Knowledge Management in a Multinational Plural Form Enterprise:

A case study of a Swedish IT-Company

Jens Kleverud and Mikael Åberg
Abstract

Efficient knowledge management is both an important source of competitive advantage, as well as a significant challenge, for firms. While research regarding knowledge management is plentiful, literature regarding knowledge management in multinational enterprises with both franchisees and subsidiaries – so called plural form enterprises – is largely absent. Knowledge management in these firms is highly complex and the headquarters faces additional challenges, for example in the form of different amount of control over subsidiaries and franchisees. Against this background, this thesis is a case study about knowledge management in a multinational plural form IT-company based in Sweden and with franchisees and subsidiaries in several countries. After analyzing numerous interviews with managers and employees from the company, as well as company documentation, the study finds that the company manages knowledge through a mix of technical IT tools and personalized systems such as coaching, team-work and fostering a company culture of individual responsibility for knowledge management. The study further finds that knowledge management in the company is highly influenced by social and managerial factors, such as variations in relationships, culture and organizational independence.

Key Words: knowledge management, plural form, multinational enterprise, franchise
Acknowledgements

We extend our gratitude to ‘the company’ and managers in the headquarters, franchisee and subsidiary for their time and assistance during this study.

We also would like to thank our supervisor Roger Schweizer for his valuable advice along the way.

Lastly, this essay would not have been possible without the generous grant from the Elof Hansson Foundation. Our sincerest thanks go out to you.

Mikael Åberg & Jens Kleverud,
Gothenburg, May 19, 2014
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM</td>
<td>Knowledge Management</td>
</tr>
<tr>
<td>KMS</td>
<td>Knowledge Management System</td>
</tr>
<tr>
<td>KMT</td>
<td>Knowledge Management Tool</td>
</tr>
<tr>
<td>KT</td>
<td>Knowledge Transfer</td>
</tr>
<tr>
<td>MNC</td>
<td>Multinational Company</td>
</tr>
<tr>
<td>PFE</td>
<td>Plural Form Enterprise</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
</tbody>
</table>
Table of Contents

1. INTRODUCTION ................................................................................................. 1
   1.1 Background .................................................................................................... 1
   1.2 Purpose and Research Question .................................................................... 2
   1.3 Delimitations of Study .................................................................................. 3

2. LITERATURE REVIEW ......................................................................................... 4
   2.1 Knowledge Management .............................................................................. 4
      2.1.1 The Concept of Knowledge .................................................................... 4
      2.1.2 The Managerial Challenge .................................................................... 5
      2.1.3 Tools and Systems .................................................................................. 6
   2.2 Knowledge Management in the Plural Form Literature ................................. 7
      2.2.1 Subsidiary and Franchisee roles in the Plural Form .................................. 7
   2.3 Knowledge Management in the Franchise Literature .................................... 8
      2.3.1 Franchise Government and its Effect on KM ........................................... 8
      2.3.2 Standardization of Practices in Franchise Systems ................................. 8
      2.3.3 Franchisee Compliance – Trust, Support and Personalities ....................... 9
   2.4 Knowledge Management: Headquarter & Subsidiary Literature ................... 10
      2.4.1 Additional Characteristics of Knowledge ............................................... 10
      2.4.2 MNC Relationship, Characteristics and Roles ........................................ 10
      2.4.3 KM-Tools ............................................................................................. 12
   2.7 Our Conceptual Framework ......................................................................... 12

3. METHODOLOGY ................................................................................................... 14
   3.1 Research Approach ...................................................................................... 14
   3.2 Research Design ........................................................................................... 15
      3.2.1 Unit of Analysis ...................................................................................... 15
      3.2.2 Data Collection ...................................................................................... 15
      3.2.3 Data Analysis ........................................................................................ 16
   3.3 Research Process .......................................................................................... 17
   3.4 Quality of Study ........................................................................................... 17

4. EMPIRICAL FINDINGS: KM IN A MULTINATIONAL PFE ......................... 19
   4.1 Overview of the Company ............................................................................ 19
      4.1.1 The Company Context ........................................................................... 19
      4.1.2. Company Management ........................................................................ 19
   4.2 KM between the Headquarters and the Subsidiary ....................................... 20
      4.2.1 Subsidiary Context ................................................................................ 20
      4.2.2 Subsidiary Management ........................................................................ 20
      4.2.3 Knowledge Transferred to the Subsidiary ............................................. 21
      4.2.4 KM-tools used in the Subsidiary ........................................................... 21
      4.2.5 KM of development knowledge .............................................................. 23
      4.2.6 KM of Process Knowledge ................................................................. 26
      4.2.7 KM of Management Knowledge ............................................................ 27
   4.3 KM Between the Headquarter and the Franchisee ....................................... 28
      4.3.1 Franchisee Context ............................................................................... 28
      4.3.2 Franchisee Management ....................................................................... 28
      4.3.3 Knowledge transferred to the Franchisee .............................................. 28
      4.3.4 KM-tools used in the Franchisee ............................................................ 29
      4.3.5 KM of Sales knowledge ......................................................................... 29
      4.3.6 KM of development knowledge ............................................................. 31
      4.3.7 KM of processes knowledge ................................................................. 32
      4.3.8 KM of management knowledge ............................................................. 33
   4.4 KM between Subsidiary – Franchise .............................................................. 35
      4.4.1 Context: The subsidiary & franchisee .................................................... 35
      4.4.2 KM of Development Knowledge ........................................................... 35
   4.5 Summary: KM in the Multinational PFE ...................................................... 35

5. ANALYSIS .......................................................................................................... 37
   5.1 Common KM-Practices in the Company ...................................................... 37
5.2 Distinct KM-Practices for the Subsidiary and the Franchisee .............................. 40
5.3 PFE KM-Practices: Managerial Implications ................................................. 43
   5.3.1 Contextual Dimension .............................................................................. 44
   5.3.2 Characteristics of Knowledge ................................................................. 44
   5.3.3 Managerial and Social Dimension .......................................................... 44
   5.3.4 KM-Tools & KM-Systems ....................................................................... 45
6. CONCLUSION .................................................................................................. 47
   6.1 Theoretical Implications ............................................................................. 47
   6.2 Managerial Implications ............................................................................. 48
   6.3 Future Research .......................................................................................... 49
7. REFERENCES .................................................................................................. 50
APPENDIX ......................................................................................................... 1
   1. Coaching ....................................................................................................... 1
   2. List of Interviewees ....................................................................................... 2
1. INTRODUCTION

1.1 Background
Knowledge is often described as one of the most important competitive advantages for contemporary firms (Grant, 1996; Brown et al., 2003; Meyer et al., 2009). For instance Knight and Kim (2009) identify knowledge as an essential factor of production and as such the firm’s main resource and competitive advantage. The knowledge management (KM) literature is immense, and the available research cover subjects such as defining knowledge, measuring knowledge, usage of IT in KM, management of the knowledge worker, and lastly, building KM systems and tools (Ragab & Arisha, 2013; Grant, 1996; Chen et al., 2007; Levy, 2009; Hislop, 2009; Hansen et al., 1999). Within the KM literature, the firm is viewed as an institution whose primary objective is to mobilize, spread and integrate knowledge throughout the organization (Grant, 1996).

KM research in the headquarters & subsidiary literature takes off from the KM literature, investigating how knowledge is transferred and integrated in multinational enterprises. The issue of knowledge transfer has been under review from many different angles, for example characteristics of knowledge affecting transferability, the conflict between following corporate directives or adapting to the local environment, absorptive capacity of the recipient and relationships, and tools of knowledge transfer (Minbaeva, 2007; Kostova & Roth, 2002; Szulanski, 1996; Bresnan et al., 1999). In difference to the headquarters & subsidiary literature the franchise literature has not explicitly looked at KM, but rather focused on legal, functional and HR perspectives (Paswan & Wittman, 2009). However, the franchise literature offers insights that are valuable from a KM perspective. These insights regard the franchise system types, incongruity of franchisor and franchisee goals, the chain standardization process, trust-, support and franchisee compliance (Paswan & Wittman, 2009; Rubin, 1978; Dant, 1998; Kaufmann, 1998; Davies, 2011; Quinn, 1999).

Against this background, research regarding international KM, and even domestic KM, in the plural form enterprise (PFE) is very limited (Ehrmann, 2013). The PFE was defined by Bradach in 1989, and is a distinct organizational form where, for instance, wholly owned subsidiaries are mixed with independent franchisees in the same organization. The PFE faces additional challenges when transferring and integrating knowledge compared to the multinational enterprise or the franchise. These challenges arise for instance from the fact that
subsidiary managers have different incentives than franchisee owners (Dant, 1998), and that absorptive capacities (Minbaeva, 2003) may be different in subsidiaries and franchisees, and finally that the amount of HQ/franchisor control is higher in the subsidiary given its formal relationship (Chang, 2001). Thus, while the complexities of knowledge transfer can be significant for any firm, they may become increasingly difficult to manage for a PFE. As one of the few articles investigating this precarious balance, Sorenson et al. (2001) examined how organizations balances standardization and adaptation for local markets with consideration to organizational learning and chain performance. He argued that the subsidiaries and franchisees have different roles in the PFE, and that particularly the role of the franchisee is accentuated in a heterogeneous market.

As neither the KM- or the headquarters & subsidiary literature provides a specific discussion about KM in the PFE, and the franchise literature almost completely lack a perspective of KM altogether, we have identified a gap in the available research about international KM in the PFE. For this reason we will conduct a case study about KM in a multinational PFE IT-company with headquarters in Sweden and with both franchisees a subsidiaries in several countries - the company was an ideal subject for the study.

1.2 Purpose and Research Question
Based on the above discussion, our purpose with this thesis is to investigate how knowledge is managed in a multinational PFE. By investigating how knowledge is managed in a PFE we hope to contribute to the research by providing an in-depth study of the phenomenon, with descriptive, explanatory and exploratory dimensions (Yin, 2003). In this study, our research question is:
- How is knowledge managed in a multinational PFE?

To gain a deeper understanding of the relationship between the company’s different units and how this affects the company’s KM work, we also have the following sub-questions:
- How is knowledge managed between the company’s headquarters and its subsidiary?
- How is knowledge managed between the company’s headquarters and its franchisee?
- What are the commonalities and differences in knowledge management between them?
- What are the managerial implications of PFE-specific KM?
1.3 Delimitations of Study
This study has several limitations based upon limitations of time and access. The major limitations are: 1) our definition of KM, 2) limitations regarding the unit of study, 3) and our selection of the literature.

First, we have limited the subject of KM to the following definition. Creation of managerial preconditions, systems and tools that further knowledge transfer in the international setting, and the resulting outcome of those managerial preconditions, systems and tools. As the above review of the KM literature show, we are fully aware that this definition of KM is somewhat narrow. However by narrowing down the definition we could disregard for instance knowledge creation and knowledge measurement. As an exploratory case study, the scope is already wide and thus this choice was made.

Second, we have chosen to explore how the transfer of sales, management, development and processes knowledge is managed. As these are the most essential and most common types of knowledge in the company it is our belief is that by studying them we will be able to answer our research questions. Furthermore, for pragmatic reasons we have chosen to limit our study to the company’s headquarters and one of its subsidiaries and franchisees respectively. While it would certainly have strengthened our study to look at the entire organization, it is not something that we are able to within the scope of this thesis, where limitations in time, budget and access are significant. We therefore acknowledge that many of the results could have been different under other conditions, and that the results should be seen as open to further investigation.

The choice of literature included in the study was based on availability (PFE & franchise literature), through readymade literature reviews, such as Ragab & Arisha’s (2013) review of the KM literature, and lastly by extensive searches on online databases for the headquarters & subsidiary literature. Of course other perspectives might have been included in the paper, but once again, time constrained our ability for continuous literature reviews.
2. LITERATURE REVIEW
This section will outline a theoretical discussion regarding KM in multinational PFEs as well as the related fields of research that are most relevant for our study. Even though multinational PFEs may take many different forms of contractual relationships, such as wholly owned units, joint ventures, and licensing agreements, our case concerns a multinational PFE with specifically subsidiaries and franchisees. Subsequently we will use theory from the literature related to KM per se, the available literature on KM in PFE, KM between franchisor and franchisee, and KM between the headquarter and subsidiary. As will be discussed further in the methodology section, the theoretical framework of our study is tightly connected to our research process. We began our research with some preconceptions about KM in franchisees, in subsidiaries and PFEs. But as the research progressed, and we gained a better understanding of the phenomenon we were studying, the theoretical framework was continuously revised. In order to understand the theoretical discussion about KM, we must first gain an understanding about that which is being transferred; knowledge. Thus, the following section will begin with the literature regarding the concept of knowledge.

2.1 Knowledge Management

2.1.1 The Concept of Knowledge
Ragab & Arisha (2013) conclude that the most common definition of knowledge is a loosely associated three level hierarchy. This hierarchy includes data, or raw information, and information, i.e. processed data, and knowledge. Information becomes knowledge as a person uses the information together with experience and judgment in decision-making. (2013, p.876) One of the most prominent taxonomies in the KM literature regarding knowledge types is the tacit (implicit) or codified (explicit) dichotomy (Polanyi, 1967). This dichotomy refers to how easily the knowledge is transferred from one person to another (Grant, 1996, p.111). Codified knowledge is easily transferred, and can be exemplified by reports, manuals, handbooks, mathematical formulas, blueprints, computer software and so on. Tacit knowledge, on the other hand, is difficult to transfer due to it often being implicit or ‘hidden’ within technology or very specific practices. Tacit knowledge may e.g. regard specific technical problems, human relations or how to estimate something. Tacit knowledge usually has to be learned through face-to-face interaction, observation and imitation or shared experiences (Holste & Fields, 2010). Tacit knowledge is thus more costly and slow to transfer.
and integrate (Meyer et al., 2009). In the following section, we continue the discussion with how companies can create preconditions for KM.

### 2.1.2 The Managerial Challenge

In order to facilitate KM firms need to build capabilities for efficient KM. These capabilities can be focused efforts, like specific tools for knowledge transfer, or more general, such as promotion of a certain type of organization, culture or managerial style. In the next section, we will review the tools of knowledge transfer more in depth, while we here focus on the more general capabilities. Management in KM includes making sense of the mission for the employees and guiding people towards the culture in which sharing of knowledge becomes natural (CEN, 2004b). This includes communicating and defining what KM means, linking the KM activities to the strategy, for instance by integrating KM with other initiatives. This process is greatly alleviated by top management buy-in, e.g. through hiring staff dedicated to the KM activities (Ragab & Arisha, 2013). Another one of the main challenges is to build skills for sharing, such as communication- or documentation skills (CEN, 2004a) and to create a desire to learn and share, so that employees freely ‘pull’ knowledge from the common pool and share it (CEN, 2004b). Ragab & Arisha highlights the importance of standardized KM practices to succeed with this. A particular challenge when creating standardized KM practices is to address how to manage time. It is very important to show that KM is beneficial for the individual by rewarding a sharing behavior (2013). “Employees [...] will take the time if and only if they understand why they do it: e.g. because they benefit themselves directly or indirectly, e.g. via incentives and appraisals, or they see how it will help their colleagues or the organization, by receiving positive feedback from e.g. management or colleagues.” (CEN, 2004a, p.14)

**Organizational Preconditions**

The general organization of the enterprise is a factor which can alleviate or hinder successful transfer. The literature argues that a network structure (CEN, 2004a), or at least a flat organization with few hierarchical levels (Clever-Cortez et al., 2007) better supports communication and knowledge transfer than a hierarchical organization. The literature further emphasize that KM activities should be part of the general business processes and roles, and responsibilities should be known and clearly communicated. (CEN, 2004a) It is recommended that the KM activities have a formulated Vision and Mission, and that – if possible – the
activities are headed by a Chief Knowledge Officer, that is responsible for the execution of the entire range of KM activities (Kannabiran & Pandyan, 2010).

**Cultural Preconditions**
In a survey by Heisig & Vorbeck (2001) European companies were asked to name the number one factor for successful KM. Almost half of the companies answered ‘the corporate culture’. However, there is considerable variation between different firms in how corporate culture is used in KM and how it facilitates knowledge transfer. There is a wide spectrum between creating an enforcing culture versus a culture that builds on voluntariness (Ragab & Arisha, 2013). Many authors have emphasized that the corporate culture that best promotes knowledge transfer is one based on informality, decentralization, ad-hocness, trust and entrepreneurialism (Al-Adaileh and Al-Atawi, 2011; Chen and Huang, 2007; Tseng, 2010; Holste and Fields, 2010; Suppiah and Sandhu, 2011). This is due to the fact that knowledge in many cases is personal (tacit) thus rendering the knowledge sharing processes voluntary. This process of sharing flourishes in a culture of trust and respect, were the employee is engaged from within to share knowledge (CEN, 2004a). The trust part of the culture is especially important since it helps to alleviate the risk of sharing knowledge. This risk stems from the fact that employees might lose a competitive advantage over peers by sharing specific knowledge. In fact, Holste & Fields (2010) found that both warm personal relationships and respect for other workers competence was required for tacit knowledge transfer. In the next section, we will review the more specific tools for KM as well as different KM systems.

**2.1.3 Tools and Systems**

*Knowledge Management Tools (KMT)*
The firm may use a number of technical and non-technical tools to facilitate transfer of knowledge. Technical tools can for example be internet, intranets, computer software, wikis (online encyclopedias) and internal databases. Examples of non-technical tools are coaching, workshops, meetings, community building and social events. Technical KM-tools in KM are both tools in their own right as well as often enabling the use of non-technical tools. Furthermore, while technical tools are often efficient for managing codified knowledge, non-technical tools like coaching and community building are instrumental for sharing tacit knowledge (CEN, 2004b). These technical and non-technical tools can be utilized and combined in order to construct so called knowledge management systems.
Knowledge Management Systems (KMS)
Technical, managerial and organizational systems that facilitate KM in an organization go under the name Knowledge Management Systems (KMS) in the KM literature (Massa & Testa, 2009). Each KMS includes technical and non-technical tools in different combinations. Ragab & Arisha identify three common ways of designing KMS, by Codification; Personalization, People-finding or as a hybrid of the three. (2013) Codification means that employees are encouraged to contribute to a common database where the information is available for retrieval for other employees (Hansen et.al, 1999). Personalization, on the other hand, is a KMS with focus on the social interaction between people. IT, in this KMS, serves the primary function of connecting people, rather than as an information repository. The person-to-person approach furthermore makes Personalization more suitable for tacit knowledge transfer (Massa & Testa, 2009). The People-Finder KMS aims to make intra-corporate experts available for consultancy by creating a registry over knowledge and who is holding it (Lloria, 2008).

2.2 Knowledge Management in the Plural Form Literature
The PFE is defined by Bradach as an (sic) “arrangement where distinct control mechanisms are operated simultaneously for the same function by the same firm” (1989, p.112). This can e.g. be a company with both franchise- and company-owned units. In the Plural Form-literature, research addressing KM is scarce, in fact, “insights on performance implications” in general are scarce (Ehrmann et.al, 2013, p.118).

2.2.1 Subsidiary and Franchisee roles in the Plural Form
One of the concepts that are discussed in the plural form literature is the standardization vs. local adaption dialectic. A crucial part of standardizing the PFE is to transfer knowledge from one part of the organization to the other. According to Sorenson et al. (2001), the PFE strives after balance between the efficiency gains by corporate-wide standardization and successful local businesses through adaption. Franchisees impede standardization by adapting local practices, thus risking generating idiosyncratic knowledge (Sorenson et.al. 2001). However, as Gillis & Combs put it: “franchisees, in their attempt to maximize local profits, sometimes develop new products and services that might benefit the chain” (2009, p.556). Sorenson et al. (2001) further argues that in contrast to franchisees, company-owned units facilitate standardization of knowledge and practices by providing testing locations for new practices. When the practice is tested in a company-owned unit before it is ‘pushed’ to the franchisee, it
is easier for the franchisor to convince the franchisee that it works (IBID). In another study, Gillis & Combs (2009) looked at factors that help the PFE reap the benefits of its organizational structure. They found that trust was a crucial component to facilitate the knowledge transfer between the franchisee and franchisor and furthermore helped when time came to persuade the franchisee to apply standardizations (Gillis & Combs, 2009). In sum, the plural form literature explicate that company-owned and franchised units have different roles to play in the corporate-wide KM. However, to provide a more encompassing theorization of international KM in the PFE, we turn to the two closely related literatures: the Franchising literature and the International Business literature.

2.3 Knowledge Management in the Franchise Literature

The franchise agreement is essentially a contract between two legal firms, the franchisor and the franchisee. This contract gives the franchisee the right to market certain products under the franchisor’s brand name. Generally, the franchisee is to receive some managerial assistance, and is assumed to run their business in a stipulated manner. The contracts normally include a termination clause (Rubin, 1978). However, there is incongruity between the franchisor and the franchisee goals. The franchisee is seen as an entrepreneurial unit focused on short-time profit and the franchisor is prioritizing the brand equity with a longer time focus (Kaufmann, 1998).

2.3.1 Franchise Government and its Effect on KM

The franchise literature has traditionally focused on e.g. the legal, functional and HR perspective, and has to the best of our knowledge produced but one article with an explicit KM perspective (Paswan & Wittmann, 2009). In their article, Paswan & Wittman argues that a franchise system governed by relations in general share more knowledge - tacit and codified - than a franchise system governed strictly by the contract. Although only one article explicitly deal with KM, much research in the franchising literature relates to KM, for instance, the dual motives of standardization and adaptation (Kaufmann et al., 1998), franchisee compliance with respect to trust (Davies et al, 2011), with respect to support and monitoring (Quinn et al., 1999; Ishida et al., 2013) and with respect to personality (Dant et al., 1998).

2.3.2 Standardization of Practices in Franchise Systems

Just as in the plural form literature, knowledge transfer in the franchising literature is usually seen from the perspective of standardization of practices. For instance Kaufmann et al. (1998)
identified contextual drivers and inhibitors of standardization of practices in the franchise. They found that there are three primary drivers of standardization of practices: cost reductions, the necessity of a consistent image, and to ease new product introduction across the chain. A consistent image is necessary for the brand. If the franchisees differ too much the customer would not be able to form expectations about the brand. However, if the customer does not buy products from more than one outlet then there is little necessity for a consistent image, and local adaptations cannot be seen as diluting the brand for the customer. Kaufmann et al. also identified inhibitors of standardization of practices: market differences and maturation effects. The maturation effects are industry- and franchisee maturation effects. As the industry competition increases, market pressures will increase and force franchisees to adapt to local conditions to produce an even better fit. And finally, as the franchisees themselves mature and gain more knowledge, the willingness to accept franchisor-enforced standardization will diminish.

2.3.3 Franchisee Compliance – Trust, Support and Personalities

As Kaufmann (1998) studied the external factors in the context that affected standardization in the franchise chain, Davies et al. (2011) studied the relationship between franchisee trust and compliance with franchisor practices. They found in their study that “satisfaction and conflict with the franchisor jointly determine overall franchisee trust levels”. (Davies et al, 2011 p.331) Franchisee trust is comprised of both the integrity and competence trust toward the franchisor. Integrity trust is trust in the franchisors willingness to show respect, dignity and consistency towards the franchisee. Competence trust is the trust in that the franchisor will recognize and address the need for franchisee economic success. The authors found that diminished trust reduces the likelihood that the franchisee will carry out the franchisor’s requests. However, what Davies et.al also found was that the two types of trust do not influence the likelihood of compliance in the same way; integrity trust influences compliance more than competence trust does. In a case study the relationship between compliance and trust was further investigated. In the particular case, Quinn et.al (1999) found that conflicts in the franchise chain stemmed not from abuse of franchisor power but rather from dissatisfaction from the franchisees with the quantity and quality of support they received. Ishida et.al (2013) found that monitoring - when implemented properly - can increase the understanding between the franchisor and franchisee. If the increased understanding is used to further better support, monitoring can signal much more than distrust. Although according to Ishida, it is of great importance that monitoring is perceived as fair (2013). Personality traits
in relation to compliance have also been studied. Dant studied the influence of personality traits on perceived relationship quality between franchisor and franchisee. Dant found that agreeable, conscientious, emotionally stable franchisee owners tend to better follow system directives. Extraverted franchisee owners do not to a similar degree follow such directions (Dant, 2011).

### 2.4 Knowledge Management: Headquarter & Subsidiary Literature

In contrast to a franchisee, a subsidiary is defined as a foreign unit of a multinational company (MNC) where the parent company controls all or at least more than half of the subsidiary’s stocks (Hill et al. 1990). Although there is plenty of literature related to KM in this area, we have focused our discussion to articles in areas that we found most relevant for our case, these are the characteristics of knowledge, subsidiary characteristics, relationships between headquarters and subsidiary and KM-tools. These areas represent a significant share of the literature related to KM between subsidiary and headquarters (Minbaeva, 2007; Kostova & Roth, 2002; Mudambi & Navarra, 2004; Grant, 1996; Szulanski, 1996).

#### 2.4.1 Additional Characteristics of Knowledge

Minbaeva (2007) constructs a model containing four characteristics of knowledge which all affect KM in multinational companies. First, Minbeava concludes that tacitness have a negative impact on KM and is a barrier to knowledge transfer because it is difficult to articulate tacit knowledge. This means that it generally requires much more resources to transfer tacit knowledge across international units. Second, complex knowledge is defined as consisting of multiple interdependent technologies, competencies or people and is thus difficult to transfer, particularly if these are spread out in multiple countries. Third, specificity: this refers to knowledge which is restricted to a certain function or task in the MNC. Specific knowledge may be easier to transfer because it is less complex. Last, availability – or lack thereof – is an important characteristic of knowledge. Even if knowledge is codified it does not necessarily mean that it is accessible for all employees. Thus availability is an important characteristic of knowledge for knowledge transfer (Minbaeva, 2007).

#### 2.4.2 MNC Relationship, Characteristics and Roles

Relationships within the firm are crucial preconditions for KM in MNCs (Kostova & Roth, 2002). Much like the franchisees, foreign subsidiaries of the MNC exist in a conflict between conforming to corporate directives and adapting to the local environment (host country laws,
practices, norms, culture) in which it operates. Kostova & Roth find that subsidiaries will adopt transferred practices, depending on relational aspects such as trust and/or feelings of dependency toward the headquarter. Tensions between managers, hostility or general uncertainties may cause the subsidiary to not fully implement the practice (Kostova & Roth, 2002). Minbaeva (2007) further discusses the importance of establishing close relationships between parent company and international subsidiaries in order to achieve efficient KM. Forums for communications, the promotion of high quality relationships between key employees and creation of organizational structures for organizational learning all contribute to better KM in the MNC. Minbaeva also concludes that knowledge transfer to and from MNCs subsidiaries are more frequent and of higher quality when the subsidiary participated in the intra-firm network (Minbaeva, 2007).

Szulanski (1996) extends the discussion about preconditions for KM by highlighting the importance of Internal Stickiness - that the knowledge is ‘stuck’ in one part of the organization. According to Szulanski the primary factors leading to Internal Stickiness are a lack of recipient absorptive capacity, lack of recipient understanding of the practice, and an arduous relationship between the sender and the recipient. According to Szulanski, absorptive capacity is an outcome of prior knowledge and capabilities to absorb new knowledge and integrate it with the already existing knowledge. The importance of prior knowledge comes from the fact that knowledge build upon knowledge, e.g. to be able to absorb the finer parts of a math problem you would need to know the basics first. Absorptive capacity as a concept can be used to describe both individuals and subsidiaries. According to Szulanski, the key determinants for absorptive capacity are: a common language between units in the firm; a common vision for the practice; an adequate skill-set for implementation of the practice, and; clearly defined roles and responsibilities. In contrast to Szulanski, Minbaeva et al (2003) includes individual employees’ motivations in the definition of absorptive capacity, thus giving absorptive capacity two essential dimensions; abilities and motivations. However, absorptive capacity is not a static characteristic and according to Minbaeva it can be promoted by active human resource management such as encouragement, training, recruitment and promoting social interaction and exchange. In the follow up study from 2007, Minbaeva concludes that absorptive capacity is the most important determinant for knowledge transfer followed by characteristics of the relationships within the MNC (Minbaeva, 2007).
2.4.3 KM-Tools

Bresnan et al. (1999) have made a contribution to the discussion about KM tools. They conclude that while efficient knowledge transfer is certainly not an easy task for firms operating in just one country, it becomes even harder on an international scale. This places much higher demands on efficient tools for KM: “[…] the establishment of sophisticated mechanisms for the transfer of knowledge throughout the far-flung networks of the MNC is necessary to stay abreast in rapid international competition.” (Bresnan et. al. 1999 p.442). The authors argue that efficient knowledge transfer in an international context requires that the members of the organization feel a sense of mutual identity and belonging with each other. Subsequently they found that knowledge and know-how are best transferred through intense communication in the form of visits and meetings within the MCN (even though their study is mostly concerned with R&D organizations and technological knowledge). Chang et al. (2012) combines the theory about firm- and individual characteristics (ability and motivation) with expatriation theory and discuss how expatriates best are utilized to facilitate efficient KM. In order for this type of knowledge transfer to be efficient, the expatriates must have the appropriate capabilities to transfer knowledge and subsidiaries need to have absorptive capacity. The main conclusion regarding expatriate capabilities is that the MNC should ensure that the expatriate have more than just technical skills, there must also be transferring skills. Such capabilities can for example be willingness to deal with cultural barriers and a willingness to build relationships with the local staff where the knowledge is destined to (Chang et al. 2012). In the next section, we synthesize this review into one consolidated conceptual framework (figure 1).

2.7 Our Conceptual Framework

We conceptualize the theories reviewed in the previous sections into four analytical dimensions that all affect the way knowledge is managed in the multinational PFE. These are the contextual dimension, the managerial and social dimension, the dimension of knowledge and the dimension of KM-tools. Figure 1 below represents the dimensions and their relationship to the KM.

**Contextual Dimension:**

Theories in this dimension help explain how the contractual relationship between the franchisor and franchisee, and factors given by the external environment, affect KM in the multinational PFE.
**Managerial and Social Dimension**
In this dimension, theories regarding management, organizational structure and culture, relationships and personalities are used to explain KM in the multinational PFE.

**Dimension of Knowledge**
Theories in the dimension of knowledge provide us with a valuable typology for the knowledge, and increase our understanding for why some knowledge may be harder to manage than other in the multinational PFE.

**Dimension of KM-Tools**
Theories in this dimension primarily lend a hand for classifications of KM-tools and KM-systems. Investigation of KM in the multinational PFE through the analytical lens of KM-tools will aid us in drawing conclusions regarding the outcome of variables in the other dimensions.

**Figur 1. Dimensions affecting Multinational PFE Knowledge Management**

Source: Own Conceptualization
3. METHODOLOGY
In this section we will discuss our research methods. The section contains information about
the research approach, sampling, data collection, research process as well as a discussion
about the quality of our study. Although we acknowledge that there are no self-evident
approaches to what methodology to use, there are methods that we find particularly useful for
investigating our phenomena and answering our research questions. Our aim with this section
is to provide a discussion about how and why we have chosen our particular methodology.

3.1 Research Approach
We have chosen to do a qualitative case study. The main motivation for this approach is
related to the type of research question we have posed. Our purpose and research questions
requires us to conduct a broad study in order to fully understand our phenomenon; KM in a
multinational PFE. This phenomenon entails several complex dimensions ranging from the
multinational context to relational and organizational aspects. Our purpose is not to make
generalizations from a sample to a population, but rather to make an in-depth study of a
that case studies are preferred when questions like “how” and “why” are to be answered when
the focus is on a real life, current phenomena with events outside of the researchers control. A
case study also enables one to understand the phenomenon in relation to its context, i.e. to
understand KM in relation to its plural form and multinational setting (Yin, 2003). Similarly,
Ghauri (2004) argues that a significant advantage using a case methodology is that it allows
for an in-depth study of the problem while at the same time enabling a holistic approach,
investigating several different factors of the phenomena from multiple angles. We also find
that a case study is particularly suitable for us as it allows for a systematic reconciliation of
our results at the same time as we are able to continue gathering information until we reach an
understanding for the phenomenon. We find this approach to be the most appropriate as we
will have to gather data coming from a wide range of cross-border, cross-cultural and
organizational contexts (cf. Ghauri 2004). Subsequently we conclude that conducting a
qualitative case study is the best way for us to gain a holistic understanding of both how and
why knowledge is managed the way it is in a multinational PFE. Our research approach
indicates that the case study will have both explanatory and descriptive dimensions. However,
as this phenomenon is scarcely researched in previous literature, the case study will also have
an exploratory dimension (cf. Yin, 2003).
3.2 Research Design
Having established our overall research approach we now turn to the more specific choices we have made in regard to the research design, i.e. regarding the unit of our study, data collection and data analysis.

3.2.1 Unit of Analysis
Efficient KM is a challenge for any firm wanting to stay competitive, and it becomes even more challenging for multinational enterprises due to the additional cross-border dimension. However, KM in multinational PFEs adds significant complexity to this challenge as the firm is forced to manage knowledge both across borders as well as across different organizational units. As research regarding KM in multinational PFEs is very limited in scope, studying this phenomenon make out our contribution to the literature. Thus we will have to study how knowledge is managed not just in the headquarters but also to and from its subsidiaries and franchisees. In order to explore this phenomenon we have chosen to study KM in a multinational PFE IT-company based in Sweden. Being an industry leading, knowledge intensive IT-company, KM make out a crucial source of competitive advantage for the company. Furthermore, the company has both franchisees and subsidiaries in several countries. For this reason, KM in this PFE makes out an appropriate unit of analysis. Due to reasons of anonymity the case unit will henceforth only be called “the company”. Yin (2003) discusses that select a larger sample is sometimes preferred in order to make the study of the phenomenon more robust. However, we aim to conduct an in-depth case study in order to explore a phenomenon - previously under-researched and limited in scope and in time - not to make statements about KM in all multinational PFEs. Thus the research design with a single case study fulfills our purpose. Merriam (1998) refer to a single case study as non-probability - since we do not generalize - and purposeful - since we need to pick the most suitable sample in order to gain insight and understanding - sampling. We have chosen the company because we were familiar with it before hand and had access to it, which is commonly called convenience sampling (see 3.5 Quality of Study for discussion about this access) (cf. Merriam, 1998).

3.2.2 Data Collection
In this section we will outline our choice of data collection techniques and sources. One of the advantages of case studies is that it allows for a broad range of sources, like documents, interviews, observations and physical artefacts. Furthermore, one of the main principles for
data collection in case studies is the use of multiple sources of evidence, so called *triangulation*, which enables the researcher to support the results from multiple angles. Moreover, case studies often utilize interviews with people directly involved in the phenomenon being studied, as well as direct observations of events related to the phenomenon (Yin, 2003). For this case we have collected primary data, consisting of interviews, and secondary data in the form of internal company documents such as charts of corporate processes and routines, as well as codified information from the company’s internal database. The choice of the interviewees is based on the expectation that these interviewees will be knowledgeable about the phenomenon because of their position in the company. In order to ensure a holistic and deep understanding of KM in the company, we have approached managers and employees from several different countries/units, departments and functions. During the first interviews, we asked the interviewees to identify persons whom they thought would be knowledgeable about KM in the company, so called *snowball sampling* (cf. Merriam, 1998). In total we approached 13 managers and employees. Everyone agreed to be interviewed but one employee had to cancel in the last minute. Instead he agreed to answer our questions via e-mail. In the Appendix a table with our interviewees and their location in the organizational structure is included. Due to reasons of anonymity, we decided to give each interviewee a specific code letter (A to M), and not specify further their identities.

Our interviews have been open-ended in order to keep a non-rigid form while still letting us direct the conversations according to our agenda. By conducting open-ended, conversational interviews we have been able to get not only the interviewees facts about KM in the company but also their opinions and deeper insights about it. As the research progressed and we became more knowledgeable about the subject, focused interviews have also been used in order to subtly steer the discussion towards matters that we have wanted to either confirm or reject. In these cases, it has been crucial for us not to ask leading questions (cf. Yin, 2003). The interviews started with an introduction of our research and then proceeded with an open-ended “how” question about KM in the company, from the perspective of the interviewee. In order to ensure more accuracy in our analysis we recorded - with the interviewee’s permission - all the interviews and then systematically transcribed them from the recordings.

### 3.2.3 Data Analysis

We have had a systematic approach to the analysis of our data. After transcribing each interview, or collecting documentation from internal other company sources, we carefully
examined and categorized the data in relation to our theoretical dimensions and our research question in order to evaluate and reflect on the progression of the study. Furthermore, by constantly corroborating the data from the interviews with various documentations, as well as from other interviews, we have been able to strengthen the validity and overall quality of our analysis. After transcribing, categorizing, corroborating and making an initial evaluation of the data, we identified the patterns of similarities and differences in KM in the company - again in relation to our theoretical conceptualization - which then laid out the ground for our final analysis (cf. Yin, 2003).

3.3 Research Process
In this section we will summarize the research process. We set out with some preconceptions about the theories regarding KM in multinational PFEs. Similarly we had some prior knowledge about the company and its KM. Subsequently, after an initial interview with the company and formulation of our research problem, we outlined the literature review and theoretical discussion. This theory became our conceptual framework. However, as research has progressed and we have learned more about the case, we have constantly revisited our theory, adding and revising the theoretical discussion according to our findings. In this manner the research process has been a synthesis of a deductive approach - where theory guides the process towards testing hypotheses - and an inductive approach - where facts from the case guides the process towards developing new theory. This process of moving between theory and facts coming from the case is called an abductive approach, and it has been helpful in building a thorough understanding and a more robust body of theory of KM in the PFE. In this way, the empirical findings has kept the theory “alive” and allowed it to develop according to our understanding of our unit of analysis, finally leading to a revised conceptualization in the analysis (cf. Johansson, 2003).

3.4 Quality of Study
Reliability ensures that if another researcher were to repeat our case study, using the same methods and operations, he or she would be able to come to the same conclusions as we have. Per definition, this is difficult to achieve in a case study as we as researchers are constantly influencing the process by interpreting data (cf. Collis & Hussey, 2009). We have tried to ensure reliability by being systematic and documenting our research process in the form of research-diary or case study notebook. This has allowed us to do constant reliability-controls and ask ourselves whether we are following the plan and procedures that we set out to do (cf. Yin, 2003).
Internal validity refers to what extent the research findings matches the reality of the phenomenon we are studying. Issues with internal validity arise primarily from the fact that all aspects of reality cannot be studied or validated because reality is not static. The researcher is therefore forced to make some inferences about it. The question then arises if these inferences and interpretations are correct - are we measuring the reality of a phenomenon and to what extent are our own biases affecting the study (Yin, 2003). Triangulation, as discussed previously, has been one way for us to increase internal validity. Also, we have been able to verify our case description with the company in order to get an assessment of the accuracy of our results. Furthermore, our data collection and analysis are spread out over the course of time which in turn might serve to increase internal validity. Moreover, our research process to some extent serves as a reflection about our preconceptions and biases. As mentioned, we set out with some preconceptions about the company and about the theory, including lack of theory, which we have then constantly revised during the course of the study (cf. Merriam, 1998).

External validity comes from the study being generalizable outside of our specific case, i.e. are our findings about KM applicable to other multinational PFEs? In general, single case studies like ours are not set out to make statistical generalizations. However, Yin (2003) argues that case studies might be capable of analytical generalization, which refers to the results of a case study being generalized to theory. For example, other researchers might use our theoretical discussion as a base for similar case studies. Then, if the results can be replicated the results might be generalizable for this theoretical area. However, this generalization is not something that we purport from trying to achieve. We have studied this case as it was a chance for us to illuminate a phenomenon that is both relevant and urgent for many PFEs.

Also relevant under this section is the discussion of our roles and access to the company we are studying. One of us has been, and will be, employed by the company. As researchers it is crucial that we are aware that this situation might entail a risk in terms of objectivity and dependency. However, it is our view that this situation has not affected the integrity of our research. On the contrary, it has gained us better access to information and to people, thus increasing the quality of data and the overall quality of the study.
4. **EMPIRICAL FINDINGS: KM IN A MULTINATIONAL PFE**

4.1 **Overview of the Company**

4.1.1 **The Company Context**

The company was started in 2008, in the words of one of the managers “*with the ambition to become the leading IT firm in Europe and to become the best in the world on our particular platform*” (Manager A, p.2). A manager in the company sums up the business like this: “*we are only focusing on one particular product, the IT-platform. Then there is the consultancy part which make up 60 to 70 percent of the revenues*” (Manager A, p.3).

**The Product**

The company modifies the platform by building modules – which are modifications and extensions of functions – which in turn enables them to build flexible and tailor-made solutions to a wide range of customers (Company webpage, 2014). The modules thus make out a central part of the company’s offer and the lion’s share of the company’s manpower is working with programming and coding the new modules.

**Growth and Internationalization**

In five years the company has grown from zero to ninety employees as well as experienced an exceptional growth in turnover. Today the company has subsidiaries, franchises and other partners in several european countries as well as outside of europe. The internationalization strategy was relatively attentive to local conditions, as one manager explains:” *[...] we do not have a complete “package” regarding how things must be done, it works differently in different countries...we must be flexible and listen to locals*” (Manager B p.2).

4.1.2 **Company Management**

**Organizational Structure: Internal and International**

As mentioned previously, the organization consists of both franchisees and subsidiaries in several different countries. The challenges of organizing and managing such a differentiated and fast growing company create significant managerial implications of which KM is one of the most central issues. As one manager describes it: “*we have lots of challenges regarding the organizational and international dimensions and how to manage it. How do you build an efficient organizational structure? We are building links of middle managers and try to get the communication to work*” (Manager A, p.6).

**Organizational Culture**
The organizational culture in the company is, according to an internal inquiry, characterized by emphasis of continuous improvement of employee competency, and emphasis of achieving integration in the process-chain, from sales to support. Documentation, processes and individual responsibility are utilized to achieve this. The individual is responsible within the framework of the processes, and has high individual autonomy with regard to implementation of solutions. Outside the given processes, communication is informal, flat and free. Few rules and guidelines are given to each individual, instead the importance of understanding other departments are stressed (Confluence).

**Organizational Focus**

No person in the organization has the assignment of coordinating the total KM work. Neither is a vision/mission statement formulated for the KM work.

### 4.2 KM between the Headquarters and the Subsidiary

#### 4.2.1 Subsidiary Context

The subsidiary was created as a response to difficulties of finding developers in the headquarters surroundings. The company founders knew a skilled developer abroad whom they had worked together with a couple of years earlier. The developer commented on how the subsidiary started: "Basically I joined the company and I wanted to stay in this country because I lived here. I found a little office to rent. Eventually we needed more people and saw if we could find any here, and all of a sudden we were a big office. This country is also a bit known for being good at IT so it ended up being a good resource for development." (Manager C p.1). Today, the subsidiary hosts a number of developers that works against international or headquarters customers, and a product development department, that are responsible for oversight and development of reusable modules, and development of new development tools. The subsidiary has about 15 employees.

#### 4.2.2 Subsidiary Management

Management of the subsidiary is integrated with the headquarters, and the manager responsible for the daily operations of the developers in the subsidiary is located in Sweden. Furthermore, the subsidiary is a wholly owned unit. The headquarters and the subsidiary are called ‘Internal’, as opposed to the franchisee. (Confluence)
4.2.3 Knowledge Transferred to the Subsidiary

Knowledge in the company concerns a wide array of areas, of which the four most prominent are: sales-, development-, management- and process knowledge. Each of these consists of varying degrees of codified, tacit, specific and complex components. The company does not sell any products in the country where the subsidiary is located and has made the decision to focus sales and distribution in English speaking markets. As a consequence, the subsidiary does not have a dedicated sales department and subsequently does not need to participate in transfer of sales knowledge. However, development-, process- and managerial knowledge all flow between the headquarters and subsidiary.

Development knowledge

Development knowledge in the company consists of design- and technical skills related to the product. This knowledge includes programming knowledge in e.g. XML, Java, CSS, as well as knowledge about the IT-platform and the modules. Additionally, some developers need knowledge about how to hold customer workshops, and how to estimate time allocated to projects. Finally, developers need to know how to utilize the company’s deployment platform. This is a tool for faster development, testing and deployment (Manager D).

Process Knowledge

Knowledge in the company also takes the form of process knowledge. The company has many processes in place for different tasks, such as the employee recruitment process, the sales process, a project handover process, site deployment and a project process, and SCRUM (Manager D). SCRUM is the most central of the company’s processes with regard to investments. In SCRUM the project is developed in small iterations which enables the team to work ‘agile’ in a trial and error process. The purpose of this is to expose impediments early. (Manager A) The team members are individually responsible but should develop solutions collectively, thus SCRUM requires a specific type of mindset and a setting of trust and team empowerment (Manager C).

Management knowledge

Management knowledge in the company concerns how to handle operations and building the organizational structure (Manager D), to compile and understand business intelligence (Manager G), and keep track of resources and time and chargeability (Manager K). Other
types of management knowledge include employee management; salaries, motivation, quality and company culture. (Manager A)

4.2.4 KM-tools used in the subsidiary

In order to transfer above mentioned knowledge, the company uses a number of technical and non-technical tools. The main technical KM-Tools used by the company are called Confluence, Jira, Skype, Go-to-Meeting, and regular email. The main non-technical tools are travels and visits, meetings and forums, training sessions, cross-office teams, support hours, and the coaching system.

Confluence
The main database is called Confluence, which works as the company’s knowledge bank, platform for communication and competence development system. Information on Confluence concern the corporate structure and different departments, contact information, work processes, information on modules and coding principles, management information and manuals (Manager D). In addition to hosting information, Confluence can facilitate communication via a blog, and a plug-in called Yammer which is a news feed and micro blog, very similar to Twitter, where people can write short status updates and share knowledge quickly. Except for shorter status updates, management notices can be delivered via the blog. Moreover, all new employees in the company have to complete an introduction program that is accessible via Confluence during the first weeks of employment (Manager A).

Jira
Jira is a program for reporting- and tracking time spent in projects. Thus it is a system for invoicing correctly, as well as for registering and following up on employee chargeability, i.e. the ratio of salary-hours to the number of hours the company charges their customers for. Jira produces key performance indicators for management and financial follow up (Manager D).

Skype, Go-to-meeting and e-mails
Other software tools enabling distance meetings and interactions are Skype, an IP-telephone program, Go-to-meeting, another program used for long distance conferences, and regular e-mail services (Manager G).

Travels and Visits
Aside from IT software and IT infrastructure, a significant share of organizational learning
within the company is based on human interaction. Many of the interviewees emphasize the importance of face-to-face interaction for knowledge transfer. Managers travel frequently to have face-to-face meetings with other managers in the different units (Manager E).

**Meetings and Forums**

There are several types of regularly held meetings in the company. These meetings include for instance corporate meetings once a month, management meetings five times per month, weekly sales meetings as well as other meetings. Some of these meetings are voluntary and some are obligatory (Manager A). Aside from the formal meetings, there are internal project meetings, via e-mail lists and chat-groups. Throughout the company there are also other informal networks that build on international visits and friendship. Within the development department, each function has meetings in the form of forums consisting of several participants each session. These sessions are held over Skype or Go-to-meeting, or in a chain-mail (Manager E).

**Training Sessions**

Aside from these meetings, there are voluntarily training sessions where the firm buys lunch for all participants as an encouragement for knowledge sharing (Manager C).

**Cross-office Teams**

Teamwork is used as a tool for KM. The so called cross-office teams are a way of using team interaction to facilitate international KM. These are project teams consisting of members from the company’s headquarter and its subsidiaries (and in rare cases from its franchisees). These teams work together in a common project, and stays in touch with the help of Skype (Manager E).

**4.2.5 KM of development knowledge**

To ensure cohesion and streamlining of KM, every new employee in the headquarters and subsidiary alike must do the introduction program, which is available on Confluence. A significant part of the introduction program is dedicated to development knowledge and knowledge related to the company’s primary systems. Confluence, the company’s deployment platform interface and the server portal are introduced with videos in the introduction program. In this way, standardized ‘starting-knowledge’ about the company’s core systems and technology is distributed similarly to all employees. However, the program is differently
adapted for different roles, so developers will receive additional development education as opposed to for example sales personnel and project managers (Manager C).

A manager commented on the introduction program: “Previously we used quite a lot of time to get people up to speed, for instance one might have had a whole week’s education with a senior developer that sat together with one or two developers and ran a course. Today that has been replaced with the introduction program” (Manager A p.2). However, this kind of intense knowledge transfer might have mixed implications, as the manager explains: “Sometimes this almost goes too far, a new developer gets hired and sits down in a corner somewhere. About two or three weeks later they emerge and suddenly they know a whole bunch of stuff” (ibid). A developer defined the introduction program as a “bombardment of information” (Employee H p.7). Because of this, the company managers should always follows up on new employees’ absorption of the introduction program.

**KM of development knowledge through Confluence**

Confluence as a tool has revolutionized the way the company is sharing information. A subsidiary manager commented: “It does actually work…it has a plug-in, like a blog concept, where people post stuff. And even though we have tried blogging approaches before, this has gained attraction.” (Manager C p.7). In this manner, Confluence has managed to change to company’s communication from being email based – where a common issue is e-mails which are never read – to encourage employees to use Confluence instead (ibid).

**KM of development knowledge through training sessions**

Confluence is not suitable for all types of knowledge transfer and is therefore complemented by other tools, as one manager explains: “Most of the time we use confluence to document things for everybody to read. But we also host training sessions over Go-to-meeting for more hands-on technical cases. There are participants from Sweden and from the franchisee during these sessions. We used to also have lunch seminars where anybody could volunteer to show or talk about something interesting. We haven't had those things for a while now.” (Employee M p.11). These training sessions are encouraged by the company in that the attendee’s lunches are paid for. In addition to these training sessions, the company has tried to have a voluntary “tech monthly”-meeting after the mandatory corporate monthly meeting. The topics
at this meeting have been related to the infrastructure of the technology, and about specific recurring issues, like a search engine implementation. However, just like with the training sessions, attendance has been dropping, pointing to a risk associated with having intense knowledge transfer too concentrated: “Maybe because the format doesn't work, it might be that the content isn't good enough, even though I think the content is something to care about. Maybe it’s too badly presented but likely also related to the fact that everyone is half asleep by that time.” (Manager C p.1).

**KM of development knowledge through processes and team work**

Aside from these, more voluntary efforts, the developers also share knowledge as a consequence of working together in SCRUM-teams. The primary driver behind this is the fact that the teams are taking a shared, collective responsibility for the assignments which in turn creates more communication (Manager C). Many of the SCRUM-teams are arranged ‘cross-office’, so that members of the team are distributed between different offices (Employee M).

**KM of development knowledge through chat programs**

Chat programs and chat groups are a frequent channel for transfer of development knowledge, not least for more informal sharing, and make out an important supplement to the cross-office teams. Every team has their own chat group for project related knowledge, and as these teams sometimes have people from several countries, cross-border knowledge sharing is facilitated. There is also chat groups exclusive for the different functions, like for instance for the frontend developers chat. One implication of having chat groups is that it encourages informal knowledge transfer both to and from the subsidiary (Employee H).

**Voluntariness vs. control**

Knowledge transfer through the lunch seminars, tech Fridays and the daily work as a SCRUM-team is based on the individual developers free will and interest. The reason and implications of this volunteerism in KM is commented by a manager: “Between the carrot and the stick-approach, it is always the carrot-approach. Basically making people want to do something rather than telling them to do it. We feel like we can't tell people what to do, but
instead we should make them want to do it themselves basically....whatever how effective that is. Some voluntary efforts don't work out.” (Manager C p.4).

In contrast to the voluntary approach, documentation of how modules are programmed is mandatory. The developers are supposed to strive towards reusability for their modules – i.e. that a module used for one customer can be used for another – and are also supposed to document their newly created modules rigorously (Employee H). However, in reality the pressure of finishing the projects has reduced the number of reusable modules. The expansion of the subsidiary with a dedicated product department was a way of solving this. The department’s assignment is to create a core of about 15 reusable modules (Manager C).

**KM of development knowledge: Finding information**

The developers have a number of options how to get information about the modules (such as what the module does, who created it, and updates). The two main options are: via presentations in the corporate monthly meeting; or by searching in the company’s internal system for modules (Employee H).

**4.2.6 KM of Process Knowledge**

Similarly as with knowledge of the IT-platform, knowledge about the main company process, SCRUM, have mainly been transferred to each new employee via the introduction program (Confluence). However, the initial attempts to implement SCRUM failed as teams implemented the superficial building blocks of the process without a deeper understanding of it. Subsequently, the newly appointed Head of Engineering was charged with the task of implementing a so called ‘Agile Transformation’ within company’s internal organization. This transformation included “getting people to understand what SCRUM is, getting everyone to the same page, and knowing what the responsibilities of each role is” (Manager C p.10). A priority in the process was making sure that the implementation of SCRUM knowledge was carried out similarly in the headquarters and the subsidiary. The transformation also meant a revising and reorganization of the company’s team structure (Manager F).

The actual transformation work was substantiated through internal workshops individually for the managers and the developers. The developers and managers participated in the workshops via Go-To-Meeting. In addition to the workshops, in order to facilitate more communication
between developers the teams were offered to work in a designated team room. This offer was particularly emphasized in teams in which management felt that communication had stagnated. Again, the voluntary approach was applied as the teams were not required to sit in the same room. “It’s ultimately their decision, that’s what I mean with empowering the teams, to ask and not to tell. It’s part of creating trust, the building block for a learning team” (Manager F p.8). In addition to holding workshops on the subject, the Head of Engineering also visited the subsidiary at occasions to hold one-and-one meetings and create individual buy-in from the personnel. The consequences of the Agile Transformation are not yet fully known, as a manager said: “I’m not necessarily seeing all the buy-in at this point. It’s difficult to make this transformation when you have a certain way of working” (Manager C p.11).

4.2.7 KM of Management Knowledge

Management knowledge- and practices are regularly transferred in order ensure organizational and managerial streamlining between the headquarters and the subsidiary. This is done mainly through the weekly bottleneck meetings and through one-on-one meetings. In the bottleneck weekly, senior staff goes through key performance indicators and presentations. In order secure cohesion in management there are common templates for reporting. Moreover discussions about the state of business are an important feature of the management meetings. The Bottleneck weekly meetings are done via Skype or Go-to-meeting in order to bridge the geographical distance to the subsidiaries. One manager explains: “[...] we’re constantly trying to bring issues to light. It that manner it is sort of like SCRUM, only at an organizational level” (Manager D p.3). The one-to-one meetings between managers have enabled deeper sharing of knowledge regarding core management knowledge. During these meetings a variety of issues gets discussed, from product quality, team performance and other human resource management issues. This setting, the subsidiary manager told us, is also where most values and company culture seeps through (Manager C). An example of management knowledge is the company’s work with DISC-profiles, a management tool for better communication between employees (Manager A).
4.3 KM Between the Headquarter and the Franchisee

4.3.1 Franchisee Context

The franchisee was a result of a merger between two already existing IT-companies in the franchisee’s home country; one of them experienced in working with the IT-platform, and the other from working with IT-consulting services. The consultancy company approached the Swedish company already in 2008 about a possible partnership. The Swedish company’s brand and the extra resources would make the franchisee the biggest in its home country on the IT-platform (Manager G). Out of the Swedish perspective, expansion into the franchisee’s home market proved an easy way to internationalize. The franchise concept came to include the deployment platforms, the brand and process- and management support from the Swedish side. In return the franchisee would run their operations, including everything from sales to support, independently of the headquarters as well as pay royalties (Manager D).

4.3.2 Franchisee Management

The franchisee’s organizational structure has fewer hierarchical layers than the headquarters, mainly because the franchisee is much smaller. In other aspects the franchisee has emulated the headquarters organizational model (Manager G). The franchisee culture is slightly different than in the headquarters. One difference lies in communication, managers from both the headquarters and the franchisee agree on the fact that people in general from the franchisee’s home country communicate less and rarely ask for help (Manager G; Manager E). Even if this is recognized, no focused effort has been made to overcome the cultural barrier (Manager A). There is no explicit KM vision in the franchisee, but learning from the headquarters is emphasized. A manager in the franchisee stated: “We want to transfer to the corporate methods in any way possible” (Manager G, p.5)

4.3.3 Knowledge transferred to the Franchisee

KM to the franchisee concerns the same knowledge as the knowledge transferred to the subsidiary, namely: development-, management- and process knowledge. However, in contrast to the subsidiary, since the franchisee has its own customer base and is selling independently of the headquarters, sales knowledge is also transferred there.

Sales knowledge
Sales knowledge consists e.g. of making an offer in the right way, to have an appropriate delivery plan and to build the sales case. Furthermore it is about setting the customer expectations correctly. Failure in these areas will jeopardize the delivery of the product to the customer (Manager D).

4.3.4 KM-tools used in the Franchisee

Many of the KM-tools used to transfer knowledge to the subsidiary are also used to transfer knowledge to the franchisee. For instance, the franchisee also uses the technical tools Confluence, Jira, Skype and Go-to-meeting and e-mail, and non-technical tools like visits, meetings and forums, training sessions and, although rarely, cross-office teams. However, the franchisee is excluded from some of the recurring company meetings, and is visited by other managers than the subsidiary. Furthermore, only one franchisee developer works in a cross-office team, whilst almost all subsidiary developers work cross-office. Furthermore, the franchisee has two additional KMS, outlined below.

Support hours

A number of support-hours are allocated to each new franchisee in the startup phase. Manager A explains the system: “*we start with an investment when we start up in a new country. We invest resource-hours designed to help the partner get started, it is usually 150 hours. When these hours run out the partner has to start deliver profit.*” (Manager A p.7).

Coaching system

The coaching system facilitates KM to and from the company’s franchisees. All franchisees appoint one single point of contact for each function in the departments. These contact persons are then given scheduled sessions with coaches 1-2 hours per week with the purpose to learn and train and also to discuss all matters related to the projects like technology and processes (see Appendix 1). Similar to the coaching system, the CEO of each franchisee have a point of contact in the form of a Partner Manager at the headquarter (Manager A). The coaching system is funded by converted franchisee-royalty. In practice this means that the franchisees buy the coaching-sessions by earning a profit (Manager E).

4.3.5 KM of Sales knowledge

As the franchisee was initiated into the corporation, they were given access to the headquarter databases, systems were installed and the franchisee was given the 150 initial support hours.
**Initiation, visits and translations**

A problem facing the franchisee was how to sell, or rather how to make an offering to the customer. For instance, in the past some projects were sold under fixed prices which caused problems for the franchisee as unforeseen costs arose. The franchisee manager told us: “*when we started the franchisee I just immediately translated the basic offers and proposals into our own language*” (Manager L p.2). Additionally, the franchisee manager visited a high level corporate manager in the subsidiary and was introduced to the way they were doing business, having sales calls etc. (Manager L). The second main knowledge transfer occurred as two employees from the creative function visited the franchisee and held a workshop for the customer together with two franchisee managers. “*In this way we saw the way you are doing the workshops, and it was another bump of knowledge that got transferred*” (Manager L p.3).

However, even if the intention was to copy the sales processes, it has not always been possible for the franchisee to implement them. A manager told us on the subject of the franchisee’s domestic market that it is somewhere between 12-36 months behind the Swedish market in terms of demand for the IT-platform, where more projects are smaller in scale and has to be sold under fixed pricing (ibid). However, these, and other market adjustments are seen as natural in the headquarters that instead emphasizes the importance of aligning work methodology in the corporation (Manager D).

**Aligning every day sales methodology**

The everyday alignment is done through weekly sales meetings that takes place via Skype or go-to-meeting, and were all of the corporate sales personnel participate. In this meeting leads and new sales are discussed. A specific sales problem facing the franchisee is lack of ready information. Managers in the headquarters, as well as in the franchisee, agree on the fact that some information is simply not available on the corporate databases. This information could for instance regard estimates, pricing or information about the modules. (Manager L) The corporate solution for this is the partner manager, whose role explicitly is to help ‘push sales targets’, e.g. by being available for questions (Manager D). The importance of a good relationship was emphasized by the franchisee manager: “*I really enjoy working with the partner manager, he and I have the same type of DISC-personalities*” (Manager L, p.6). However, even with good relations, cultural issues can at times hinder this transfer, as the franchisee manager explained: “*If people from our country ask two times we will not ask a*
third time, that’s it. We say, ok, we’ll just have to manage our own business, that’s about it” (ibid).

4.3.6 KM of development knowledge

Much knowledge was transferred at the start-up phase of the franchisee in the form of information bundled in the modules. An example of this type of knowledge transfer in the product was given by the franchisee manager who explained that the headquarter modules seldom were in conflict with each other, a problem that the franchisee had had with downloaded public modules in the past (Manager G).

KM of development knowledge through Confluence

Ongoing learning about module functionality is supposed to happen with the help of confluence. It is possible to search for modules in the database (Employee I). A franchisee developer can in this case via the server portal find out who made the module, and a few times per month, requests via email are sent from franchisee developers about certain modules to the people who have been involved in building them (Employee K).

KM of Development Knowledge through Coaching

Module functionality is also discussed during the coaching sessions. However, IT-platform programming problems are the most common subject for discussion during the sessions. The sessions are voluntary and initiated from the franchisee, and the headquarter developer receives an email with the session subject the day before. This ensures efficiency in the sense that it is based on need rather than prescribed learning. The coaching is virtual and the programmers use Skype to talk to each other and at times screen-sharing to show how certain problems can be solved (Manager H). At times this volunteerism has been frustrating from the headquarter point of view, “we sometimes wish they would ask us more and more often” a manager said (Manager E p.6). Because of the voluntary nature of the coaching, the relationship between the coach and the franchisee programmer was emphasized by the franchisee manager: “People from our country are not known to be talkative, and neither are developers, and if you combine the two... to really know your coach, to get into the team, is therefore important” (Manager G p.8). Knowledge gained from the coach is than redistributed to the rest of the franchisee on a basis of self-interest and voluntarism (Manager G). The informal format of the coaching discussions also leads to knowledge being
transferred back to the headquarters, for instance in the form of feedback about the system or the modules (Employee K).

**KM by Participation in a Cross-Office Team**

A newly hired developer was also initiated straight into an internal team as an effort to transfer methods. “At first, he visited the Swedish office, and now he works in a cross-office team with Swedes, using their way of working completely. When he rejoins the team at home again the other guys can ask him about the working methods and how things are done in Stockholm” (Manager G p.9). However, the cross-office teams were critiqued by a developer: “it is much faster to share information with someone you are sitting next to; you can hardly convey feelings over a chat” (Employee H p.10).

**Participation in the Corporate Forums**

The franchisee developers also participate via Skype in the corporate wide forums, such as the Front End session or the PM forum were presentations and discussions are held about function-specific issues (Employee K). In addition each function is usually connected to a specific channel of communication, channels which are then used for the entire corporation. For instance, corporate backend developers use an email-chain for questions of more general nature, whilst frontend developers use a chat program and so on. In addition each team has their own chat. Much communication that doesn’t take place in the coaching may take place in these formats. However, according to a Swedish developer, 95 percent of what was said in the chat is ignored (Employee H).

**Participation in the online community**

Lastly, the franchisee developers are encouraged to participate in the online Confluence community, read the blog posts, participate in the Yammer updates and so on. However, there is a general consensus in the franchisee that the benefits of participation does not outweigh the time consumed participating. This concerned both reading the posts but primarily writing them: “If I write what I do, who will benefit from that?” was common question.

**4.3.7 KM of processes knowledge**

Transfer of process knowledge is done via information on confluence – in the form of educational videos and manuals - the coaching system, from the developer in the cross-office team, and the corporate project management emails and weekly forum. The corporate main
process, SCRUM, is not implemented in the franchisee, rather, they are on their way towards implementing it, letting knowledge seep in little by little (Manager G).

**Culture as a driver of knowledge transfer**

Transfer of process knowledge is included in, but not enforced by, requirements in the franchisee contract. Rather the company culture is the primary driver. A manager explained: “It says in the contract that they must follow our processes. But we have a corporate culture that builds on that very few things are actually enforced...there is plenty of feedback to the franchisees...but our attitude is seldom our way or the highway” (Manager A p.7). In this sense, the ‘pull’ for implementation of corporate processes must come from the franchisee. However, whilst the franchisee managers recognizes the value of the processes, timing of KT and company size sometimes interferes with implementation: “When you start doing SCRUM, you should do the whole packet, not just one part here and there” a manager told us, as he emphasized the importance of beginning to implement SCRUM in a new, not old project (Manager G p.4). Additionally, since the franchisee is much smaller (about 10 employees) than the headquarter (about 60), some processes are not perceived as relevant (Employee I).

**4.3.8 KM of management knowledge**

Management knowledge is transferred to the franchisee through visits to and from the partner manager, weekly management meetings with the partner manager and the other franchisee CEOs, participation in corporate meetings, informal communication with the partner manager, and through learning by using the corporate time tracking system.

**The partner manager**

Similarly as the different functions have coaches, the managers of the franchisee have a coach in the form of the headquarter partner manager who meets with them via Skype or Go-to-meeting once a week. His role is to provide financial follow up, assist the franchisee with the key performance indicators, do management training and coordinate the franchisee with the rest of the organization (Manager D). A crucial component is the personal relationship between the partner manager and the franchisee managers. Each of them has done the DISC-test, and they are well aware of each other’s strengths and weaknesses, which facilitate smoother knowledge sharing (Manager E; Manager L). Outside the weekly meetings, communication is informal and free, and sustained over Skype and emails or the phone.
Visits to the Headquarters

Frequent visits have been instrumental in the transfer of management and corporate routines from the headquarters to the franchisee. A franchisee manager commented: "the best way to transfer knowledge between teams and people is probably by meeting people. Skype, Go-to-Meeting etc. are the second best alternatives if you can’t meet in person" (Manager G p.6). Another manager from the franchisee expressed the importance of close interaction like this: “It would be nice to have possibility to participate in any project in Sweden, to just visit when you are making a deal, to just be there, listening and seeing what you are doing.” (Manager L p.9).

Visits from the partner manager

The partner manager also travels to the franchisee regularly, about twice per month, to coordinate with them about management issues and progress. However, the partner manager has in practice little scope to ensure that management processes are actually implemented and lack regular feedback from the franchisee to the headquarter (Manager E). This situation is exacerbated by the fact that the franchisee still is struggling to consolidate fully as one organizational unit. It is the only one of the three corporate franchisees that has offices in dual locations, which means that there is an additional communication link for information to travel through (Manager D).

Participation in corporate meetings

To gain insight in how the headquarters and the subsidiary are handling organizational problems, the franchisee managers have at times listened in to bottleneck weekly meetings. However, due to the fact that the franchisee organization is still small and do not have many of the problems reported at the meeting, the managers does not benefit fully from it (Manager D).

Learning by using systems

In some cases, knowledge was transferred simply through transfer of software. The corporate time tracking system, Jira, enabled the franchisee to accurately track how many hours their employees were spending on each customer. In some cases it was discovered that previous invoicing had been too low, based on an incorrect estimate (Manager G).
4.4 KM between Subsidiary – Franchise

4.4.1 Context: The subsidiary & franchisee

The formal ties between the two units are relatively weak with few natural communication channels. As opposed to the relationship with the headquarter managers, there were no prior relationships between the managers in the franchisee and subsidiary. While one manager in the subsidiary described the knowledge sharing as non-existent (Manager C), a manager in the franchisee says that they view the subsidiary exactly as they do the headquarter but that he simply does not have a counterpart in the subsidiary (Manager G). Knowledge transfer is limited to sporadic transfer of development knowledge. When knowledge is transferred between the two units, it is almost exclusively one way; from the subsidiary to the franchisee (Manager C).

4.4.2 KM of Development Knowledge

As the franchisee was initiated, there were significant challenges to transition over to the corporate IT-systems. Subsequently, a franchisee developer was sent to the subsidiary for training in the corporate deployment platform and the modules. The developer later initiated the deployment platform to his colleagues in the franchisee. He was aided in this process informally by both the manager responsible for systems in the headquarters as well as by developers in the subsidiary (Employee J). Furthermore, knowledge transfer occurs in the form of informal discussions or ad-hoc requests for technical assistance via e-mail, Skype and Yammer, the micro-blog integrated in Confluence. Furthermore, developers from the franchisee have participated in the “tech monthly-meetings” where technical knowledge emanating from the subsidiary product development department is transferred (Employee H).

4.5 Summary: KM in the Multinational PFE

This section will provide a brief summary of our empirical findings. Figure 2. displays KM that is common in the whole company and specific for both the subsidiary and the franchisee. This condensed summary of our results will then, together with our conceptual framework, serve as a foundation for the analysis.
Figur 2. Common and specific knowledge management in the company

**KM common for both the franchisee and the subsidiary:**

- Flat organization and culture of voluntariness
- Managerial encouragement to share information
- Participation in mandatory company meetings
- Cross office teams
- Occasional expatriation and training sessions
- Informal networks
- Codified, people to data KMS

**KM specific for the subsidiary:**

- Strong interpersonal ties to headquarter
- The agile transformation-program
- Participation in all ‘internal’ meetings
- Managerial cross-country feedback
- More opportunities for ‘natural’ KT due to higher frequency of cross-border teams

**KM specific for the franchisee:**

- Significant start-up assistance
- The coaching system
- Voluntary circulation of knowledge in franchisee
- Participation in company sales meeting
- Participation in franchise management meeting

Source: Own Conceptualization
5. ANALYSIS
This chapter will analyze our empirical findings as follows. First, we divide the KM-Practices of the case into company-wide practices and specific practices to the subsidiary or the franchisee. Then we review these practices with the help of our four analytical dimensions (figure 1). This section serves to highlight the interplay of the theories and the case, as well as answer our first three sub-questions. Thereafter we analyze the material through the four dimensions, this time with specific focus on the managerial implications, thus answering our fourth sub-question.

5.1 Common KM-Practices in the Company

The Problem Revisited
The literature discusses the challenge of managing both tacit and codified knowledge (Holste & Fields, 2010) as well as complex knowledge (Minbaeva 2007). We see plenty of support for this challenge in our case study. International dissemination of knowledge about the company’s many modules (codified but overwhelming) or international pricing (availability) project estimation (tacitness) or SCRUM implementation (complexity) is indeed a challenge for the PFE. Furthermore, this knowledge is different in terms of ease of transfer. For instance, codified specific knowledge like the introduction program is transferred with relative ease throughout the PFE whilst codified complex knowledge like how to work SCRUM, is much harder to transfer to the entire company at the same time. Tacit complex knowledge such as how to manage the SCRUM teams is even harder still to transfer globally in the PFE. This has had consequences for which tools the company uses, and the order that they are applied.

What is the PFE solution?
Just as the literature suggests, the company has managed the KM challenge by combining technical and non-technical tools (CEN, 2004) into different KMSs (Ragab & Arisha, 2013). First, the codification KMSs makes as much knowledge as possible available on the Confluence database, via the blog and through the introduction program. Second, there are the personalization KMSs, such as the cross-office teams, training sessions and educational visits. Lastly, the company also has a people-finder KMS, in the sense that it is possible to see who has made the modules, and that these people sometimes get contacted for more information. Thus the company falls into the category of companies using a hybrid KMS strategy in their KM work. Except for visits, typically these KMSs are accessible using some type of technical tool and their cost is very low. Roles and responsibilities are in some cases well known among
the employees, for instance that it is ‘almost law’ to document the modules. Similarly in some cases meeting attendance is mandatory. However, these KMSs still require an element of volunteerism to work. Active learning, such as searching the confluence database and participating in the elective meetings, both require individual initiative and interest. As the will to access and share information must come from the individual employee, the company has invested a lot of time and effort into creating a company-wide culture characterized by ‘pull’ of information from the employees, rather than a ‘push’ from managers. In the HQ and subsidiary settings, this is most prominent in the effort to build ‘trusting and empowered teams’, and in the HQ to franchisee setting, it is visible by the fact that the choice to initiate a coaching session, lies with the franchisee developers. This sort of culture, ‘the learning organization’ as a manager put it, is part of what Ragab & Arisha (2013) identified as a precondition for successful KM.

**Which factors is the solution dependent on?**
The literature argues that deep relationships, trust, understanding and informality are crucial preconditions for efficient KM (Holste & Fields, 2010); Al-Adaileh and Al-Atawi, 2011 et al). Furthermore, CEN (2004) argues that building a sense of community facilitate KM. We find that the company has made efforts common to both the franchisee and the subsidiary to bring people together. Facilitating visits between the offices, having cross-office teams, starting an online community on Confluence, have all worked to transfer knowledge as well as to improve the cross-country relationships.

**Implications of the Solution**
The literature argues that it is important to have a common vision for the KM and to have someone responsible for all of the company’s KM efforts (Kannabiran & Pandyan, 2010). However, in this respect the company diverted from literature since there is no common vision for KM. Similarly the literature argues that managerial buy-in is important (Ragab & Arisha, 2013). Whenever there is an option to participate in a voluntary KM activity or getting on with the regular work, the employee must know that the KM activity is valued by management. The degree of KM buy-in in comparison to operational work in the company is unclear, as many employees seemed confused about what was expected from them. Furthermore, literature also recommends clear roles and responsibilities regarding KM (CEN, 2004a). On a contractual level, no KM responsibilities are outspoken except as a statement that the Headquarter should assist the franchisee with support. Similarly, when it comes to
Voluntary sharing as mentioned above, such as participation in the online Confluence blog community, or ad-hoc, informal sharing or simply asking for help, no such responsibilities are communicated in the company. Similarly, expectations about what knowledge managers are expected to share and how that should be shared does not seem to be formalized. Thus, the company has shifted responsibility, or at least initiative for KM, partly over to the individual manager or employee.

Variations in Outcomes
Even if the KMSs mentioned above are common to the entire company, the outcome seems at times to be different in the franchisee and subsidiary. For instance, building an online community seems to have worked better in the headquarters and subsidiary than in the franchisee. This can be linked to the lacking sense of community discussed by Bresnan (1999). One implication is that while the relationship between the headquarters and the subsidiary is characterized by common history and personal bonds, the franchisee is new to the company relationships and culture. A manager from the franchisee emphasized the importance of intra-company exchange in the future to build more social connections. The literature and franchisee managers alike suggest that expatriation and mutual visits are crucial tools for KM (Chang et al. 2012; Manager G). Moreover, the overall communication difference could also be related to personality traits as discussed by Dant (2011). The literature suggests that mutual understanding is important in this respect. To overcome personality differences and help establish relationships, the company uses tools like the DISC personality evaluation test. Since interviewees from all parts of the company referred to this tool, it seems to have aided in building relationships.

An additional explanation to the varying outcomes in the franchisee and subsidiary might be that even codified KMS often need an element of tacit knowledge to really work. As an example, the introduction program is readily available for usage in all three countries and does not require more than access to the common network. However, to make sure that the employees receive on-going feedback as they work through the program is a managerial challenge. Thus, the introduction program is codified, but the managerial implications of implementing the program is not. These phenomena can to a degree explain why the same codified knowledge may be transferred to varying degrees of success in different units of the company.
Lessons from the Franchisee to Subsidiary Knowledge Transfer

The importance of relationships as a precondition for the company-wide KMSs is also visible when looking at knowledge transfer between the subsidiary and the franchisee. These two offices had no previous personal relationships. In contrast to the headquarters-subsidiary relationship, or the headquarters-franchisee relationship, the subsidiary-franchisee KM has no fixed ‘extra’ KMS like the coaching system or one-on-one meetings. Therefore, the two offices had not really had any chance to build relationships. The fact that knowledge transferred is limited to occasional e-mail requests and visits from the franchisee, supports the fact that relationships plays a distinctive role in encouraging informal knowledge transfer.

5.2 Distinct KM-Practices for the Subsidiary and the Franchisee

Some KM in the company are limited to only the franchisee such as coaching and visits from the partner manager, and some are limited to the subsidiary such as regular bottleneck weekly meetings or ‘the agile transformation’-effort. There are a number of reasons for this.

Two Independent Economic Units

The first is that the subsidiary and the Swedish office is one consolidated economic unit, whilst the franchisee is separate. The fact that the franchisee pays for knowledge transfer via the royalty system means that the franchisee, in difference to the subsidiary, must first evaluate knowledge in the company. This creates a strong incentive to wait and see until practices are fully developed before engaging in costly knowledge transfer. This confirms Sorenson’s (2001) description of the PFE that tests practices in company owned units before applying them in the franchisees.

Local Adaptation & Standardization

The second reason is that the conflict between following company directives and adapting to local conditions outlined by Kostova & Roth (2002), only takes place in the franchisee. This is due to the fact that the subsidiary does not sell any products on its own local market and therefore do not need to adapt to it. In fact, the subsidiary’s customers are the same as the headquarters’, making adaptation to market equal to alignment with the headquarters. However, Kaufmann et al. (1998) argued that market differences, high industry competition and age of the franchisee all would correlate with a high local adaption. In this case the franchisee is very young, and it is the leader in its national industry. Similarly the market is not very different from the Swedish except for running a bit ‘behind’. Thus, even if there
exists a degree of pressure on the franchisee to adapt to local conditions, this pressure is not fundamentally going against recruiting knowledge from Sweden. For instance, the offering, and international price lists have been valuable for the franchisee. Thus it can be concluded that local adaptation is not a primary reason behind why the subsidiary and franchisee KM differ.

Kaufmann et al. (2001) also argued that there were three main reasons for standardizing the franchisee with respect to the franchisor. Those were; cost reductions; to ease new product introduction in the franchise chain, and; the necessity of a consistent image. The standardized or common KM discussed in the previous section generates both cost reductions and makes it easier to introduce new products in the sense that the entire company is working with the same platform. However, a consistent image is not necessary in this company since no customer of the Headquarter would have reason to contact the Franchisee. Thus aligning the image of one outlet with others is not important, as long as the brand itself is intact. Thus it can be concluded that neither standardization- nor local adaptation pressures should affect the KM very much.

Organizational Size and its Effect on KM
However, the headquarters and the subsidiary together are much bigger than the franchisee which affects the hierarchy. There are only two steps from the CEO to the developers in the franchisee, whilst there are four in the Headquarter and subsidiary. This means that meetings like the bottleneck weekly, which function is to resolve issues with hierarchical compartmentalization, has little or no relevance for the franchisee. On the other hand, as argued by Claver-Cortez et al. (2007), few hierarchical layers is a characteristic that benefit KM, making it potentially easier to disseminate knowledge in the franchisee. In any case, it is our interpretation that the different structural preconditions in the franchisee obstruct the use of other company-wide KM-practices.

Difference in Cultures
As previously discussed, a common company culture is very important as a supplement to a KM vision and clear rules and responsibilities. However, when looking at culture the distinction between the franchisee, the headquarters and the subsidiary is significant. The general perception of people from the franchisee’s home country as being slightly less communicative is pervasive within the company. Furthermore, the efforts to build a
knowledge sharing culture, a culture of trust (Ragab & Arisha, 2013), is primarily propelled by one-on-one meetings and the ‘agile transformation’. These are all meetings and process exclusive to the headquarters and the subsidiary where the franchisee does not take part. Thus we argue that lack of a common culture in the franchisee and the headquarters is inhibiting KM.

**Different Absorptive Capacity and Relationships**

Szulanski (1996) argues that the ability to absorb new knowledge is determined by prior knowledge. Since the subsidiary hosts the product development department it is a significant source of new knowledge, most notably development knowledge, which is in the core of the entire firm’s product offering. Moreover, there were prior personal relationships between the subsidiary and headquarter managers. This caused familiarity with the company culture and personalities, and in the end, with its knowledge. The franchisee has a completely different background and role, and subsequently a different prior knowledge base. Thus we argue that different prior knowledge have been a reason for varying absorptive capacity and in the end differing KM. Minbaeva’s (2003) argued that also individual motivation is part of absorptive capacity. All the respondents in our interviews expressed that they wanted to participate in knowledge transfer. However, as discussed above, a lacking sense of community (Bresnan, 1999) may for instance have decreased motivation in the franchisee to participate in the online community. Thus we argue that difference in motivation have affected at least some KM. However, we do not find significant relevance for Szulanski’s (1996) stickiness-concept as caused by an arduous relationship between managers.

**Subsidiary KM: Cross-Office Teams**

CEN (2004) argues that teamwork is instrumental in building a sense of community in the firm. Accordingly we find that at least some KT occurs naturally through teamwork and everyday interaction in the cross-office teams, which mainly involves employees from the headquarters and the subsidiary. The reason for this is rather simple; the franchisee’s customers are exclusively in its own home country which means fewer reasons to work in cross-office teams. It is not clear however what the implications of this higher frequency of cross border teamwork between the headquarters and subsidiary are for KM. A common attitude from both developers and managers is that the cross-office teams do not automatically mean more KT. The main argument is that geographical distance does make out significant barrier to efficient KM and that you share more knowledge with people you sit next to. This
might imply that the importance of ensuring actual communication is more relevant for our case than focusing on teamwork *per se*.

*Franchisee KM: Coaching to Resolve Differences*

The solution to the differences between the franchisee and the subsidiary is the coaching system which allows the franchisee to ‘tap in’ horizontally to the internal organization. As a personalized KMS it enables transfer of tacit and to some degree complex knowledge. As such the coaching system represents one solution to the problem of availability. Furthermore, since the issues brought up during the coaching sessions are initiated by the franchisee, the knowledge transferred tends to be focused on things that the franchisee really needs. However, the absence of a formalized routine for KT internally in the franchisee, and an overall lack of communication, seems to result in that knowledge does not always make it all the way through the franchisee organization.

*Franchisee KM: Support and Monitoring Through the Partner Manager*

As the subsidiary is managerially consolidated with the headquarter, as well as lacking a sales department, it is not in need of the kind of managerial coaching system given to the franchisee by the partner manager. However, the partner manager’s role should not be confused with what Kannabiran & Pandyan (2010) calls a Chief Knowledge Officer (CKO). The partner manager does not have formal responsibility over KM nor does he have the same type of contact with the subsidiary as with the franchisee. He is able to provide support to the franchisee in matters related to KM but he lacks mandate to exert overall control over KM, for example with matters related to communication. Thus the partner manager is somewhere in between a CKO and a coach for the franchisees. However, the franchisee managers report satisfaction with the support given as well as feeling understood by the partner manager. We do not find evidence of conflicts, or franchisee dissatisfaction or distrust towards the headquarters, as discussed by (Davies *et al.*, 2011). This supports the argument made by Ishida *et al.* (2013) that properly implemented monitoring from headquarter can actually increase the understanding between franchisee and franchisor, lead to better support, and thus reduce conflicts and increase satisfaction.

### 5.3 PFE KM-Practices: Managerial Implications

We will now summarize the analysis by returning to our conceptual framework as outlined in the literature review. The summary follows the same structure as the conceptual framework,
i.e. contextual dimensions, characteristics of knowledge, managerial and social dimensions and KM-tools & KM-systems.

5.3.1 Contextual Dimension
The fact that the franchisee is economically independent from the headquarters means that the franchisee buys and thus evaluates knowledge coming from the headquarters. From a managerial perspective, this means that a practice must be proven before it makes sense to push it to the franchisee. As a consequence the headquarters has managed knowledge in different ways since the transfer does not happen at the same time. We also found that the local adoption and standardization discussion put forth by e.g. Kaufmann (2001) is valuable for understanding KM in the multinational PFE. In this case the subsidiary, in contrast to the franchisee, did not sell any products on its own domestic market and therefore did not need to adapt to it. Furthermore, we found by analyzing Kaufmann’s (2001) drivers and inhibitors for local adaptation that these had only a limited impact for the franchisee KM. From a managerial perspective we argue that the absence of a conflict between standardization and local adaptation has contributed to the company-wide commonalities in KM.

5.3.2 Characteristics of Knowledge
Minbaeva (2007) argued that transferring both tacit, codified and complex knowledge is a challenge in KM. We found evidence for this in the PFE where some types of knowledge were more difficult to transfer than other. The managerial implication of this is that tacit complex knowledge takes more effort to transfer than codified specific knowledge. The result is that the entire company is up to date on all codified specific knowledge which may include process descriptions etc. At the same time, following the argument above, the tacit elements of knowledge is transferred to the subsidiary before it is transferred to the PFE.

5.3.3 Managerial and Social Dimension
We argue that managerial and social dimensions influences the company’s KM significantly. The company has abstained from a formalized KM vision, as well as to a large extent abstained from formal KM responsibilities. From a managerial point of view this means that expectations and responsibilities about who should do what is often not evident and may at times lead to employee confusion regarding priorities. As a consequence, the company has shifted responsibility of KT to the individual with the purpose of facilitating a more ‘organic’ form of KT initiated from the individual, in contrast to managerially enforced KT. The company is ensuring this by establishing a common culture of trust and individual
responsibility. In this manner, we view the culture as a substitute for formalized strategies. However, we argue that the cultural aspect has a dual significance in the company. First, company culture has been a way for the headquarters to arrange common KM. Second, cultural differences between the franchisee and the subsidiary have been an important reason for adopting different KM-practices.

Furthermore, there are different hierarchies in the franchisee compared to the headquarters and subsidiary which affects KM. In the headquarters and subsidiary there are five hierarchical layers between the CEO and a developer. In the franchisee there are only two hierarchical layers. From a managerial point of view this means that meetings designed to solve managerial problems in the headquarters, such as faltering communication between departments, have little relevance to the franchisee. Consequently, some channels used for knowledge transfer, is not equally suitable for the franchisee. Thus the headquarters must invent additional solutions for the franchisee. This neither supports nor discards Claver-Cortez et al.’s (2007) claim that hierarchy itself makes KM tougher. Instead it leads to a new proposition for the multinational PFE, that differences in organizational hierarchy between the foreign units inhibit KM.

Another aspect leading to differentiated KM in the PFE is the fact that the different unit’s abilities to follow headquarter mandates is different. The units have different absorptive capacity and a different sense of community due to their distinct histories and relationships to the headquarters. As a consequence, the company has to compensate for this variation in absorptive capacity by supporting the franchisee with additional KMS. The recurring visits from the partner manager exemplify this.

5.3.4 KM-Tools & KM-Systems

As discussed in our findings, the company manages several different types of knowledge. Common for these is that different KMSs are more suitable for some knowledge than other. For example, documentation of the modules (codification) is encouraged. However, this is not completely feasible because of the sheer amount of modules created by the company. To manage this, the company combines the documentation with a ‘people-finding’ KMS; developers can see who made the module and contact them directly with questions. Thus the company falls into the category of companies that use a hybrid variant of KMS (Ragab & Arisha, 2013).
The common KMSs all require voluntary acts to work. For instance, even if documentation is mandated, it is never enforced, leaving it largely up to the individual to take the time to do it or not. As a consequence, the previously mentioned culture is instrumental in giving substance to KM-tools and KMs. Thus we argue that the managerial and social dimension is tightly correlated with the use of KM-tools and KMSs and that without the social dimension the tools don’t amount to much, as the subsidiary to franchisee KT shows.

As mentioned previously, in some cases it is problematic to use the same KMS for the franchisee and the subsidiary because of the problems related to franchisee hierarchy and independency. For example, the franchisee does not take part in some of the company’s regular meetings due to differences in hierarchy. Thus, some personalized systems are exclusive to the subsidiary, and some are exclusive to the franchisee. Interestingly, we have seen that even when knowledge is to be transferred to the franchisee the same KMSs are not utilized. The coaching system, for example, is an example of an arrangement where the company has tried to bypass the organizational hierarchy in the franchisee and speed up the transfer process. The reason for this is that instead of waiting for the information to trickle down from the management level to the employees, the coaching system allows the employees to tap into the learning, much earlier. Furthermore, the coaching enables tacit knowledge to be transferred directly from developer to developer, and from manager to manager, thus bypassing an unnecessary intermediate.
6. CONCLUSION
Our purpose with this study was to investigate how knowledge is managed in a multinational PFE. By doing a qualitative case study of a multinational PFE, we have answered our research question “how knowledge is managed in a multinational PFE”, specifically the PFE that we chose for this case study.

We found that the multinational PFE is managing knowledge by using a hybrid of codified, people-finding and personalized KMSs, which are embedded in and aided by the company culture, and dependent on personal relationships. Furthermore we found that KM in the company is different for the wholly owned subsidiary and the franchisee. The subsidiary has no sales department leading to less local adaption and a higher dependency on the headquarters. This has led to a situation where transfer of knowledge to the subsidiary’s to a much wider degree than the franchisee is managed within the company’s everyday processes and meetings.

With a different culture, different hierarchical structure, no past relationships to the headquarters and a different set of prior knowledge, the franchisee differs significantly from the subsidiary which affects KM. As an independent economic unit, the franchisee is buying its support from the headquarters. In order to accommodate the franchisees requirement of highly relevant, quality knowledge, the company tests processes in the subsidiary prior to transferring it to the franchisee. Furthermore, knowledge to the franchisee is mainly managed in parallel to the company’s regular meetings and processes through focused KT sessions directed at multiple levels in the franchisees hierarchy (coaching + partner manager).

In sum, we find that KM in the company is highly influenced by the complexities of its plural form. It is complicated to enforce KM in the multinational PFE due to variations in personal relationships, cultures, personalities as well as due to organizational independence. Instead the PFE is promoting the use of an organizational culture where individual responsibility for KM is encouraged. However, we did not find that KM in the company to any larger extent had been determined by demands for local adaptation.

6.1 Theoretical Implications
From our literature overview and our conceptual framework (figure 1) we expected KM in the multinational PFE to be determined by contextual dimensions, the characteristics of knowledge, managerial and social dimensions and KM-tools & and KM-systems. Through
cross-examination of the relations between the different company units, we have found strong support for the notion that personal relationships determine KM in the PFE. Thus we argue that the managerial and social dimensions of KM are tightly correlated with the use of KM-tools and KMSs and that the KM-tools are given substance through the social dimension.

In our literature review we have found no study of how knowledge is managed in a multinational PFE. Thus, this study contributes to the plural form literature as well as the KM literature. We have been able to confirm that a number of presumptions that originates from other fields than the plural form research, such as the franchise literature and the international business literature, also holds true in the plural form setting, while others did not.

First, we found evidence supporting Minbaeva’s (2007) notion that transferring both tacit, codified and complex knowledge is a challenge also for the PFE. Moreover, we found strong support for the notion that personal relationships determine KM in the PFE (Kostova & Roth, 2002; Minbaeva, 2007; Holste & Fields, 2010), and that a culture of ad-hocness and trust promotes KM (Tseng, 2010; Holste & Fields, 2010). Furthermore, we found supporting evidence to Bresnan et al.’s (1999) claim that visits are the best way to transfer tacit knowledge. We also could confirm Sorenson’s (2001) division of roles in KM between the units in the PFE. Second, we found some evidence that low organizational focus influences KM (CEN, 2004a; Ragab & Arisha, 2013). With specific regard to the franchisee we found some support for Ishida’s et al.’s (2013) and Quinn et al.’s (1999) arguments that monitoring may lead to better support and that better support may lead to less conflicts. Lastly, we found that the concept of absorptive capacity (Szulanski, 1996; Minbaeva 2007) and the local adoption and standardization discussion put forth by e.g. Kaufmann (2001) as useful for understanding the PFE KM.

We neither found support nor reasons to discard Claver-Cortez et al.’s (2007) claim that hierarchy itself makes KM tougher. Instead we can contribute to the literature with a new proposition for the PFE; that hierarchical differences in between PFE units inhibit KM.

6.2 Managerial Implications
Our findings imply that codification of knowledge ease KM. However, the multinational PFE cannot rely on only a codified KMS. As in the case of the introduction program, the codified knowledge often needs a tacit element - managerial feedback - to really work. Therefore, a combination of KM-tools into a hybrid of KMSs may be required in the multinational PFE
setting. Furthermore, our findings imply that managers need to consider the importance of having either a clearly formulated vision or strategy for KM or compensate for a lack of a formalized KM strategy. This could be done by having a company culture that ensures that employees take individual responsibility for transferring knowledge. Our findings also suggest that the use of additional KMSs, like targeted coaching and support, might be a way for managers of a multinational PFE to compensate for variations in absorptive capacity between its subsidiaries and franchisees. Also, a coaching system may be a way for tacit knowledge to be transferred faster and more efficiently to the PFE franchisees, bypassing unnecessary intermediates.

6.3 Future Research
As discussed in the limitations section of the introduction, our study is not generalizable to KM in multinational PFE in general. To increase the validity of our findings additional studies of the subject are necessary. Such studies could be broader in scope, and include more than one subsidiary and franchisee. Furthermore, our study is limited in regard to the number of different types of knowledge. Follow-up studies could thus be done in other companies or industries to cover other types of knowledge in the companies. Our conceptual dimensions could further be refined into a more coherent model. Whereas we conceptualize the dimensions as independent, further studies could further ascertain the causal relationships between the dimensions and the company KM.
7. REFERENCES


APPENDIX

1. Coaching

One of the most important parts of partner support process is the coaching. The aim for the coaching is high quality knowledge transfer. Our distributors are given the opportunity to have direct contact with one FE Lead, one Systems Architect, one PM and one designer (UX) for coaching, one contact person per department at the distributor (max 4 persons at the distributor).

FE Coaching - FE lead

1-2 hours per week a FE Lead is available for one contact person at the distributor. This person at the distributor is preferably the most experienced FE Developer who can mentor the internal team.

One or two meetings should be scheduled between the FE Lead and the partner contact every week (or less often if agreed between the parts). The meeting is normally around 30-60 minutes. Each meeting should preferably be scheduled a week in advance and if possible should the developer notify the FE Lead a day in advance of the topics. One day to prepare is giving the FE lead time to prepare themselves with examples where possible so that additional time is not wasted on that during the session.

It is up to the distributor to use the coach in the best possible way. When the coach is doing hands-on programming it is mandatory for the developer to sit in and watch (via shared screen and Skype) the coach’s work so that it is still a learning experience.

Coaching should never be urgent since the coach might be busy for one or two days in a project, sick or on vacation.

Example of what can be discussed in the coaching meetings:
• How are the projects going?
• Are there any questions and problems the projects?
• What are the biggest risks in the projects?
• Which modules are used in the projects? Are there any questions about the modules?
• Where can I as a coach help the most?
• What else do you need?

Guideline FE Coaching - FE lead

• Allocate 1-2 h per week for our distributor
• Be standby and use the time when needed.
• Use this time to answer frontend questions on email.
• Try to answer within 4 hours work time.
• If no questions arrive then work with customer or internal projects.
• Book the time on distributor project in Jira (VCS).
• When time's up: Stop! Unless the problem is "business critical".
• If the problem is "business critical" then ask the partner manager for further directives.
• For definition of "business critical": See wiki page.
• If you as a coach see a need for extended coaching you have the opportunity to give up to 10 h extra support inside a month. If you see a risk that you might exceed 10 h you need to notify the partner manager.
• The first month you can give an additional 8h without notifying the partner manager.
2. List of Interviewees

<table>
<thead>
<tr>
<th>INTERVIEWEE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager A</td>
<td>Headquarters</td>
</tr>
<tr>
<td>Manager B</td>
<td>Headquarters</td>
</tr>
<tr>
<td>Manager C</td>
<td>Subsidiary</td>
</tr>
<tr>
<td>Manager D</td>
<td>Headquarters</td>
</tr>
<tr>
<td>Manager E</td>
<td>Headquarters</td>
</tr>
<tr>
<td>Manager F</td>
<td>Headquarters</td>
</tr>
<tr>
<td>Manager G</td>
<td>Franchisee</td>
</tr>
<tr>
<td>Employee H</td>
<td>Headquarters</td>
</tr>
<tr>
<td>Employee I</td>
<td>Franchisee</td>
</tr>
<tr>
<td>Employee J</td>
<td>Franchisee</td>
</tr>
<tr>
<td>Employee K</td>
<td>Franchisee</td>
</tr>
<tr>
<td>Manager L</td>
<td>Franchisee</td>
</tr>
<tr>
<td>Employee M</td>
<td>Subsidiary</td>
</tr>
</tbody>
</table>