations have knowledge management systems, which provide continuity but do not foster collaboration, socialization, and new ways of thinking.

2.1.4 A knowledge management framework: creation, retention, transfer, & application

Given the research question, foreign mission context, and this study's knowledge as a process perspective, the thesis will focus on knowledge management *within* the organization's boundaries. Knowledge management consists of four closely integrated processes: creation, retention, transfer, and application (Argote et. al., 2003). Knowledge creation involves generating new knowledge, and retention requires embedding it in a repository. Knowledge transfer is "the process through which one unit is affected by the experience of another" (Argote & Ingram, 2000). None of these, however, can result in increased organizational productivity or improved products or services (Alavi & Leidner, 2001). Knowledge application, on the other hand, can, because successful application connects what an organization knows to what an organization does. To facilitate these knowledge management processes, organizations must establish a knowledge management infrastructure that these processes can leverage (Gold et. al., 2001). This infrastructure includes available technology, formal and informal structures for socialization, and culture toward collaboration, all of which are based on corporate leadership and values.

Within an organization's boundaries, knowledge creation, retention, transfer, and application affect three units: individuals, groups, and the overall organization (Argote et. al., 2003). The outcomes and the units that knowledge affects are all interrelated. For example, efforts to transfer knowledge from an individual to a group can often lead to new knowledge creation.

Knowledge Creation Individuals create knowledge by utilizing their intentions and understanding of the world to act autonomously and handle change (Nonaka, 1994). Organizations, on the other hand, cannot create knowledge. As individuals seek to create a world based on their knowledge, they affect the knowledge of groups and organizations where they socialize. Organizations, in turn, provide the context for knowledge-creation, retention, transfer, and application among individuals and groups. These individuals and groups create new knowledge together by converting existing knowledge into new types of knowledge (i.e. tacit to explicit) or new versions of the same knowledge (i.e. detailed explicit guidelines into more simple written steps) (Nonaka & Von Krogh, 2009).

Socialization is the process in which new tacit knowledge is created within individuals through shared experience (Nonaka, 1994). Joint activities, empathy, and collaboration provide an individual with information that is closely connected to the other's emotions and relevant contexts. The proximity and interaction teach one how the other thinks over time. For example, a junior attorney can learn how to write from a managing partner by reading the partner's court documents and absorbing rounds of feedback over time. A shared physical space and open mentality are critical to the mutual exchange of experience, emotion, and thought that occurs during socialization (Nonaka & Konno, 1998).

Alternatively, *combination* converts bodies of explicit knowledge into more complex sets of explicit knowledge (Nonaka, 1994). Combination starts when an organization or individual capture explicit public knowledge and disseminate it via meetings and presentations (Nonaka & Konno, 1998). Combination occurs when the recipients of that explicit knowledge make it more usable into new reports or presentations that can become a basis for the organization to act. This can be accomplished virtually or in less intimate social settings than socialization.

Moving from tacit to explicit and explicit to tacit is also a form of knowledge creation (Smith, 2001). A process called *externalization* supports the conversion of tacit to new explicit knowledge (Nonaka, 1994). Here, the tacit knowledge holder carefully expresses his or herself in a way that relates to the recipient group or individual (Nonaka & Konno, 1998). The recipient individuals or groups note the tacit knowledge holder’s discussions, ideas, and descriptions. By taking certain inferences, they create explicit knowledge which achieves a result that is as successful as the tacit knowledge holder’s outcome. Externalization is supported by collaborative settings with like-minded individuals whose skills are so similar that they can convert the tacit knowledge holder’s mentality into common concepts.

Finally, an organization’s explicit knowledge can be converted into new tacit knowledge through *internalization* (Nonaka, 1994). Here, individuals reinterpret explicit knowledge and broaden its application into new contexts. As the employee experiments, his or her tacit knowledge base develops. An organization can create tacit knowledge within its employees through internalization by increasing its on-the-job trainings and workshops. These learning environments allow the individual to safely experiment with the organization’s explicit knowledge while personally learning through experience (Nonaka & Konno, 1998).

Knowledge Retention Creating knowledge requires that it is retained in both the individuals and social context of the organization (Argote et. al., 2003). Doing so means it can be retrieved and applied in future contexts. Explicit knowledge can be precisely expressed and therefore, it can be codified (i.e. written) and stored within an organization’s IT systems or documents (Zack, 1999).

Tacit knowledge, on the other hand, is a by-product of personal experience, and it lies within individuals’ cognition (Haesli & Boxall, 2005). Tacit knowledge generally involves skills and routines, and its embeddedness within the organization supports the speed and effectiveness with which employees work and address issues (Moorman & Miner, 1998). Retaining and accessing tacit knowledge within the organization depends upon how well the organization has embedded employees' individual tacit knowledge into its 'organizational memory' (i.e. its history, shared beliefs, accepted routines and procedures, and organizational culture) (Walsh & Ungson, 1991). Organizational memory depends on employees' engagement and interactions, because they form the social network which integrates shared tacit knowledge into how the entire firm operates as a whole.

Organizational memory, however, is not a purely abstract, interpretive system (Moorman & Miner, 1997). While it is most often seen as retaining beliefs, routines, and practices within people, culture, or operations, organizational memory can also be expressed in frames of reference and "physical artifacts". For example, an organization whose routines are characterized by collaboration may design an open office layout or remove doors from offices.

Still, organizational memory has several characteristics which can affect knowledge retention (Moorman & Miner, 1997). These include the level of knowledge the organization can retain, the type of knowledge it wishes to retain, the accessibility of that knowledge, and how it is disseminated throughout the organization. As these characteristics are continuously updated within the organizational memory, the stored knowledge performs two fundamental roles: (1) filtering the way the organization's information and experience are viewed and categorized; and (2) guiding group or individual action. For example, an organization retaining a high degree of procedural tacit knowledge can quickly and effectively address changes in operational environments (Moorman & Miner, 1998). That same organization may, however, struggle with creative innovation and novelty due to the high levels of current knowledge in the organizational memory.

Knowledge Transfer While an organization's members, structures, operating procedures, culture, and physical layout can help retain knowledge, knowledge transfer within an organization tends to occur at the individual level (Walsh & Ungson, 1991). Knowledge is transferred when an individual's new knowledge manifests itself through changed performance or knowledge levels within their peers or respective units. Knowledge transfer can occur through a variety of mechanisms such as personnel movement, training, communication, observation, technology, new products, and new inter-organizational relationships (Argote, Ingram, Levine, & Moreland, 2000).

Organizations can achieve significant benefits from transferring knowledge from one individual to another (Argote et. al., 2000). Knowledge transfer increases productivity and supports a more interconnected organizational form; however, successful knowledge transfer can be difficult to achieve. Successful transfer of knowledge is largely dependent upon the recipient's ability to learn and retain knowledge (i.e. its absorptive capacity) in addition to the quality of the sender and the relations between both the sender and receiver (Tsai, 2001).

Szulanski (2000) describes the main steps of knowledge transfer in terms of initiation and implementation. During initiation, a knowledge gap is identified, and steps to fill that knowledge gap such as affirming the understanding of current operations, delineating the scope of the transfer, and documenting changes must occur. During implementation, the exchange of information and resources between the sender and recipient become the focus as both parties plan, coordinate, and communicate successive exchanges. These stages are then followed with a ramp-up period in which individuals apply, experiment, and integrate the new knowledge into their existing knowledge base in order to complete the transfer.

There are many factors which can affect the success of initiating and implementing knowledge transfer (Szulanski, 2000). For example, the interpersonal nature of tacit knowledge transfer requires that recipients know whom within the organization possesses the expertise they seek (Hansen et. al., 1999). The recipients must also have an existing knowledge base that allows them to retain and utilize newly transferred knowledge (Szulanski, 1996). The sender of the tacit knowledge must have sufficient depth of topic in order to avoid causal ambiguity. Positive relations and frequent meetings are also crucial since the transfer of tacit knowledge typically requires interactions and shared experience over time, and a receiver is unlikely to appreciate the knowledge of a sender he or she dislikes (Tamer Cavusgil, Calantone & Zhao, 2003; Hansen, 1999). Finally, the organizational context affects knowledge transfer as the existence or lack of structures like incentives, values, meetings, and support will all either facilitate or hinder the transfer process.

Knowledge transfer can be engendered through an organizational structure, set of procedures, technology base, and culture that encourage cooperation, trust, and learning between parties (Nonaka, 1994). The cultural aspect is especially important in terms of transfer between temporary and permanent workers, when mistrust, fear, and suspicion may already characterize the relations between them (Davis-Blake Broschak, & George, 2003).

Knowledge Application Knowledge application is the final step to enhanced organizational performance, because knowledge itself is not a resource (Alavi & Leidner, 2001). Rather, it is an organization's ability to transform its employees' knowledge into effective action which will enhance productivity. Without applying new knowledge, organizations will suffer from the "knowing-doing gap" (Pfeffer & Sutton, 1999).

Knowledge application can be hindered when employees mistrust the knowledge sender, lack the time to apply and experiment with the new knowledge, or are risk averse to new applications (Davenport & Prusak, 1998). An organization can, however, takes steps to diminish the negative impact of these hindrances and close the gap between its knowing and its doing (Pfeffer & Sutton, 1999).

By maintaining a long-term perspective, supporting research and development financially, creating a culture of trust, learning, and doing, and by providing incentives for innovative and novel ideas, organizations can encourage application of knowledge (Pfeffer & Sutton, 1999). Likewise, organizational redundancy (i.e. overlapping of business units' talents and resources) can increase the likelihood that a particular piece of knowledge coming from one unit will be applied by another. Effective team leadership characterized by democratic and inclusive idea-sharing and clearly outlined goals and expectations have also been found to support knowledge application (Sarin & McDermott, 2003). On the other hand, an exaggerated emphasis on team harmony and structure has actually been found to do the opposite. Finally, the implementation of knowledge management systems that focus on IT can increase knowledge application (Choi, Lee, & Yoo, 2010). These systems make knowledge easier to locate within the organization. They can also support specialization of complex knowledge and cognitive tasks and enhance transparency and trust within teams.

2.2 Personnel turnover

Personnel or employee turnover is the rotation and circulation of workers around the labor market through different organizations and different roles encompassing at different times states of employment, unemployment, or inactivity (Burgess, 1998). In practice, turnover involves an entire cycle from losing personnel to filling the vacancy and retraining the newly hired employee (Woods, 1995, p. 345).

Turnover can be voluntary or involuntary (Shaw, Delery, Jenkins, & Gupta, 1998). Voluntary turnover occurs when an employee decides to leave an organization outside of management's control, while involuntary turnover occurs when an employer decides to terminate the employment relationship. Within these voluntary and involuntary categories, the turnover can be functional or dysfunctional. Functional turnover occurs when bad performers leave, and good performers stay (Johnson, Griffeth, & Griffin, 2000). Dysfunctional turnover, on the other hand, occurs when good performers leave and bad performers stay (Abbassi & Hollman, 2000).

The ending of a temporary employment arrangement has been considered both voluntary and involuntary turnover, depending on the employee's goals at the job (De Cuyper et. al. 2008). The departure of a temporary employee who hoped for a permanent offer but loses the position due to poor performance, for example, may be considered involuntary. On the other hand, the departure of a temporary employee who was happy with the short-term arrangement may be considered voluntary. Employers generally use temporary workers to increase innovation and flexibility and to save costs.

"Turnover" within this study refers to rotations between different foreign missions even though the main employer, a nation's ministry of foreign affairs, remains unchanged. In this thesis, turnover includes elements from both voluntary and involuntary types, since it is impossible to know whether a diplomat posted at a certain foreign mission wished to remain there or move on. Diplomatic staff have chosen a career where tenures at a given foreign mission are temporary, indicating that the rotation is accepted and voluntary. At the same time, a ministry of foreign affairs could rotate an underperforming diplomat to a less desirable foreign mission that was not by choice, and this may have an impact more similar to involuntary turnover. Thus, the knowledge management processes in this study are reviewed under the lenses of both voluntary and involuntary turnover.

Elements of functional and dysfunctional turnover will also be explored, because in this thesis, it is not possible to objectively assess whether a diplomat or local hire is a “good” or “bad” performer. Foreign missions include permanent, locally-engaged staff and temporary, diplomatic staff working side by side. This combination may result in both dysfunctional and functional turnover situations and difficulties with continuity of work (Abbassi & Hollman, 2000). The presence of these difficulties, however, will all depend on the individuals involved.

2.2.1 Effects of turnover

Turnover is expensive for an organization, because it represents a loss of investment and intellectual capital from the organization’s boundaries (Abbasi & Hollman, 2000). There are enormous adjustment costs any time a human resource exits. These costs are direct in terms of termination of the old employee in addition to advertisement, recruitment, and orientation for the new employee. There are also many underestimated hidden costs such as disruptions in customer relations and workflow and the lost opportunity in achieving new goals while the new employee trains. This is especially true when organizations invest significant time and resources into the exiting employee (Guthrie, 2001).

For organizations like foreign missions whose main outputs are knowledge-based services, turnover and short-term employment practices are especially problematic (Stovel & Bontis, 2002). In knowledge-based firms, employees are critical since their contribution to the organization is intangible and non-replicable. This knowledgeable staff provides relational capital (i.e. strategic networks of contacts and understanding relationships) and structural capital (i.e. re-imagined and customized services per client issue) which define the organization’s entire value-creation proposition.

Knowledge workers’ ability to provide this relational and structural capital depends upon their understanding of their job and organization (Stovel & Bontis, 2002). Temporary employees may lack the time to develop sufficient knowledge about their job and employer to make meaningful contributions to the organization's relational and structural capital. Alternatively, those temporary employees who do develop sufficient knowledge will be taking that knowledge with them when their employment expires. Thus, the departure of a knowledgeable employee negatively impacts the organization's overall level of intellectual capital, its potential new streams of business, and its rolodex of contacts and clients.

Likewise, turnover and short-term employment can significantly impact knowledge-based firms' social capital (i.e. the collective goals and trust among employees) (Dess & Shaw, 2001). Knowledge workers tend to exhibit greater loyalty to their colleagues and profession than their employer. Here, loyalty to colleagues and strong relational ties may prevent a key permanent employee from exiting. A work environment full of temporary employees may, however, inhibit the permanent employees' development of collegial loyalty that keeps them within the organization.

Temporary employment practices exacerbate the negativities of turnover, because the turnover cycle occurs more frequently (De Cuyper et. al., 2008). Further, permanent workers may be forced to assume greater responsibility during periods without the additional manpower from temporary help, and quality and efficiency may decline. Finally, temporary staff may even create voluntary turnover among permanent employees (Davis-Blake et. al. 2003). For example, the permanent workers may feel the temporary workforce constitutes a threat to their job, or they may learn about outside opportunities from the temporary colleagues.

In terms of knowledge, turnover is most problematic for the organization's tacit knowledge, since the organization's explicit knowledge remains within its codified materials after the employee's departure (Droege & Hoobler, 2003). Still, loss of an individual's tacit knowledge affects the creation of new organizational explicit knowledge. New explicit knowledge develops from interaction between an individual's tacit knowledge and the organization's explicit knowledge base. Thus, organizations need to provide employees with time to experiment with the current knowledge base in order create new knowledge (Guthrie, 2001).

Organizations that use temporary workers limit the meaningful contributions to knowledge that these employees can make, and the short duration of employment also makes retaining their knowledge difficult (Davis-Blake et. al. 2003). Likewise, the short-term duration of the temporary work relationships limits the development of dense social structures and repeat interactions which can support knowledge management among employees and the organization as a whole (Droege & Hoobler, 2003). The steady inflow of new employees also leads to a competitive dynamic between temporary and permanent workers, which inhibits collaboration, learning, and other social elements of knowledge creation (Davis-Blake et. al., 2003; Kalleberg, 2000). Managers also typically delegate less complex tasks to temporary workers, which limits their ability to contribute to the organization's overall knowledge (Nollen, 1996).

2.2.2 Managing the negativities of turnover

Two main strategies for managing turnover and its negative effects seem to exist: (1) preventing turnover; and (2) minimizing turnover's damage (Ongori, 2007). Since organizations that use temporary employees (i.e. this study's foreign mission setting) have operational models based on turnover, strategies that mitigate turnover's negativities will be the focus here.

Temporary employment situations can provide employers with flexibility and lower costs and provide employees with variety and growth if both sides manage their ends of the relationship (Von Hippel, Mangum, Greenberger, Heneman, & Skoglind, 1997). To obtain fast productivity from temporary employees, organizations that use them must develop procedures to train and integrate temporary staff into their culture without using them interchangeably with permanent staff. This can reduce the skepticism and mistrust that may hinder meaningful collaboration and socialization with permanent staff. Trust among individuals with weak ties can provide access to non-redundant knowledge, because the source is distant and the interactions are less frequent (Levin & Cross, 2004).

Organizations engaging temporary workers must also have procedures in place to fuse the temporary staff's knowledge with the organization's existing knowledge base (Matusik & Hill, 1998). They must actively manage the interface between temporary and permanent workers in order to maximize the integration of outside knowledge into the firm's social structures. Methods for collaboration could be formalized in manuals and encouraged via rewards. Both formal and informal settings and structures for frequent social interaction should be utilized, and temporary employees should be encouraged to share their opinions. Implementation of IT systems can also facilitate the socialization of workers. Temporary employees should also be encouraged to embed their expertise, views, and approach into written documents (Anand, Glick, & Manz, 2002). Doing so records codifiable parts of their personal tacit knowledge into explicit knowledge for the organization.

Likewise, team composition should include a mix of both permanent and temporary employees (Droege & Hoobler, 2003). The combination of strong and weak ties within the team maximizes the amounts of non-redundant knowledge and information that each team member provides. As a temporary employee, for example, brings new knowledge and experiences to the group, a permanent employee and a colleague with whom he or she has a “strong tie” (i.e. similar tacit knowledge base) can assist one another in understanding and absorbing the new knowledge. Tie-building activities can include cross-unit project work, mentoring systems, and buddy opportunities.

In order to assist the integration between temporary and permanent employees, organizations should create a culture that encourages both intrinsic and extrinsic motivations for knowledge sharing (Yeh, Ko, Chang, & Chen, 2007). The focus should be on reciprocity, rich exchange, and a desire to solve shared problems. These should be prioritized over external incentives like bonuses or promotions, because rewards may only secure temporary compliance.

3. Methodology

3.1 Theoretical underpinnings

An inductive approach was utilized in this study in order to remain open and flexible to exploring the many different procedures, resources, and activities that foreign missions use to manage knowledge. An inductive approach was also important given the little academic research available regarding strategic management and foreign missions. In an inductive study, data, observations, and eventually findings emerge from different research methods such as interviews in a case study (Eisenhardt & Graebner, 2007). Theory emerges from the researcher’s recognition of patterns of relationships in the data and their underlying logical arguments. This study’s propositions and implications for knowledge management at foreign missions emerged inductively from the research itself instead of being drawn from available literature and then tested during the research.

Researchers have identified the inductive approach as relevant when analyzing complex interactive, social processes "*that have no definite 'face'*" (Tracy, Lutgen-Sandvik, & Alberts, 2006). In the Tracy et. al. (2006) study, an inductive method allowed the researchers to pivot from their first goal of understanding workplace bullying to instead cataloguing victims' sense-making of workplace bullying.

Like bullying, the knowledge management processes studied in this thesis also require complex personal interactions over an extended time. Similar to in the Tracey et. al. (2006) study, the inductive method allowed for a shift in focus from an original goal of exploring knowledge management within commercial services to instead exploring how foreign missions manage knowledge more generally. This change occurred as initial interviewees struggled to limit their answers to just experiences within commercial services. The flexibility to re-evaluate the study's research goals and tools was therefore valuable given the novelty of this research setting. For example, as interviewees struggled to answer certain questions and were more engaged during others, some questions were omitted from the interview guide. An inductive approach supported this study's evolution and was a natural fit.

Epistemology is concerned with what should be regarded as acceptable knowledge (Bryman & Bell, 2015 p.26). This study's approach is interpretivist, because under this approach, social actors (i.e. the staff of foreign missions) provide the answers on how foreign missions manage knowledge (Weber, 2004). The study's data comes from their perceptions. It is, after all, the staff who create, retain, transfer and apply knowledge. A universal, objective, and observable understanding of the knowledge management practices is not obtainable, because whether or not a process, meeting, or document creates, retains, or transfers knowledge depends upon the employee's perception. For example, two individuals may completely misunderstand the knowledge being sent between them and retain very different knowledge from one another. Ignoring their perspectives over an "objective reality" of knowledge management imposed by the foreign missions neglects important perceptions coming from the people who actually participate in the process.

This study’s foundation that knowledge is built through social actors’ construction and sense-making of the world given their experiences, beliefs, and goals indicates a constructionist onotoligical approach (Jonassen, 1991). Here, humans’ perceptions and interactions shape the reality in which they exist and constantly revise it (Bryman & Bell, 2015 p. 33). This logic guided this project, because the management of knowledge depends upon human interaction and the ability and willingness to consciously or unconsciously learn and share knowledge. Moreover, constructionism supports this study’s technique of gathering data from sources on multiple occasions, because the interviewees’ beliefs about knowledge management likely evolved as they interacted with the idea over and over again.

3.2 Multi-case study background

The methodological approach used in this thesis was a multi-case study (Yin, 2009). Case study is most useful for providing in-depth or extensive descriptions of “how” or “why” a social phenomenon works, especially when the answers will come from qualitative research. Qualitative data is most appropriate when studying a naturally occurring phenomenon that depends on social actors’ interactions, perceptions, and representations of that phenomenon (Rynes & Gephart, 2004). This thesis' guiding research question of how foreign missions manage their employees’ knowledge is thus a good match for a qualitative, case study.

Case studies are also useful in providing propositions, implications, and building theory in previously under-investigated areas (Eisenhardt, 1989; Voss, Tsikriktsis, & Frohlich, 2002.). Thus, studying knowledge management within diplomatic operations through a qualitative, case-based approach makes the most sense for this thesis, because the study’s foreign mission setting is highly unexplored in terms of the strategic management literature.

The “multi-case” approach is most useful when looking to study a phenomenon across organizations or groups (Yin, 2009). When the theory involved in a study is not straightforward, or the topic is new and requiring additional certainty, multiple case is a common approach to substantiate the research. The propositions from a multi-case study represent the aggregate of multiple individual cases, and thus they are generally considered more compelling and robust. In this approach, each case must represent a “replication” in that it either produces similar results or predicts contrasting results for an inexplicable reason. Consistent design and data collection must be utilized in each case.

This study adopted a multi-case research design for several reasons. First, the theory on knowledge management processes includes many intangible and socially complex interactions (i.e. Nonaka & Konno, 1998). Further, theories of strategic management have hardly been studied within diplomatic operations. It was necessary to integrate findings from several foreign missions in order to make this study's overall propositions more externally valid and robust (Voss et. al., 2002).

In presenting the propositions from a multi-case study, a balance must be achieved between rich description and emerging theory (Eisenhardt & Graebner, 2007). Otherwise, a text full of rich narrative for each case will exceed page limits and overshadow relevant theory. Structuring the paper along propositions that are based in theory and supported by empirical evidence can help achieve this balance. Quotes from selected interviews can add descriptive richness, illustrate theoretical concepts, and poignantly represent a research proposition or research group (Anderson, 2010). In this study, relevant quotes that were identified as illustrative of the theory-based propositions and representative of the participants' general opinion will thus be utilized to add empirical richness. To protect the anonymity of this study's participants, quotes will be attributed to individuals based on their continent of origin, seniority, and diplomatic versus local hire status, as patterns within the interview data often emerged along these characteristics.

The present multi-case study has focused on nine different nations' foreign missions and includes an "embedded" approach (Yin, 2009). Each nation represents a case. The "units of analysis" within each case were the diplomats and local hires who participated in their foreign mission's interviews. Conscientious efforts were made to establish a variety of "cases" both in terms of size of the foreign mission and geographic diversity.

Discussions concerned the interviewee's perspectives on knowledge management practices and culture within his or her nation's foreign ministry. Interviewees' stories and experiences about previous diplomatic rotations under the same flag, in addition to the current posting, were also accepted in the study, since the "case" represented the nation and not just the interviewee's current position. Therefore, interview data also contains stories and experience from positions in different departments within the foreign mission beyond just commercial services.

Access was also a key consideration in opting for a multi-case approach. Foreign missions are typically heavily guarded and secure facilities with workload and responsibilities that are ever-changing and dependent on many factors outside of the foreign mission's control (Sciolino, 1987; Heine, 2008). Many foreign missions could not participate in this study due to what one Asian embassy explained via email as, "*the limited size of personnel and the other official duties currently going on*." Studying knowledge management within case studies at several foreign missions minimizes the risk of relying on one research partner whose availability could suddenly change due to unforeseen circumstances.

Still, despite the varied empirical evidence from multiple nations' diplomatic systems, proposition, implications, and theory that emerge from case-based research are rarely generalizable to an entire population or universe (Eisenhardt & Graebner, 2007). The goal of this thesis, however, remains to develop a deeper understanding regarding knowledge management in the unique planned turnover context of foreign missions.

3.3 Sample

Given the qualitative, multiple case-based research design and the specific foreign mission context, purposive sampling provided the most appropriate method for gathering information in this study. Researchers employ this non-probability method when looking to study a certain domain and phenomenon that contains knowledgeable experts (Tongco, 2007). The inherent bias of the method actually enhances its efficiency (Bryman & Bell, 2015 p. 429) For example, purposive selection of research participants supports snowball sampling where a limited number of initial, relevant contacts are utilized to broaden the research base within a population of individuals that are private and difficult for researchers to access (Biernacki & Waldorf, 1981).

To gather interview participants for this study, personal contacts within the foreign missions of a few different nations became the first interviewees. After they participated in interviews and became familiar with the study's goals, these initial contacts offered introductions to colleagues with different perspectives and to contacts within different foreign missions. These initial contacts provided a relevant starting point in reaching the additional foreign mission staff, because contact information for these individuals is rarely publicly available. Further, foreign missions are highly secure operations (Menon, 2001). One participant mentioned that he agreed to participate in the study after hearing from an acquaintance who also participated that there was "*nothing dangerous going here.*"

Likewise, as certain codes, patterns, and propositions emerged from each case's interview data, requests for subsequent access to certain types of colleagues or contacts were made. This theoretical sampling supported the study's grounded theory approach as the emerging insights guided the direction and selection of the next interviewee (Rynes & Gephart, 2004; Glaser & Holton, 2004). For example, as patterns emerged in some of the large, western foreign missions that were initially reached, efforts were made to increase the sample's diversity in terms of foreign mission size and geography, because if similar patterns were found in these additional foreign missions, it may enhance generalizability (Voss et. al., 2002). Likewise, when the study's first few diplomatic interviewees frequently discussed collaboration with local hires, requests were made for contact information of local hires who could share their perspective. Similarly, as senior diplomats discussed certain tacit learning processes like diplomatic writing, junior diplomats were sought after in order to hear their side. The initial contacts' familiarity with the study helped to bring in relevant subsequent interviewees who contributed new and different perspectives on the emerging insights (Rynes & Gephart, 2004).

In total, a combination of nineteen local hires and diplomats from nine different nations' foreign missions were interviewed in connection with the study. One-time interviews, however, are often insufficient in producing the rich and full descriptions necessary for worthwhile findings (Polkinghorne, 2005). Subsequent meetings and interviews can also serve as an internal validity and credibility check for emerging findings (Burnard, 1991). In this study, efforts were made to re-interview several of the diplomatic and locally engaged participants when deemed necessary. Four of the study's interviewees were re-interviewed or sent follow-up questions to gain deeper insights or confirmation of a topic at their foreign mission.

Despite using strategic sampling techniques to increase the study's depth and efficiency, the study's sample may actually hurt its transferability (Maxwell, 1992). Here, seven of the nine nations reached in this study were European or North American, and there is no African presence. Non-western foreign missions may find the study's propositions irrelevant. Efforts were made to contact a diverse set of foreign missions in Oslo, but sixteen of the eighteen invited embassies who declined participation came from Asia, Africa, or South America (See Exhibit 9.1).

3.4 Data collection procedure

Information is a flow of messages capable of yielding knowledge depending on the commitment and beliefs of the recipient (Nonaka, 1994). Interviews serve as invaluable qualitative information-gathering tools, particularly in situations where attitudes may not shine through in writing (Agarwal & Tanniru, 1990). Interview guides structured along the pertinent theoretical domain provide interviewers with frameworks to compare information. They structure a participant's introspection and can range from a loose dialogue to a systematic communication flow. A semi-structured interview allows the interviewer to base his or her inquiry around a series of questions, which can be varied in sequence and even developed with additional questions when a significant response is uncovered (Bryman & Bell, 2014 p.205).

In this study, interviews occurred over a three-month period from February to May 2017. Twenty-seven foreign missions of interest received a cover letter which introduced the research, described the project's goals, and requested an interview with at least two officials (Exhibit 9.2). Interested foreign missions could respond via email or telephone. Opportunities for group interview were given to the interviewees upon request, and meetings with two western European embassies occurred as group interviews with two participants. This "dyad" group interview structure is relevant when the topic or concept is technical or the population of interviewees is small (Cooper & Schindler, 2014, p.157). Both of these characteristics are present in this study of knowledge management at foreign missions. Requests for observational access at the foreign mission were not granted.

For most cases, two to three interviews took place during a visit to the foreign mission. For interview participants based outside of Oslo, FaceTime interviews were utilized. All interviewees received the questions in advance. All interviews began with an introduction to the study and its goals, in addition to a warm-up question regarding background, number of years worked, and number of rotations (when applicable). When agreed upon, interviews were recorded using a handheld recorder, and notes were taken throughout the interview. Otherwise, notes and quotes were taken on computer without recording. Interviews were as short as 22 minutes and as long as 68 minutes. All recordings were transcribed afterwards.

The same semi-structured interview guide was utilized during all interviews (See Exhibit 9.3). This provided the flexibility to dive deeper into interesting and unexpected themes or topics. Generally, the line of questioning began by asking the numbered question from the guide. When certain topics were uncovered, follow-up questions which are lettered or in roman numerals in the interview guide were asked. Flexibility was an important aspect of the interview, because diplomats and local hires of a variety of nationalities, seniorities, and backgrounds were interviewed. Further, very little research has been done within the foreign mission setting, so planning or anticipating for specific responses was not possible.

3.4 Data analysis process

Inductive researchers typically combine multiple data collection methods (Eisenhardt, 1989). Another feature of inductive research is the overlap of data collection and analysis. This guides the theoretical sampling of future participants. It also helps indicate when adjustments should be made to the research process if, for example, the data collected does not sufficiently answer the research question.

In the analysis of qualitative data, a non-biased coding system emerges from the researcher’s interpretation of the data in order to distinguish and organize it (Rynes & Gephart, 2004). Researchers use the emergent codes to constantly compare data from the very first data point. Analysis and groupings of similarities and differences within the codes leads to concepts (aka “themes”), which exist organically in the data and are relevant to the research question (Braun & Clark, 2006). Concepts can be used to compare and contrast the findings of cases. In analyzing a concept, it is important to first assess the rigor of its supporting codes, followed by comparing the concepts to one another in relation to the entire data set. Establishment that concepts represent real world phenomena in the data supports the creation of propositions.

In a multi-case design, it is important to note that the development of propositions is a multi-step process (Yin, 2009). The aforementioned comparative analysis first occurs within each case. The data within each case is neither directly compared to data from other cases nor pooled across cases. The "within-case" analysis of a multi-case design includes a write-up or summary of propositions for each case as an individual entity (Eisenhardt, 1989). Identifying patterns across the cases can then be done by selecting pairs of cases and noting the similarities *and* differences regardless of what is apparent between the juxtaposed cases. The patterns of consistent similarities and differences identified across many of the different cases can then serve as the study's overall propositions.

Some researchers apply grounded theory principles loosely as building emerging theory based on patterns within systematically collected qualitative data (Suddaby, 2006). Propositions and theory emerging from this process fall short. When using grounded theory, researchers should provide a detailed and systematic explanation of the iterative analytical processes and theoretical sampling, which support the propositions' (and theory's) emergence from data (Rynes & Gephart, 2004). Researchers need to clearly explain via tables and presentations how codes, concepts, and propositions emerged from the data in order to showcase the creativity of the grounded approach and the uniqueness of the cases (Graebner & Eisenhardt, 2007) (See Exhibit 9.4, 9.5, 9.6). This transparency helps to prevent some of the misconceptions and criticisms of the grounded theory approach.

In this study, interviews with diplomatic and local staff serve as the primary source of data. Interviewees were not limited to discussing knowledge management processes within one department or one foreign mission, because employees of a foreign ministry may have opportunities to work in many different departments and embassies during their career (Heine, 2008). It was not useful to limit responses to only "knowledge management processes within commercial diplomacy", for example, because interviewees should share their experiences in an unrestrained way in an inductive, grounded theory based study (Wimpenny & Gass, 2000). Otherwise, rich data and new perspectives uncovered in the interview could be lost.

When available, written sources provided by the interviewees were also used. For example, one local hire shared the daily newsletter of translated newspaper articles. Several interviewees referred to the foreign mission's Facebook site in terms of applying local knowledge. One commercial officer provided a copy of his embassy's commercial marketing brochure in order to explain the editing processes involved. This additional archival evidence helped to illustrate and concretize the knowledge management processes described during the interviews.

The best practice in data collection often includes three different data collection methods in order to support triangulation (Collis & Hussey, 2013, p.78). In this study, the participating foreign missions did not allow for ethnographic or participant observations. During most visits, recording devices were not permitted, and instead, detailed notes and quotes were taken during interviews. Thus, the data used in the propositions of this study are limited to transcribed notes and interviews with support from archival documents.

Once the interviews and/or notes were transcribed, open source coding of texts began immediately in order to provide detailed labels to the activities that were discussed (Miles & Huberman, 1994). Axial coding was then employed in order to relate the codes to one another via causal relationships or contexts (Strauss & Corbin, 1990). These related groupings formed the basis of the study's concepts.

In this study, analysis began by adding interview data into a table in Word (Exhibit 9.4). The table had three columns based on the question asked, the respondent's answer, and a space for identifying codes. Statements that were linked to codes were highlighted. To identify broader concepts within each case, codes were grouped based on similarities, differences, and relevance to the research question (Exhibit 9.5). It was not uncommon for one code to support the development of several concepts. Concepts were then reviewed over several iterative rounds with respect to its supporting codes and other concepts within the case. Once a concept was deemed supported by data and exhaustive, statements regarding each concept were written up to create a "case summary". The case summaries per nation were then compared and contrasted to create the study's major propositions (Exhibit 9.6). In comparing the case summaries, similarities were highlighted in pink, while distinctions between two cases were highlighted in blue. The yellow check above a pink item indicates that the similarity was seen again (and again) in the further rounds of side by side case comparisons.

To provide one example, a major concept that emerged in each case was the *diplomatic rotation process*. Within this concept, the supporting codes were broken down into the "sub-concepts" of (1) pre-rotation activities, (2) purposes of pre-rotation activities, and (3) infrastructure supporting pre-rotation activities. These sub-concepts were originally concepts themselves until further rounds of comparison revealed how each described the diplomatic rotation process. Codes within these "sub-concepts" include items such as *formal and informal meetings, written handovers, overlapping period, observation, introductions, reports, guidelines, open door policy, coffee break, interviews, etc*. A summary per case (country) was made regarding these 3 sub-concepts, and the summaries were directly compared and contrasted based on the knowledge management literature. The resulting similarities and distinctions across the cases create the basis of Proposition 4.6. Other main concepts that emerged from the cases and form the basis of Section 4's propositions include *knowledge management systems*, *ongoing knowledge management*, *activities for collaboration*, and *organizational culture*.

The immediate, constant comparison of intra-case data and eventually inter-case findings also showed patterns within the responses not only in terms of content but also in terms of quality. In these instances, adjustments can be made to the data collection instruments (Eisenhardt, 1989). Here, one question regarding the office's collaborative environment yielded so many valuable insights that new questions regarding office culture and specific activities were added to probe the topic further.

After the study's propositions were developed in draft form, participants were given an opportunity to provide feedback. Interviewees received an email containing the study's main propositions and some relevant definitions. They were asked whether the propositions were a fair and reasonable account of knowledge management given their experience in their ministry's foreign missions. In total, participants from only six of the nine foreign missions responded during the respondent validation process. One diplomatic participant did, however, read through the entire paper and provide feedback and comments. This validation of findings by research participants is best practice in qualitative research and serves to corroborate the accuracy of the propositions that the researcher has reached (Torrance, 2012). It is not uncommon to involve only the most engaged stakeholders or organizations in parts of the respondent validation process.

3.6 The Research Setting: Foreign Missions

> "*It is interesting that you are looking to study a fairly modern topic like knowledge management in an old fashioned game like diplomacy." – Western European ambassador interviewed during the study*

Diplomacy developed during the Renaissance of the 14th century among the Italian city-states (Mattingly, 1937). Each city-state developed a consular office designed to maintain commercial interests within the others. From this model, Italy, followed by other European powers, began maintaining permanent diplomatic representatives within their sphere of international interests during the mid-15th century. A nation's ability to send and receive diplomatic envoys became a test of sovereignty. These early outposts received official standing from the home nation to represent their interests, which now extended beyond commercial and trade.

According to the Dictionary of Diplomacy, modern diplomacy is the management of relations between two sovereign nations through officials based in the home nation or stationed abroad at the home nation's diplomatic mission (Menon, 2001). The diplomatic mission is the entity, which represents the home nation within the host nation, typically via embassies and consulates. A modern embassy contains the offices of a diplomatic mission that is headed by an ambassador and exercises diplomatic functions. Diplomatic functions include acting as the permanent channel of communication between two nations, reporting host nation conditions to the home nation, and promoting and protecting the interests of the home nation and its citizens within the host nation through a variety of commercial, administrative, and personal services. A consulate is an office, which exercises similar diplomatic functions in an area displaced from the embassy.

The buildings which house these foreign missions are extremely secure (Bullock, 2015). Security features such as metal detectors, searches from armed guards, and restricted access to cell phones and media are not uncommon. Despite security guarantees from host countries, many nations install their own military to increase security within a foreign mission. Many U.S. Embassies, for example, are built to "Inman Standards". These call for new building on remote sites, set away from surrounding streets in blast-proof buildings limited to 15% external window surface (Menon, 2001). These highly secure buildings are linked to their foreign office at home through secure, encrypted electronic communication channels.

Diplomats and permanent local staff manage the operations of a foreign mission (Menon, 2001). The diplomatic staff sent from the home country carry out the foreign missions' main priorities. The 1961 Vienna Convention describes these main "diplomatic functions" as representing, protecting, negotiating, ascertaining, and promoting. The local staff fill specialist, service, administrative, and technical roles. They "*provide valuable service that could not be duplicated*" in terms of handling local bureaucracies, understanding culture and politics, offering language services with specific dialects, and developing contacts (Sciolino, 1987). Local staff also form a bridge between the foreign mission and the local populace and prevent the foreign mission from becoming "*a closed fortress*." Given their permanent positions, they are also viewed as the foreign mission's organizational memory.

From this staffing infrastructure, models of diplomacy have emerged and evolved from a "club" to a "network" (Heine, 2008). In the club model, diplomats engaged with high-ranking government officials, other diplomats, important businesspeople, and occasionally the press to deliver a speech or official interview. In this model, diplomats work only with esteemed individuals from their own inner circle in order to negotiate agreements between sovereign states.

Technology has, however, pushed diplomacy toward a network model with greater involvement of diverse players in the host country (Heine, 2008). The club-model has evolved into a flatter network of individuals whose main diplomatic activity is a bilateral exchange of information that lays the foundation for international cooperation. The specialized nature of these exchanges have often resulted in other government agencies maintaining an international presence at foreign missions. Traditional diplomatic staff must therefore learn from more people than before in order to understand the technical nature of the foreign mission's substantive activities.

Foreign ministries rotate diplomats every few years in order to provide the diplomat with a breadth of international experience and prevent "localitis" (Menon, 2001). Localitis is when a diplomat adopts a non-neutral position toward the host nation. These rotations, however, come at the cost of the diplomat's local expertise, which goes to waste if the foreign mission does not retain it (Hogan et. al., 1991). For example, a specialized local unit, like a nation's diplomatic liaisons covering the World Trade Organization in Geneva, can suffer from a severe lack of continuity due to rotations (Shaffer, 2006). By the time the next diplomat can become versed in these specialized, local matters, he or she is rotated to another unrelated post.

4. Propositions of knowledge management in the foreign mission setting

Six propositions emerge from the data. They describe foreign missions' knowledge management processes in terms of specific procedures occurring both just prior to a diplomatic rotation and on a day to day basis. The propositions indicate that both processes for knowledge management (i.e. creation, retention, transfer, application) and an infrastructure for knowledge management (i.e. technology, culture, informal & formal structures) must exist and work in unison in order to achieve effective knowledge management (See Appendix 9.7). As shown in the framework, the processes depend upon infrastructural support, which serves as the foundation for knowledge management effectiveness. The infrastructure, however, cannot manage knowledge alone. It needs processes that leverage it. When the infrastructure and processes work together cohesively, the foreign mission's procedures effectively manage their staff's knowledge both just prior to a rotation and on an ongoing basis.

The propositions indicate that knowledge management at foreign missions is a challenge. In one pattern, knowledge management procedures appear to have been developed without an infrastructure upon which they can be successfully performed. In another pattern, an inferior infrastructure impedes the execution of certain knowledge management processes altogether. An organization's knowledge management program requires mature processes and a developed infrastructure in order to be effective (Gold et. al., 2001). The following propositions provide greater detail on the aforementioned patterns by describing the actual procedures which accomplish knowledge management at foreign missions.

4.1 Foreign missions maintain knowledge management infrastructure that retains explicit knowledge; however, their procedures do not retain all the explicit knowledge that can actually be codified and stored.

> *"Presumably a filing and records system exists, but my records and [the foreign mission's] are very different." – A senior diplomat from Europe*

The interviewees met during this study each described archiving systems and intranets that they utilize regularly in their day to day work. These systems maintain all diplomatic cables, reports, whitepapers, notes, rules, and guidebooks. Many of the intranets described during this study also contain biographies and directories for a foreign mission's staff to facilitate contact across foreign missions. Many foreign missions also have customer relationship management software where staff can add profiles and share impressions, opinions, and notes on external contacts. Further, diplomatic cables sent from the foreign mission to the ministry can be often tagged according to their themes and re-accessed by the sender, receiver, and other individuals with security clearance. "*It should work like Google, but unfortunately it's not that user friendly,*" described one senior western European diplomat.

While the majority of foreign missions appear to have electronic storage systems, the Asian embassy met during this study lacked an online archive. Staff here were required to maintain their own records and provide these to colleagues upon request. To reduce complexity, staff maintained "*watered down*" versions of their work in order to retain a record of knowledge and information that was simpler and faster to provide to colleagues, according to one senior diplomat. Another North American diplomat similarly described their stored electronic records as lacking the full complexity of the foreign mission's knowledge, but this was due to a simple lack of time. He explained, "*We are so busy that it is tough to talk, let alone sit down and create documents. Some specifics just are not going to get written down.*"

Both diplomatic and local staff of the foreign missions with electronic filing systems also explained a lack of clarity and guidance as to what knowledge should be stored on the intranet versus what should remain in private files. One Western European embassy attributed this to the transition from an archivist-managed system to one that is staff-run. This incongruity between what is shared versus what should be shared "*puts the staff at risk to repeating the same mistakes from the past*," according to a local hire. A local hire of another European embassy described the knowledge on their intranet as "*somewhat of a dump*" that is "*decentralized and lacking structure.*" The local hire explained the uncertainty: "*It's like 'should this be on the shared database or not?' We all use it in a different way.*" A junior North American diplomat noted that uncertainty as to what should be stored has led to wasted time and inaccuracies on the intranet. He explained, "*You really have to go through and see what is up to date and useful. Some documents never get updated. You can find staff biographies that are five years old."*

Still, one local hire at a European embassy that maintained an archivist to manage its electronic system acknowledged this codification problem is more due to the nature of diplomatic communication rather than a cultural or structural issue about what knowledge should be stored. She explained, "*In the cables and notes, [diplomats] express the most important things in a few lines, but after a one-hour meeting, for example, there is actually a lot more [knowledge] to share*."

4.2 Creating the knowledge used in traditional "diplomatic work" requires application of both tacit and explicit knowledge.

> *"In my work, the database provides content and some basis, but collaboration with colleagues is the most important." – A junior diplomat from an eastern European embassy*

Whether it was writing diplomatic cables, commercial services, administering protocol at official events, or developing agreements, the diplomats met during this study describe other people as the greatest resource in accomplishing their day to day work. That is not to say explicit knowledge is overlooked. In terms of activities like cable writing, for example, interviewees describe templates and checklists which exist on their intranets and provide guidelines on the cable's format. When it comes to the cable's content, the writing process also includes consultation of previous cables and reports stored internally in order to gain context.

According to nearly all of the staff interviewed who write diplomatic cables as part of their job, the substantive knowledge in the cable is created via interpersonal interactions. One senior North American diplomat explained, "*90% of the cable is based on what people have said*." According to the diplomatic interviewees, the typical chain of events for procuring knowledge for a diplomatic cable includes a review of the online guidelines, internal reports and cables, and public documents, followed by procurement of information and substantive knowledge from colleagues and external contacts via formal and informal meetings.

The cable writing process itself is similarly dependent on frequent collaboration. Once the knowledge is procured, the cable author writes drafts which receive edits, comments, and suggestions from each level of the foreign mission's hierarchy before finally reaching the ambassador for further editing and eventual approval. These edits and comments often include feedback on content, length, succinctness, and voice. In the foreign missions reached in this study, none had strict guidelines to these stylistic elements. Rather, as one European diplomat described, "*Cable writing is learned through experience and getting back harsh comments*." An experienced European ambassador of a different nationality even described one of his top responsibilities as "*showing young diplomats how to write*."

Other diplomatic work like commercial services have been similarly described. One commercial officer described his business development work as "*opportunity driven*" and based on a "*learned understanding*" of both nations' priorities and goals, rather than any prescribed marketing method. One of his colleagues elaborated, "*Company information is one thing, but knowing how to use it to benefit [the home nation] is the real knowledge."* This embassy also follows the 70/20/10 formula where 70% of knowledge comes from on the job experience, 20% comes from others, and only 10% comes from formal training.

Experience-based knowledge appears to trump explicit guidelines for diplomatic protocol as well. Extensive guidelines and rules for diplomatic protocol exist and are publicly available (U.S. Department of State, 2011). These documents provide instructions on everything from writing a letter to planning a party within the diplomatic realm. Despite the prevalence of these guides, staff in charge of protocol describe experience and interactions as the key to the job. One local hire who handled protocol at an Asian embassy described, *"The protocol person needs knowledge in the local area and the local contacts. You don't get that in a guide book."* Another local hire who handled protocol at a European embassy explained, "*The handbooks do not teach you what to do if the guest of honor shows up late. You have to trust abilities that have [developed] through many situations.*"

4.3 Creating the knowledge used in traditional "consular work" rests more so on applying explicit knowledge rather than tacit.

> *"Written guidelines are more important for consular work. Diplomatic is more based on gut feelings." – Diplomat from a small European embassy*

During the interviews, a distinction emerged between a foreign mission's diplomatic work versus its consular and administrative work in that the latter relies more heavily on formal guidelines and rules. Several local hires at small foreign missions indicated that lack of structure was challenging when they came into their administrative roles. Some even lacked a formal job description. "*It was a mess*," described one local hire at an Asian embassy. "*I built the position from scratch.*"

To learn their tasks, the local hires explained how they contacted fellow foreign missions and local authorities and documented procedures on how to run the organization, developing operational items like accounting and tax systems, contact lists, and vendor relationships. "*In the beginning, there is a lot learning by doing*," explained a South American local hire. Once established, however, the existing codified knowledge appeared to drive administrative operations forward. This local hire commented further, "*I recently talked to my predecessor's predecessor, and she said 'You are the person whose name I see on all of the internal handbooks!'.*" Another local hire in charge of administration at a larger embassy similarly described her work, "*It is the kind of job when you do the same over and over according to the procedures, but you develop an expertise*."

Consular services, such as the approval of a visa or passport, stem from dense written statutes or codes, which the applicants must meet. Those with experience in consular affairs who participated in this study expressed a reliance on procedures and guidelines in completing their day to day work. Staff also receive formal training on the detailed steps and procedures taken to process a consular request. One South American local hire explained, "*For the consular affairs, it is more organized, systematic, and specific. If you need a visa, for example, then provide the following things."* The guidelines and statutes for many consular services like passport and visa processing can be found on the foreign ministry's intranet and include each step for fulfilling the service. Another European diplomat explained, "*The steps for something simple like a new passport are online.*"

Still, consular services are not always just a simple process of checking items from a detailed list. According to the interviewees, tacit knowledge plays an important role as not all cases are clear. One European diplomat explained, "*We are trained on what to do if there is anything irregular in a certain case."* Another North American diplomat described the statutory language that governs consular affairs as "*subjective terminology*" that must be interpreted through experience and local knowledge. He explained, "*Determining whether a visa applicant has 'strong economic ties' to their country, for example, varies from case to case.*"

Likewise reducing the dense statute or guidelines to a more useful form also requires tacit, experience-based understanding of which parts of the code are most useful for the work and the specific foreign mission. A colleague in the same North American embassy explained, “*We often break down the statute into cheat sheets based on the most useful information for us and the country we are in.”*

4.4 Foreign missions’ structures and activities support socialization, which is the staff’s preferred method for knowledge transfer and creation.

> “*Why go on our intranet and search when I can call a colleague or contact?*” *–junior diplomat at a European embassy*

When asked if they were more inclined to speak to a knowledgeable contact or colleague or consult written materials on a subject, all of the interviewees indicated a preference toward socialization. “[*The infrastructure of codified knowledge*] *is imposed on us entirely*,” described one senior European diplomat.

The interviewees were clear in their preference of creating and transferring knowledge through their foreign missions’ developed formal and informal social structures and activities. Interviewees emphasized that structures for collaboration were important throughout their entire rotation but became especially relevant during periods of personnel shifts, change of ambassador, and regime change in the home or local government. These structures include weekly or monthly (depending on embassy size) all-staff meetings (where individuals explain current priorities and receive priorities from the ministry), frequent interdepartmental meetings (depending on embassy size), lunch briefings with presentations, small team meetings, structured feedback sessions, and to a lesser extent video conferencing with other foreign missions on topics of joint relevance. These formal meetings are accompanied by informal ones such as coffee or lunch breaks and ad hoc drop-ins. “*Open door policy*” was a term that consistently surfaced throughout the interviews. “*There is a skeleton of infrastructure that fills long term continuity needs, but the social fiber within our ministry has been developed over hundreds of years and is the most important*,” explained one European ambassador.

That is not to say that old reports, cables, and notes on the foreign mission’s intranet are not regularly consulted in the creation of new knowledge. Both the diplomats and local staff who participated in the study acknowledged the stored documents' usefulness; however, as one diplomat from North America explained, "*topics change so rapidly that sometimes it is just easier to go out and find new information.*" Other documents such as daily distributions of translated local news articles were considered less relevant sources of knowledge than colleagues. A senior diplomat from North America explained, "*The daily newsletter contains topics which are usually not relevant to my focus area. I would rather ask a locally engaged colleague about [his or her] opinion on something in the news.*"

In summing up the social nature of diplomatic work, one local hire at a European embassy described the situation: "*If you could read a book or talk to three people who read the book, we would typically choose the three people*." Another senior European diplomat described the propensity toward socialization over written documents as due to the nature of the work. "*Our job is to advise ministers. It is communicative in nature, and we get our knowledge the same way."*

4.5 Foreign missions' organizational culture is not always conducive to the socialization and collaboration that support knowledge transfer, creation, retention, and application.

> *"In many embassies, it can be very hierarchical". – A diplomat from a North American foreign mission.*

The participants in this study acknowledge the important role that socialization plays in creating, transferring, retaining, and applying knowledge within the foreign mission and ministry. Still, many of the diplomats and locally engaged staff who participated in this study have experienced an organizational culture that actually inhibits these social and collaborative knowledge management processes.

One of the most common factors expressed was that the foreign mission's hierarchical culture and strict adherence to tradition and protocol inhibited collaboration and work. One European local hire explained, "*There is a clear hierarchy so culturally you feel pushed down a bit.*" Another local hire from an Asian embassy explained how the hierarchy negatively impacted collaboration: "*The local hires sat in one area and the diplomats in another…Office politics and egos really prevented any 'great knowledge transfer' between us*." The choice of ambassador also seemed to play a role in how flat or hierarchical the foreign mission operates socially. "*The culture depends on the person in charge*," explained one

North American diplomat. "*Right now we have an open relationship with the ambassador, but the next one could be different and that makes it difficult*."

Another cultural dynamic hindering the foreign missions' knowledge management processes was the competitive nature of the staff. One European local hire explained, "*Experienced diplomats do not want to show weakness*. *If they show a lack of knowledge, it could be held against them*." With individuals competing for seniority and desirable future rotations often being based on performance, this competitive environment and mistrust reduce the potential for true collaboration. The European local hire furthered, "*It has to do with the person sharing the knowledge and their self-interest. 'How much do I want them to know? What do I need to keep for myself?'*" The knowledge holder is not the only one at fault though. Foreign missions' competitive culture also results in wasted time. A diplomat from Europe explained, "*People would take so much time gathering knowledge individually before just asking for help in order to appear as smart as possible.*"

One final dynamic mentioned by several interviewees described the entrenched nature of some locally engaged employees as inhibiting collaboration and the generation of new ideas. One European local hire explained the context around such longevity: "*The embassy does a lot to keep the local hires happy, because of their experience and deep relationships with contacts. The person before me worked at the embassy for 22 years.*" While most acknowledged that these tenures benefitted knowledge retention, a local hire in charge of administration at a North American embassy explained, "*[The job] can be hierarchical and repetitive. After a while, you could get demotivated*." With such attitudes prevailing, a local hire from another European embassy found it difficult to work with unhappy local hires. She explained, "*Diplomacy is not glamorous like it was…The salary is not great, and [the local hires] are bitter, complaining… For a young, new employee trying to bring new ideas, they do not want to hear it.*" A local hire from a different European embassy attributed her skepticism toward collaboration and experimentation to the local hires' longevity. She explained, "*I heard stories about my predecessor's mistakes. I did not want to be the one they talk about next.*"

Despite these dynamics of hierarchy, entrenchment, and competition negatively affecting organizational culture, it did appear that the interviewees enjoyed generally good working relationships within their current foreign mission. For example, during the study's two group interviews, participants communicated as trusting, respected peers despite holding different diplomatic ranks. Still, given the rotational aspect of diplomatic work, it should not be surprising that embassy staff encounter periods where organizational culture is suboptimal for some of the more social knowledge management processes.

4.6 Foreign ministries have specific procedures to transfer and retain a diplomat's knowledge, both on an ongoing basis and just prior a rotation; however, the foreign missions' formal structures and culture do not always support consistent, standardized, and successful implementation of these procedures.

> *"Sharing of knowledge was not just mandatory but in the diplomats' interest, because they were rotating themselves and also needing that information from their next post." – Senior diplomat at an Asian embassy*

Through the interviews, six distinct procedures to transfer and retain a departing diplomat's knowledge emerged. A written handover that described responsibilities, tasks, and contacts; an overlapping period between the predecessor and successor; and exit interviews all occur just prior to rotation. Other procedures and resources like a report summarizing the foreign mission's main activities and priorities; locally engaged staff who substantively collaborate with diplomats; and desk officers at the ministry receive and retain a diplomat's local knowledge throughout his or her entire tenure. No foreign ministries formally required all six procedures, but some did require a selection of them. Others only suggested they take place informally and provided little structure for accomplishing the procedures.

4.6.1 Written handover of job-related responsibilities, tasks, and contacts

Both the diplomats and local hires of all the nations reached in this study described a "*will*", "*memo*", "*letter*", "*email*" or "*written handover*" as an important aspect of both transferring knowledge to a successor and retaining knowledge within a foreign mission prior to rotation. The formality and necessity of this written documentation, however, varied greatly among nations. One western European diplomat described not only what content was required in the document but also how her embassy utilized the knowledge. She explained, "*You write down what's on the agenda, everything you do in your job, and even the contacts with opinions on what to watch out for and who is a priority. Then all heads of sections have the responsibility to manage that item as a real record of what is currently important.*"

A local hire at an Asian embassy was required to complete a similar document for her successor, but she described a different scenario in terms of structures retaining her knowledge. She added, "*To what extent this [document] was utilized by the next person or the embassy I have no idea."* Another diplomat from a North American embassy described the written handoff to his successor as "*just to be nice*", "*not statutorily required*", and "*taking two seconds to describe the job and contacts."* One senior European diplomat described the lack of rules and formality around the written handoff within his foreign ministry by simply saying, "*Sometimes it happens; sometimes it doesn't.*"

4.6.2 Periods of overlap and "shadowing" between successor and predecessor

All of the individuals met in connection with this study expressed how, prior to a rotation, diplomats can arrange an overlapping period of one day to several weeks. Here, the successor can observe and learn from the predecessor who acts as host. During these periods, the parties review all relevant projects, files, responsibilities, and contacts. Meetings and work-related social gatherings are attended together to provide the successor with introductions and first hand observation of how to work in the new country. One Eastern European diplomat described the importance of this overlap, saying, "*The documents provided the basis, but the period of observation was the most important in learning the new job.*"

Despite the perceived importance of an overlap period between successor and predecessor, the activity's implementation was inconsistent across the foreign missions. Several embassies described this overlap as part of the ministry's "*formal structure*" before rotations and indicated that one to two weeks overlap was common. On the other hand, one senior North American diplomat explained a lack of formal structures supporting their overlap period. He said, "*You may get three days of overlap about 50% of the time. It is a definite disadvantage when the overlap does not occur.*" According to another North American diplomat, whether or not an overlap period occurs may depend on the importance of the post and position. He explained, "*There is a one week minimum required shadowing in priority posts but in non-priority posts it just depends on time.*" A local hire at a South American embassy questioned what was achieved during her embassy's overlap periods. She said, "*The diplomats very rarely get an overlap, but if they do it is one to two days that are less about learning and more about getting settled into the new country."*

4.6.3 Exit interviews

The participants in several foreign missions also described exit interviews as a standard activity to provide feedback and insight just prior to rotation. According to the interviewees who discussed exit interviews, they occur at all levels within the foreign mission and help leadership to learn operationally what was unsuccessful, what functioned well, how was collaboration with colleagues and external contacts, and how was the overall working environment. While this sounds like an important activity to retain the departing diplomats' impressions and improve operations, one junior North American diplomat noted how mistrust in the culture and structures supporting the interview reduced the benefit of the step. He explained, "*Diplomacy is a small community…There is a lot of dishonesty in these interviews, because nobody wants to piss off other people and then have to work with them again or be seen as a complainer.*" For this reason, another senior European diplomat found the exit interviews rather unhelpful. He explained, "*99% of exit interviews are positive appraisals, because the easy solution is always to appraise someone middle of the road. It doesn't create any problems, but it doesn't help us improve either.*"

4.6.4 Annual report detailing the foreign mission's workflow

Another source of codified knowledge that incoming diplomats and other new staff could utilize was an embassy-wide annual report. Only two of the nine nations met during this study referenced an embassy annual report as an important, required resource for retaining staff's local knowledge. According to one North American diplomat whose ministry required an embassy-wide annual report, the document "*summarize(s) and capture(s) all of the work we have been doing.*" A senior diplomat within the Asian embassy reached in this study described how the reports could pinpoint individual staff contributions. He explained, "*Each staff member summarizes the reports and work they completed throughout the year…The annual reports drive the preparation for anyone new.*"

4.6.5 Cross-staffed teams of diplomatic staff and local hires

Another way to retain the local knowledge of diplomatic staff is collaboration and interaction between the diplomatic and locally-engaged employees. All of the foreign missions reached during this study employed local hires who worked beside the diplomatic staff throughout their entire tenure in the foreign mission. During this study's interviews, many diplomats referred to their local hire colleagues as the foreign mission’s “*continuity*”, “*repository of knowledge*”, “*institutional knowledge*”, and “*organizational memory*” due to the close collaboration between both groups and the local hires’ longevity, which “*last[s] for decades*”, according to one of them. One European diplomat described the embassy’s reliance on local hires’ cultural knowledge by explaining, “*I cannot do my job without the local staff. The local knowledge is so valuable, because it helps to understand the actual situation beside from just reporting facts*.” A local hire working in the same embassy’s commercial section explained her contribution: “*The diplomats come in with the ideas that the ministry want, and I come in with the strategy on how this could be done locally. It could be very different from country to country.*”

One junior North American diplomat described how his embassy’s organizational structures promoted collaboration between local hires and diplomats. He explained, “*We have four diplomats and three local hires. We share all the local hires for our different topics so instead of working with one ‘main’ local hire on all of my topics, I work with three.*” One of the local hires in that same North American embassy tended to agree: “*We work in teams every day. We share offices and have a total open door policy*.” Another junior diplomat working in consular services at a different North American embassy described a similar organizational structure that provides close collaboration. He explained, “*I work with local staff every day. They do everything. I do the visa interview and check eligibilities, but they do all the behind the scenes stuff to get things done.*”

Structures and culture supporting deep collaboration between local hires and diplomatic staff was not, however, common across all of the foreign missions reached in this study. One local hire at a European embassy described a difference in the level of collaboration between local hires with substantive “advisor” roles and local hires in more administrative positions. She explained, “*There are two levels: the locally employed who work closely with the diplomatic staff and the consular and administrative local staff who are happy when they’re kept in the loop during weekly meetings.*” The local hire at the South American embassy interviewed during this study explained her interaction with diplomats as more practical than substantive. She explained, “*[Diplomats] will rely a lot more on local staff regarding how the country works, practical things. In terms of their jobs and relevant subject matter, they would rely on old cables.*” The local staff of the Asian embassy interviewed during this study expressed a similar division in the work. She explained, "*You have the diplomatic core and the local staff who are supporting and maybe collaborating substantively on communications…Diplomats came to me for cultural references and language tips, but we were divided into different departments…I sat across from the only other local hire in the embassy*."

4.6.6 Desk officers

Desk officers are typically diplomats or civil servants who sit at the ministry and are charged with oversight of relations with a particular country or subject area (Menon, 2001). Several interviewees described the desk as the "*institutional memory*" of their foreign mission, because the desk receives and retains all reports, cables, and messages between the foreign mission and ministry. One senior western European diplomat described her posting's specialized desk officer as "*the line manager of all institutional knowledge regarding [X country]*." One Asian diplomat interviewed in connection with this study explained how a desk officer in his ministry specializes to maintain the institutional knowledge of a country: "*A person who is finished in an embassy will then come home and be assigned to that country's desk. He will rotate back and forth to another consulate in that country or the embassy again to really develop the specialized knowledge.*"

Structures supporting continuity and specialization, however, are not the practice of all ministries. In other ministries, a posting to a desk serves as another temporary diplomatic rotation. A North American diplomat working in this type of system explained, "*Some desks are so important that they will have a full-time non-diplomatic officer who develops long-term knowledge of that country. For others, it may be a diplomat spread across several countries who then rotates out or may go on leave without an available replacement. Then the knowledge gets lost.*"

5. Analysis

This section analyzes the study's propositions in terms of relevant literature. Rather than reviewing each proposition individually, they will be analyzed collectively under the broader categories of the foreign mission's culture, technology, and structures for knowledge management. This analytical structure is in line with the study's main framework (See Appendix 9.7), because the knowledge management infrastructure and knowledge management processes (which the propositions describe), are all deeply interconnected in establishing knowledge management effectiveness. In the propositions, the reason why a certain knowledge management process was effective or ineffective existed within the foreign mission's knowledge management infrastructure. Thus, the foreign missions' technology, culture, and organizational structures are the ideal units of analysis for this section.

The literature on knowledge management also confirms the deep ties between knowledge management processes and infrastructure (i.e. Gold et. al., 2001). Given the scarce literature available connecting foreign missions and strategic management and this study's inductive approach, it is impractical to analyze the propositions under a different theoretical lens. Further, by analyzing the study's more intangible, process-oriented propositions under related, concrete units like the technology, structure, and culture for knowledge management, it will be easier to link the theoretical implications that result from this section's analysis to next section's practical recommendations for managing knowledge.

5.1 The technology for knowledge management at foreign missions

The existence of a system or database where the knowledge from cables, reports, guidelines, and other documents can be stored and re-accessed indicates that foreign ministries aim to deliver services through knowledge reuse (Alavi & Leidner, 2001). Reuse of centrally available knowledge can help organizations to deliver its services faster and cheaper (Hansen et. al., 1999). It was not surprising to find that a foreign missions' consular and administrative work rely heavily on these codified guidelines, because many of these activities, like processing a straightforward passport or registering diplomats with local authorities, will require identical steps in each case. By referring to established guidelines instead of undertaking each visa or administrative task from the start, the foreign mission can service constituents more efficiently and at a lower cost.

The fact that the majority of diplomats and local hires met during this study identified uncertainties and inconsistencies around what knowledge could and should be stored on the intranet indicates, however, that there may be overemphasis on the technology at the expense of well-defined knowledge retention structures and roles (Zack, 1999). Without clear responsibilities and leadership guiding the knowledge database, an organization's knowledge may not be fully captured, correctly stored for future reuse, or appropriately presented upon contextual search. Users may turn to one another for help rather than consulting available documents that could answer the same question. These issues can, in turn, overcome the cost-savings and time efficiencies that knowledge systems should create for the foreign mission. Among the propositions, this lack of standard procedures for knowledge retention was both surprising and not surprising. On one end, foreign missions are geographically diverse, and a central organ that captures and organizes these dispersed sources of knowledge could be expected. At the same time, diplomacy dates back to the 14th century. It should not be surprising that such a classic profession may initially struggle with technological adaptation.

A lack of codification of knowledge also becomes problematic when codification's benefits would outweigh it costs, yet the act does not occur (Cowan et. al., 2000). The foreign missions whose staff attributed a lack of codification to time constraints, uncertainty or frustration with the intranet functionality, or just unwillingness are particularly at risk here. When codifiable knowledge is not made explicit and accessible, an organization may, through turnover, "forget" what it previously "knew" and could have "remembered". The organization becomes susceptible to repeating the same mistakes or wasting time on generating a solution, which previously existed. This lost, experience-based knowledge must also be replaced at some cost. The foreign missions' rotational staffing increases the likelihood of these problematic knowledge-loss situations (Matusik & Hill, 1998).

Still, the fact that some interviewees felt that certain knowledge went uncodified in their foreign mission may not always be a major concern, because it is not always possible to transform all aspects of knowledge into codified form (Johnson et. al., 2002). Different types of knowledge have different degrees of codifiability. For example, a foreign mission may be able to codify their opinion on the host country's environmental regulations into a report; however, the report writer's ability to draw conclusions based on prevalent laws and culture remains personal knowledge. Though the report writer's analytical process could be partially explained, it is unlikely that the written explanation contains all of the writer's experience-based, subconscious knowledge on how to analyze. Therefore, foregoing the codification of this type of knowledge is not as problematic as failing to codify the step by step, repeatable procedure of creating a passport, for example.

5.2 The culture for knowledge management at foreign missions

A collaborative culture can support the experiential and interactional aspects of many knowledge management activities (Gold et. al., 2001). Organizational culture provides the context for social interaction by setting the rules, norms, and penalties under which people interact (De Long & Fahey, 2000). A developed social culture characterized by safe, mutual exchanges of experience, emotions, and thought will support all types of knowledge creation (Nonaka & Konno, 1998). For example, the foreign missions' constructive feedback on cables facilitates not only diplomats becoming better writers but also managers becoming better mentors and editors. This culture of collaboration, trust, and learning with respect to diplomatic writing can lead to overall effective knowledge management within a foreign mission if it extends to other activities (Lee & Choi, 2003). A culture that stifles collaboration, on the other hand, could potentially impede knowledge management processes.

Organizational culture may differ between departments, groups, and individuals within an organization (Alavi, Kayworth, & Leidner, 2005). The flat, collaborative, "open-door" culture that interviewees described was in some instances paralleled with descriptions of a hierarchical culture by colleagues of the same foreign mission. Some local hires mentioned restrictions on working with high-ranking diplomats. This hierarchy undermines knowledge transfer and impedes opportunities for new knowledge creation and application by restricting collaboration between distant groups that likely carry non-redundant knowledge (Levin & Cross, 2004). Local hires have also been described as a critical source of the foreign mission's knowledge continuity. When a hierarchical culture undermines opportunities for collaboration between permanent and temporary staff, like the local hires and diplomats here, organizations may miss an opportunity to retain the temporary workers' tacit knowledge (Droege & Hoobler, 2003).

Likewise, when the organizational culture appears to value personal knowledge by rewarding more knowledgeable individuals with better opportunities over others, individuals will hold knowledge to themselves (De Long & Fahey, 2000). Diplomats are intelligent, career-oriented professionals who pass rigorous screenings to enter their foreign ministries (Chen, 2015). Desirable postings are highly sought after, and past accomplishments are considered in the selection process. The highly competitive culture that was described at some of the foreign missions could hinder the quality of knowledge creation, retention, transfer, and application as individuals may not be forthcoming with what they know during collaboration (De Long & Fahey, 2000). The foreign mission then stores a sub-optimal knowledge product in its remaining staff and systems, while the truly knowledgeable staff member rotates out. Future work on the same topic may then be developed from the weaker knowledge source. A culture where colleagues withhold knowledge from each other is especially problematic in this foreign mission setting, because this study's interviewees all expressed a preference to obtaining knowledge from colleagues and contacts over written sources.

A competitive culture also tends to breed mistrust, which can similarly reduce the potential benefit of knowledge transfer (Levin & Cross, 2004). Several diplomatic interviewees cited mistrust as one reason they did not provide honest feedback during the pre-rotation exit interview. Here, the feedback provided in the exit interview does not always reflect the diplomat's true or full knowledge and beliefs, because the diplomat fears repercussions of a negative review being made public. As the exiting diplomat refrains from giving honest evaluations regarding colleagues and operations at the current post, opportunities for individual and organizational improvement are missed, because the departing diplomat's full knowledge is not transferred (Tsai, 2001).

Organizational culture does not just impact the social environment for knowledge management. The culture can also impact how individuals will utilize the knowledge management tools at their disposal (Alavi, Kayworth & Leidner, 2005). Staff members' individual attitudes toward the knowledge management tools may not be uniform, resulting in intra-organizational usage differences. For example, an inconsistent approach to maintaining records emerged at several foreign missions. Some staff members appeared to dislike the intranet system, while others found it useful. As a result of these cultural perceptions toward the knowledge management tools, these foreign ministries likely experience a broad spectrum along the quality and frequency of how their individual staff members retain knowledge on the public intranet system.

It was rather expected when interviewees expressed a preference to creating, applying, retaining, and transferring knowledge through social processes.

Diplomats are, after all, skilled communicators. The criticism of organizational culture was more surprising, because after describing their appreciation for their colleagues, many interviewees later described a hierarchical, competitive culture that actually impedes collaboration. This juxtaposition between preferring to manage knowledge via socialization yet working in an organizational culture that impedes collaboration with others may be the study's most interesting finding.

5.3 The organizational structure for knowledge management at foreign missions

Organizations using temporary workers stand to convert a considerable amount of personal tacit knowledge to organization-wide explicit knowledge if they require temporary staff to document their approaches, opinions, and viewpoints (i.e. tacit knowledge) (Anand, Glick & Manz, 2002). Activities like cable and report writing, developing marketing materials, or creating administrative handbooks all result in various sets of written documents that can retain staff's substantive, explicit knowledge on a topic but less so their personal, tacit knowledge.

The "written handover" of job-related tasks, responsibilities, and contacts shared between the predecessor diplomat and successor, on the other hand, is an opportunity for a transfer of more personal, opinion-based, experiential knowledge. Here, the successor can learn things that may be omitted from a typical report, like which local sources are trustworthy or how the ambassador likes cables written, for example. In some foreign ministries, the written handover is a required step that management oversees, while others describe it as more of a non-mandatory, informal courtesy. Ministries that do not formalize and require the written handover may therefore be at risk to lose certain "codifiable" tacit knowledge that the successor must re-learn again through experience (Cowan et. al., 2000).

Similarly, uncodifiable tacit knowledge, which could have been retained, escapes the foreign mission when the predecessor and successor fail to arrange a period of overlap prior to rotation. According to the majority of interviewees, this "shadowing" period is neither required nor standardized by most ministries. Those who do not shadow their predecessor start their new job from a disadvantageous standpoint, because when organizations set up formal and informal structures that encourage socialization and collaboration, they provide a context that supports tacit knowledge creation, transfer, retention, and application (Matusik & Hill, 1998).

Without a formal overlapping period, the successor misses not only an introduction to new contacts but also an opportunity to directly acquire tacit knowledge which can only be learned through observing the predecessor. It was surprising to learn how many ministries handled simple transition activities like the written handoffs and shadowing periods so informally and inconsistently, because these are tools used in most professions during turnover (Stovel & Bontis, 2002). Without these activities, successors use time learning aspects of their new job which the predecessor could have explained. The already finite window of time in which the new diplomat can making meaningful contributions to the foreign mission's knowledge base becomes even further reduced.

An exiting diplomat's tacit knowledge may also escape the foreign mission if structures that support collaboration between diplomats and permanent staff (i.e. local hires and desk officers) do not exist. As permanent employees, the local hires and desk officer support the foreign mission's organizational memory (Walsh & Ungson, 1991). Their ability to absorb and retain the diplomats' knowledge depends upon the procedures in place that support their interactions. Without established procedures for ongoing collaboration between the permanent and temporary workforces, the diplomats' knowledge may not fuse to the organization's (Matusik & Hill, 1998). The knowledge simply disappears with the diplomat upon rotation.

According to the interviewees, reliable and informed local hires and desk officers act as an important source of local knowledge for diplomats throughout their rotation. Many diplomats interviewed in this study mentioned their close collaboration with local hires for not only practicalities like translations but also to integrate their local knowledge into the execution of the foreign ministry's agenda in the host country. Several foreign missions designed an organizational structure where diplomats worked with not just one but several different local hires in different sections such as commercial or cultural affairs. Interviewees also mentioned how useful a desk officer can be in understanding long-term local trends.

By implementing organizational structures with rich, repeated collaboration between temporary staff and permanent staff, the foreign mission supports the creation, transfer, retention, and application of new tacit knowledge through socialization (Nonaka, 1994). The rich, mutual exchange of knowledge and shared experience between both parties integrates temporary and permanent staff (Yeh et. al., 2007). As the temporary diplomatic staff transfer their tacit knowledge, new tacit knowledge is created and retained within the permanent local hires and desk officers (Alavi & Leidner, 2001). In turn, the foreign mission's organizational memory develops as permanent staff integrate their new knowledge into the organization's procedures and activities by applying it in different contexts (Walsh & Ungson, 1991: Matusik & Hill, 1998). It was therefore surprising to learn that not all foreign missions encourage substantial collaboration between permanent staff and temporary diplomats since most parties seemed to agree that local hires and desk officers support the foreign mission's organizational memory.

Relational knowledge and substantive knowledge are both critical in the successful delivery of services (Sarvary, 1999). Foreign missions' main activities include the delivery of commercial and consular services for businesses and locals, in addition to supplying the ministry with local knowledge (Rose, 2007). The relational and substantive knowledge utilized in the provision of these services are based on the foreign mission's available stores of both tacit and explicit knowledge (Johnson et. al., 2004). Without structures that support the "written handover", the overlapping period, and collaboration with well-informed local hires and desk officers, the foreign mission misses opportunities to capture outgoing local tacit and explicit knowledge. The newly rotated diplomats therefore miss an opportunity to start their job with important relational and substantive knowledge that are critical in carrying out the foreign mission's serviced-oriented tasks. New diplomats are instead forced to recreate this knowledge for themselves through many time consuming and costly experiences.

6. Implications for practice

The study's main framework suggests that a foreign missions' knowledge management effectiveness depends upon the development and synchronization of its knowledge management infrastructure and processes (Appendix 9.7). The propositions upon which that framework is based, however, indicate that the infrastructure and processes are not always in place and working in unison. The previous section explained the theoretical implications of such a mismatch in terms of the foreign mission's technology, culture, and organizational structures. This section explores how those theoretical implications could be handled in practice.

6.1 Foreign missions' technology for knowledge management in practice

The problem highlighted by both interviewees and the literature was not a lack of public database for knowledge management but rather staff's inconsistent or reluctant use of the existing one. One method to prevent staff's abandonment or inconsistent use of knowledge management IT infrastructure is the introduction of a knowledge management officer (Bontis, 2001). This officer manages knowledge resources and educates staff on their usage and value. Knowledge officers not only manage the training on how to use the knowledge database but also develop knowledge directories that can guide interested users to the individuals and content needed for their projects. Training individuals on the intranet's use is important, because otherwise they may not see the value in spending time developing its content. An early, sophisticated understanding of the system will also transform its use into a regular aspect of the job. A common understanding and appreciation of the knowledge management databases and software also regulates and standardizes its implementation among staff (Alavi, Kayworth & Leidner, 2005).

By standardizing the type of content that should be uploaded to the centralized intranet, foreign ministries may avoid some of the problems they currently experience with their knowledge management systems. Individuals will be more likely to uncover solutions to previously solved problems, when the solutions are readily available online (Herschel & Nemati, 2000). Past mistakes will be less likely repeated, and individuals across the organization struggling with the same issue will be less likely to do so in isolation. Further, by ensuring that staff understands what knowledge should be stored and how it can be accessed, time will be saved. The ministry's collective knowledge becomes a trusted, readily available asset rather than outdated and accessible only after a lengthy search expedition.

The frequent turnover of diplomats in foreign missions heightens the importance of consistent and widespread management of knowledge on the intranet (Bontis, 2001). Administrative and consular staff's heavier reliance on codified processes and procedures also underscores the need for a force that oversees and quality checks the codified knowledge on the intranet.

6.2 Foreign missions' culture for knowledge management in practice

When it comes to the culture for knowledge management, the interviewees who worked at larger foreign missions tended to characterize their environments as at times so hierarchical or competitive that collaboration was impeded. The social work environment at several of the smaller foreign missions, on the other hand, stand out with practices that other foreign missions may consider implementing, even despite their size differences. By actively working to remove this hierarchical and competitive culture, foreign missions' knowledge management processes in day to day operations and pre-rotation are supported by a foundation of trust and open, mutual exchange (Levin & Cross, 2004).

For example, to increase transparency and collaboration, one small European embassy removed all doors, and the ambassador sat amongst staff in an open plan. A small, neighboring European embassy even shared the wide open office! The ambassador was available for meetings with both local staff and diplomats who had relevant requests. By breaking down both the physical and psychological barriers of a hierarchy, managers create a collaborative environment that supports knowledge creation, transfer, retention, and application at both the individual and organizational level (Alavi, Kayworth, & Leidner, 2005). A non-hierarchical culture also encourages innovation and experimentation. A diplomat working at the aforementioned embassy described how the flat, open structure promoted new discussion and debate from everyone at the embassy regardless of job title. A local hire from the same embassy expressed how she felt free in implementing and experimenting with ideas from other embassies.

Ranks exist to distinguish an individual's place within the diplomatic hierarchy (Menon, 2001). Management should, however, strive to minimize these hierarchical distinctions when it comes to day to day operations, because doing so will promote knowledge management (Alavi, Kayworth & Leidner, 2005). One way foreign missions can remove certain embedded hierarchies is through adopting a matrix structure for project-work (Larson & Gray, 2011, p.76). Project members answer to both a project manager and a functional manager, and the project itself defines the roles of the two types of management. For example, in developing a high-level export promotion event, support may come from embassy staff working in commercial services, protocol, and administration/event planning.

The project manager relies on the divisional managers for resources, while the divisional managers rely on the project manager to organize those resources (De Laat, 1994). While the project manager may come from commercial services, that manager works closely with functional staff of other departments who contribute their expertise. The new, multiple boss structure and reallocation and recombination of certain staff creates a work environment outside of the organization's traditional hierarchy (Larson & Gray, 2011, p.74).

Another interviewee from a small European embassy described her work environment as a "*family atmosphere*". Here, individual success depends upon that of the whole embassy. At this embassy, individuals were willing to candidly share knowledge and collaborate regardless of title or position. Shared goals support knowledge management in organizations, because the goals tie individuals' interests together (Chan & Chow, 2008). By knowing no one's self interest will affect them adversely, colleagues trust one another. Through this trust, colleagues are more likely to share knowledge with one another both vertically and horizontally (De Long & Fahey, 2000). By being measured as a group rather than individual, diplomatic and local staff at this small embassy both trusted and supported each other. To increase trust, small foreign missions could take a similar approach, while larger ones could tie an individual's success and positive review to the achievements of the department or group projects upon which they work.

6.3 Foreign missions' organizational structures for knowledge management in practice

Organizational structures that support ongoing socialization and collaboration are necessary for successful knowledge management (Gold et. al., 2001). Several foreign missions stand out in terms of organizational structures that design workflows in ways, which encourage meaningful, repeat interactions. One small North American embassy, for example, matches local staff to relevant departments so that a diplomat with responsibility in three departments, for example, will collaborate with three different local hires. Multiple collaborative relationships increase the likelihood that a knowledge recipient will have the existing knowledge base to both retain and successfully re-apply the sender's knowledge within the organization on an ongoing basis (Szulanski, 1996). At the Asian embassy visited during this study, desk officers serve as permanent country experts, and the position is not one short-term rotation. Managers should develop such organizational structures, because patterns of rich interaction with well-informed, permanent staff will result in knowledge flows that can be retained within the organizational memory throughout the diplomat's entire rotation (Walsh & Ungson, 1991).

In addition, the aforementioned matrix structure could create project teams populated with local hires and diplomats from departments that may not regularly collaborate (Larson and Gray, 2011). The previously referenced open office layouts also tend to increase socialization and contact among distant individuals (Nonaka & Konno, 1998). Collaborations among individuals with weak ties are a source of non-redundant, new knowledge (Levin & Cross, 2004). Foreign missions should consider such organizational structures, because their resulting additional collaboration among staff enhances the flow of knowledge (Matusik & Hill, 1998).

Finally, foreign missions that do not require written handoffs and shadowing periods between predecessor and successor diplomats should consider formalizing these steps. By doing so, foreign missions' structures and personnel retain knowledge at a crucial point in time pre-rotation. The shadowing period is crucial, according to one North American ambassador, because "*this is the time to learn some of the things [the predecessor] does not want to put in writing.*" By acquiring knowledge through these formal procedures, the successor avoids relearning through experience and increases the window of time in which he or she can make meaningful contributions to the foreign mission (Stovel & Bontis, 2002).

7. Conclusion

7.1 Limitations of the study

The major limitation of this study lies in its exploratory nature. The empirical data gathered in this study suggests that mature processes and strong infrastructure for knowledge management do not always exist within foreign missions. Without both factors working together, implementation of a foreign missions' procedures for knowledge management will be inconsistent and unstandardized. Knowledge management as a whole may then be ineffective. In inductive case studies like this one, new theoretical propositions emerge that can then be proven or disproven by data gathered in deductive studies (Eisenhardt & Graebner, 2007). This study's propositions and framework for knowledge management effectiveness must be rigorously tested deductively in order to truly add to the theoretical discussion of knowledge management.

Another limitation of the study could be its sample. Interviews were conducted with nine different embassies during the study, and seven of nine were from Europe and North America. If more access had been granted at embassies from nations in Africa, Asia, or South America, it is possible that new patterns would have emerged in the propositions. Theoretical sampling supported input from different nations, but unfortunately, access was not granted.

One methodological limitation of this study may be the combination of both individual and group interviews. In this study, individual interviews were preferred; however, group interviews at the same foreign mission were granted upon request. Researchers caution against using group interviewees for groups such as co-workers or family members who share an “affinity base” (Cooper & Schindler, 2014 p.159). Group effects can also impact a participant’s willingness to speak on certain topics (Bryman & Bell, 2015 p. 516). Still, as a single researcher, group interviews reduced the time spent on interviews and in some cases, participants drew deeper responses from each other.

Another methodological issue was the inability to record all interviews. Most foreign missions did not welcome electronic recording devices on site, and instead, notes were taken on computer or by hand during the interview, noting exact key quotes. When recording devices were permitted, they were utilized. By only taking notes during some interviews, the qualitative data did not always include *how* certain ideas were expressed (Bryman & Bell, 2014 p.482). Further, the focus on notation may have resulted in overlooking follow-up question opportunities, and the notes could have been influenced by my subliminal biases. The different types of qualitative data used in the grounded theory analysis, however, should not be problematic as grounded theory analysis can include interview data, field notes, observation, photos, recordings, diaries, etc. (Hair Jr., et. al. 2011, p. 276).

7.2 Theoretical perspectives and future research

The present study has investigated strategies for knowledge management in a work environment where staff turnover not only frequently occurs but is actually planned and coordinated through the use of temporary employees. The study's empirical evidence indicates that in many ways foreign missions employ knowledge management procedures that match those employed by the private sector. Procedures for knowledge management discovered in other studies and reviews of the private sector have included integrating temporary and permanent workers (Matusik & Hill, 1998), exit interviews, periods of overlap (Stovel & Bontis, 2002), linking temporary staff's work to written documents (Anand et. al., 2002), and developing a culture of collaboration (Yeh et. al., 2007). Like at the foreign missions, implementation of knowledge management procedures at these firms was not without flaw. For example, Stovel and Bontis (2002) found that only 35% of HR managers in the Canadian financial industry were experienced with knowledge management. Thus, in terms of this study's "side goal" of adding to the conversation of whether "government should be run like a business", it appears that both have room for improvement when it comes to knowledge management.

In terms of knowledge management theory, this study concretizes the somewhat intangible knowledge management processes of creation, transfer, retention, and application. The study identifies and explains the actual procedures, resources, and activities which accomplish these processes within foreign missions. The study also takes this identification process one step further by distinguishing these knowledge management procedures, resources, and activities from one another on the basis of timing. Within the propositions, clear distinctions emerged between how knowledge was managed on an ongoing basis versus just prior to a diplomatic rotation. Some authors have alluded to *when* certain knowledge management processes should occur (i.e. Szulanski, 1996 – knowledge transfer should occur after the recipient has established a base of knowledge). This study has more explicitly linked exact timing to knowledge management practices by identifying when certain procedures occurred during a diplomat's tenure.

Some procedures, such as cross staffed teams and archiving documents on an online system, manage knowledge on an ongoing basis. Others, like the shadowing period, increase knowledge management just prior to turnover. By distinguishing knowledge management procedures on the basis of time, organizations can be better prepared to capture knowledge throughout a temporary employee’s entire tenure within an organization. Future researchers could explore whether these knowledge management processes are appropriately timed given an individual’s cycle of employment. For example, does meeting and training the replacement before the start of employment maximize knowledge transfer or should it be done sometime after the replacement has some experience in the position? Should the “written handover” of relevant job items occur periodically to management rather than just before turnover to the successor?

This study’s propositions also support the current theory that effective knowledge management requires support from mature knowledge management processes and a developed knowledge management infrastructure (Gold et. al., 2001). This study’s proposed framework for knowledge management effectiveness (Appendix 9.7) takes this theory one step further by characterizing the infrastructure for knowledge management as an organization’s foundation toward developing processes for knowledge management effectiveness. As described in this study’s propositions, ineffective knowledge management processes often stemmed from inadequate knowledge management infrastructure. By analyzing the propositions according to the foreign missions’ knowledge management infrastructure, this study suggests that the key to understanding and improving knowledge management processes is optimizing the knowledge management infrastructure. From a practical standpoint, this focus on infrastructural optimization may simplify knowledge management for organizations. Rather than focusing on intangible knowledge management processes, which are personal and difficult to manage, organizations can focus time and investments on developing and optimizing more concrete technologies, structures, and culture that support these processes.

Finally, and not surprisingly, this study’s propositions provide support to the accepted notion that turnover and temporary employment practices impede knowledge management in organizations. A turnover event represents a loss of both structural and relational knowledge. As indicated in the propositions, it is inevitable that certain tacit and even explicit knowledge will exit the organization during turnover, even when it can be planned and coordinated.

On the other hand, the sheer number of different procedures, activities, and resources for knowledge management uncovered in this study of foreign missions may indicate that organizations which use temporary employees are better prepared to prevent turnover-based loss of knowledge than one thinks. Here, foreign missions cannot prevent staff turnover; it is planned for and part of their operating model. In response to this, many have developed mature infrastructure, processes, and procedures to manage knowledge both on an ongoing basis and just prior to a turnover event. Frequent turnover could actually catalyze investments in knowledge management infrastructure, becoming an impetus to knowledge management effectiveness rather than an impediment. Future research could be performed to assess whether organizations that regularly experience turnover manage knowledge more effectively than those where turnover is infrequent. This study's framework for knowledge management effectiveness (Appendix 9.7) could serve as a basis for a comparative analysis between organizations with planned turnover versus those which employ a permanent workforce.

8. References

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9. Exhibits

9.1 Study participants by geography

	# of participants	**Interview minutes**	**# of foreign missions participating**	**# of foreign missions declined**
Europe	11	486	5	1
North America	5	224	2	1
Asia	2	105	1	9
South America	1	41	1	3
Africa	0	0	0	4
Total	**19**	**856**	**9**	**18**

9.2 Study cover letter

BI Norwegian Business School
37 Nydalen allé
0484 Oslo
Date

Dear Ambassador ___________,

I am a Masters student at BI Norwegian Business School in Oslo, Norway, and I am currently conducting my Masters Thesis study with the goal of broadening the academic understanding of knowledge management in organizations with rotations / "planned turnover". I want to study knowledge management in organizations that have rotations / "planned turnover", because this is very common in the field where I will work after graduation – strategy consulting. I also thought it would be exciting to study this concept in a context that is atypical for a business school master thesis.

This is why I endeavor to study knowledge management within the foreign missions of different nations, because governmental foreign ministries often require individuals to work within different foreign missions throughout their career. From what I have read and heard, knowledge management is a priority within these organizations so I hope to explore how a foreign mission retains local knowledge from diplomatic staff who are being rotated to another post.

The goal of this study is not to go “in-depth” regarding IT systems or confidential data storage techniques utilized within the foreign mission. I do not want to learn any of the “knowledge” or information being managed. Rather, I hope to explore on a more general basis what processes are utilized to capture, create, retain, share, and eventually apply the knowledge of those who are scheduled to exit the foreign mission. In short, I simply hope to explore the knowledge management processes that are both purposefully or perhaps even subliminally in place.

Regarding the actual study, I would be interested to interview current staff (two to three individuals if possible) to hear about how they have experienced knowledge management while working in foreign missions. I have prepared a semi-structured interview guide, which can be sent over in advance. Each interview should last around 30 minutes. All responses are confidential. No names or affiliations will be mentioned in the study.

The final findings would be a description of the most prevalent knowledge management processes in place, in addition to explaining the processes which participants found most effective. I would be happy to share my findings afterwards and allow for review prior to submission of the master thesis.

Thank you for considering participation, and I look forward to hearing from you.

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9.3 Semi-structured interview guide

Interview guide for diplomatic and local staff

Introduction

1. Introduction of interviewer
2. Introduction to research project and goals
3. Consent to participation and being recorded
4. Introduction of interviewee:
    a. Current deployment and role
    b. Number of total deployments / years working in foreign mission
        i. Description of past roles if different than current

Substantive semi-structured interview questions

1. How would you describe the different types of knowledge that exist in the embassy where you work?
    a. For what reasons do you see the differentiation you previously described?
2. How would you describe knowledge **creation** at the embassy where you work?
    a. How often do you collaborate with colleagues?
    b. How would you describe the actual collaboration in terms of activities undertaken?
    c. How are the outputs of such collaboration integrated into larger groups and the embassy as a whole?
3. How would you describe knowledge **retention** at the embassy where you work?
    a. At the individual level?
    b. At the group/departmental level?
    c. At the organizational level?
    d. Would you describe the knowledge retention practices more based on "codification" in official documents or "personalization" within the staff?
        i. Why one or the other?
        ii. What type of knowledge is in the codified areas?
        iii. What type of knowledge lies within the people?
4. How would you describe knowledge **transfer** at the embassy where you work?
    a. At the individual level?
    b. At the group/departmental level?

    c. At the organizational level?
5. How would you describe knowledge **application** at the embassy where you work?
    a. At the individual level?
    b. At the group/departmental level?
    c. At the organizational level?
6. How often do you teach colleagues things?
    a. How often do they teach you?
        i. Can you describe the communication process during these types of interaction?
7. Can you describe periods of time when these knowledge management activities become particularly prevalent?
    a. Describe specifically the increased activities that occurred.
8. How does your embassy offer a social environment, which facilitates knowledge management processes?
    a. Describe the activities.
    b. Describe the culture.
9. Explain why any of the following statements resonate with knowledge management processes at your embassy.
    a. I collaborate and share many work-related experiences with my colleagues.
    b. I share expertise with colleagues who digest and apply what I explained.
    c. We disseminate external knowledge internally & edit down to what is usable.
    d. I take information from the embassy and attempt to apply it in new contexts.

Conclusion

1. Review of notes.
2. Is there anything else you would like to add?
3. Can you introduce me to a colleague who could also contribute to this study?

Sources: Argote et. al. (2003); Nonaka (1994); Hansen et. al. (1999) ; Szulanski (1996) ; Nonaka & Konno (1998)

9.4 Coding of interview data

Excerpt of interview with full transcription:

Question	Answer	Codes
1	This is an organization with a huge advantage in terms of knowledge. The two sides complement each other in a way. There's the ministry who sends input and information and the work here is to develop the contacts and network locally. It's here where we can, you know, implement the knowledge, you know the balance between the local field expertise and the specific orders and guidelines we get from ________. For example, promoting items on the website, on the Facebook, developing conferences, all the agendas they have here.	Management Implementation Orders Commercial tasks
2	When I started in this job, I got a general overview but the rest was developed on the go. You know, administrative things that I had not been trained on, I was familiar with the general stuff but there was not a lot of information so it	Learning Administrative Codified documents

	took time to figure this out. Then, you know, everything this knowledge was shared in documents so that we have it as part of the embassy's record. On the other side, I think we have a small team here so there's pretty clear communication channels and it's flat, not some hierarchical place where it's difficult to get input. Um, we get a high degree of responsibility here because we're so small so whatever information and knowledge that's obtained, the higher ups will proofread but there's not so many corrections in terms of content on the writing. We need the approval of ____ before publishing a report, for example, but it's rare they will come back with anything serious. When there's a new ambassador though, then there are a lot of changes so it's about being as efficient as possible.	Challenges Storage system Size Non-hierarchical Collaboration Editing Management Reports Periods of change
3	We have rules that say we have to store all documented electronically and printed for up to 5 years. They are really restarting the embassy's printed archive. Clear rules determine what gets stored, and there's all sorts of possible things that can be stored. Plus there's also, everything that gets stored it's possible to tag according to searches and it's classified by number. Copies of everything are also sent by post and this is just to really assure transparency. With the communications that are stored, they are really standard. You know, all the ambassadors come from the same school so there's not a ton of different styles. And anytime there's a meeting with contacts, that information can be stored in the file, the directory, with the different fields to help organize what you want to say and what you're looking for.	Guidelines Storage system Codified documents "Google" Reports Cables Communication Formal meeting CRM Software
4	Knowledge transfer happens all the time. We work in teams everyday, and we're a young staff that's educated and works really well together. I relied a lot to learn from my colleagues when I started in different tasks, and it's easy here just to ask a different question. We share offices, and I think it's a complete open door policy where you can ask anyone about anything if it's practical or anything. We don't have interoffice meetings though. Those are kind of a waste of time, and	Collaboration Positive Open plan Open door policy Formal meeting

	we all have different schedules so there’s really no point I think. If I need to talk to someone, I just go ask. We do have a formal group meeting every second month but I feel like that is more because we have to do it rather than actually accomplishing anything in there.	Informal meeting

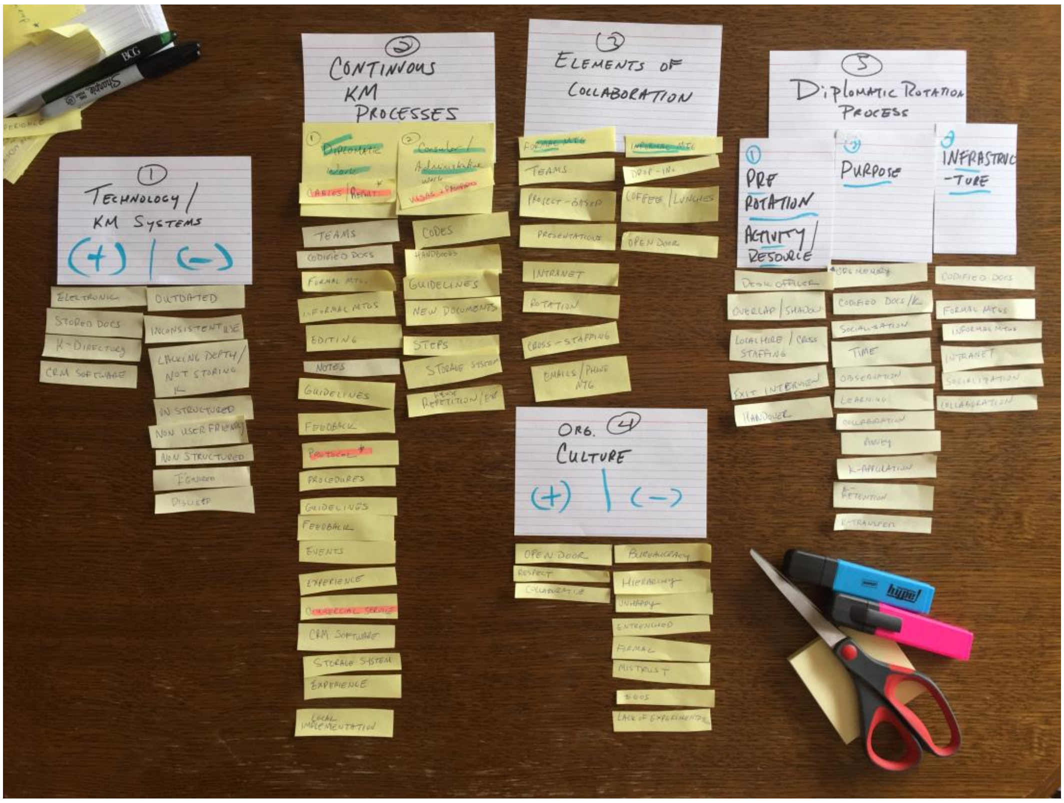
Excerpt of interview with only notes and quotations:

Question	Answer	Codes
1	• Knowledge comes from talking to more experienced officers • Also found by using the intranet: ○ Intranet is poorly managed though – ▪ “You really have to go through and see what is up to date and useful though. Some documents never get updated. You can have staff biographies that are 5 years old.” ○ For instance, I am moving to _______ so I am checking people on their intranet but it has not been updated ▪ I go to look at their biographies • Consular department lacks foreign government contacts • In my last job at the _________, we had lists of contacts in a database like that and they were ancient. One of my first job was to update the database and contacts which were listed as current hadn’t worked in these places in years ○ Other things can pretty up to date and useful but it’s really necessary to go through each item ○ Definitely a very small percentage of what’s on the embassy’s intranet may be added the official ministry one	Tacit knowledge Socialization Storage system Rotation Contacts CRM Software Problems with intranet
2	• Consular work based on a huge statute with tons of different sections ○ Huge pain to find stuff	Guidelines

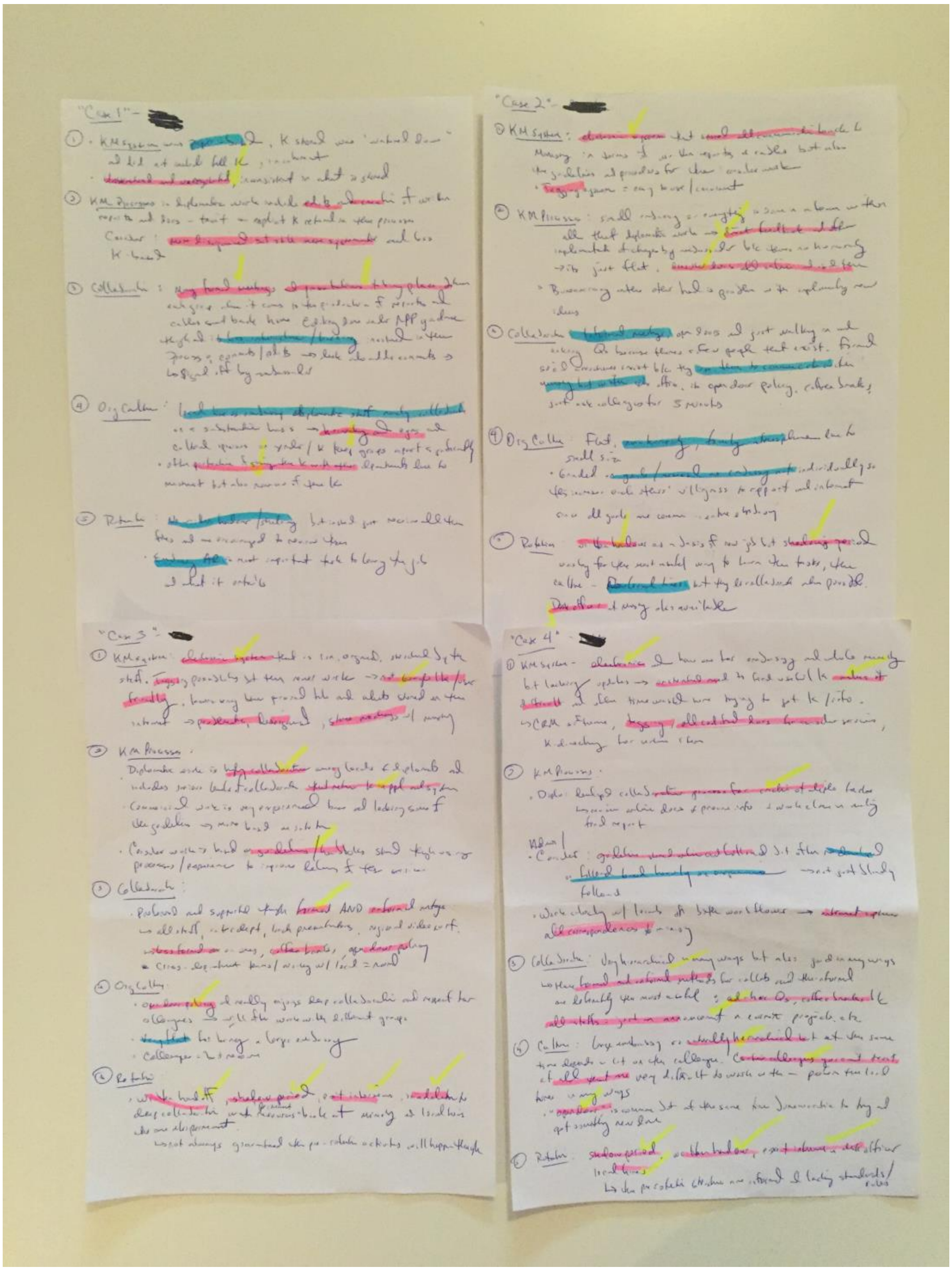
	■ “We often break down the statute into cheat sheets based on the most useful information for us and the country we are in.” ○ Boss has made cheat sheet with information to citations for the type of relevant visas to find the guidelines quickly. ○ Boss sends out to all by email – there are dozens of visa classes so every once in a while so this helps to figure out the ineligibilities and fees because all of that information - literally 1000s of pages ■ Re-codifying it to being more useful instead of looking all that stuff up • DCM: ○ Goes out of his way to mentor young people ○ Taught a lot about how the department works and how bureaucratic practices gum things up ○ Get out of the bureaucratic processes to get things done • Learned to work outside of the bureaucratic rules and get waivers to this • “I call the chargé by his first name”	Codified documents K-creation K-transfer Explicit K Collaboration Socialization Visas Tacit K Experience Hierarchy Culture
3	• One of the biggest things is that they try to gap it so that people don’t always leave at the same time ○ “Ideally, you should always have someone more experienced to learn from.” • 2 guys in my position, we should have an overlap of 1 year with the colleague so you are never full of new employees to the embassy • “The local hires are important because they stay for decades so they are really just the institutional knowledge more than we are.” ○ Local staff knows what’s going on more than the officers all over the world • Desk officer org knowledge different levels of importance ○ “Some desks are so important that they will have a full-time non-	Rotation Collaboration Overlap Local hire K-retention Org. memory Co-dependence Desk officer Rotation period K-retention

	diplomatic officer who develops long-term knowledge of that country. But for some others, you know it may be a diplomat spread across several countries who then rotates out or just may go on leave without an available replacement. Then the knowledge gets lost. No one is covering that. ” • Especially when you change – when you first start and when leaving – lots of KM retention • There’s all this stuff you have to do tying loose ends ○ Plan for handing off responsibilities for incoming person – send an email with job description, contacts, and give the availability, not mandatory ○ Shadowing depends on your post	Written handover Successor Rules Overlap period
4	• Do cross trainings where people work outside of their job ○ Cross trainings. If someone works in fraud, they can do a 2-month rotation in visa ○ Mostly for staffing gaps for more flexible workforce • Weekly meeting with local staff and we share that with them • US Gov spends a lot training the local hires, a lot • “I work with the local staff everyday. They do everything. I do the visa interview and check the eligibilities but they do all of the behind the scenes stuff to all the things done.”	Collaboration Formal meetings K-transfer Trainings Local staff Visas

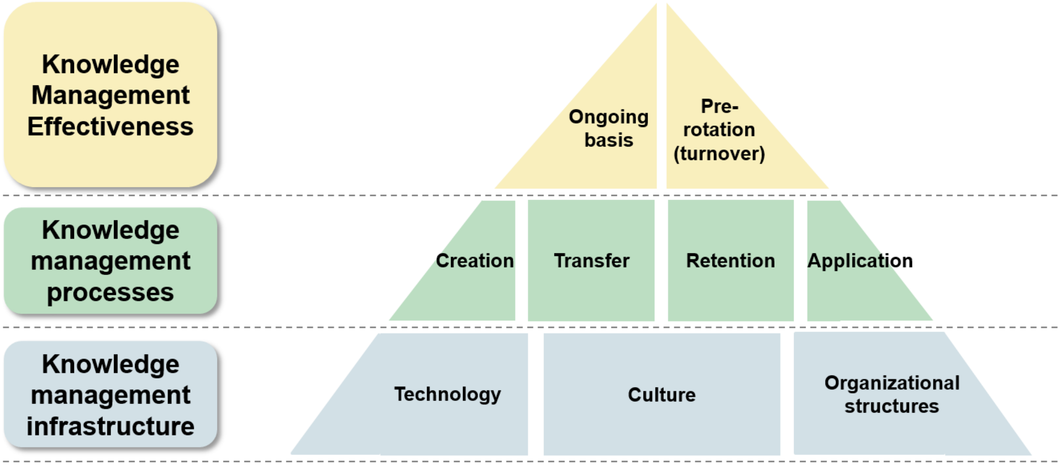
9.5 Developing concepts and “sub-concepts” within a case


① Technology / KM Systems
(+) | (–)
Electronic
Stored docs
K-Directory
CRM software
Outdated
Inconsistent use
Lacking depth / not storing K
Unstructured
Non user friendly
Non structured
Disused
② Continuous KM Processes
① ~~Diplomatic work~~
Cables / Report
② ~~Consular / Administrative work~~
Teams
Codified docs
Formal mtg
Informal mtgs
Editing
Notes
Guidelines
Feedback
Procedures
Guidelines
Feedback
Events
Experience
CRM software
Storage system
Experience
Local implementation
Codes
Handbooks
Guidelines
New documents
Steps
Storage system
Repetition
③ Elements of Collaboration
~~Formal mtg~~
~~Informal mtg~~
Teams
Project-based
Presentations
Intranet
Rotation
Cross-staffing
Emails / Phone mtg
Drop-in
Coffee / Lunches
Open door
Org. ④ Culture
(+) | (–)
Open door
Respect
Collaborative
Bureaucracy
Hierarchy
Unhappy
Entrenched
Formal
Mistrust
Egos
Lack of experimenting
⑤ Diplomatic Rotation Process
① Pre rotation
Activity / Resource
Desk officer
Overlap / shadow
Local hire / cross staffing
Exit interview
Handover
② Purpose
Org memory
Codified docs / K
Socialisation
Time
Observation
Learning
Collaboration
K-application
Retention
K-transfer
③ Infrastructure
Codified docs
Formal mtgs
Informal mtgs
Intranet
Socialization
Collaboration

9.6 Comparing “case summaries” to develop propositions


“Case 1” – [redacted]
“Case 2” – [redacted]
“Case 3” – [redacted]
“Case 4” – [redacted]

9.7 A framework for knowledge management effectiveness at foreign missions


Knowledge Management Effectiveness
Ongoing basis
Pre-rotation (turnover)
Knowledge management processes
Creation
Transfer
Retention
Application
Knowledge management infrastructure
Technology
Culture
Organizational structures