



**UNIVERSITY OF GOTHENBURG**  
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Master Degree Project in International Business and Trade

**“Sharing Knowledge Creates Better Knowledge”**  
-The process of knowledge exchange in the case of Volvo Group

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## **Abstract**

Owing to the increased globalisation, Multinational Corporations (MNCs) are operating in a complex global market. This infers the importance to enable the organisation to not only transfer generated knowledge between global sites but also benefit from and develop this knowledge to be competitive. Consequently this study addresses the demand for an increasing theoretical understanding in regards to knowledge management in an international business context with special emphasis on the importance of intra-organisational relations following the idea about the transnational solution. Although knowledge transfer has been studied thoroughly over the past decades, limited attention has been given to what happens after the transfer and how new knowledge is developed. Attention is dedicated to the current static approaches of storage and transfer of knowledge, although by building on the importance of utilizing transferred knowledge this study presents a new conceptual model of how to make use of acquired knowledge, and how new knowledge is developed and exchanged within the MNC. By performing a qualitative case study on several of Volvo Group's sites the findings infer the importance of intra-organisational relations, meaning social interaction, social networks, and social relations, between employees in order to achieve knowledge exchange. In addition to recent research, the findings of this study further suggest there also need be management involvement and personal dedication to create these intra-organisational relations and hence facilitate intra-MNC knowledge exchange.

## **Key words**

International business, intra-organisational relations, knowledge exchange, knowledge management, MNC, Volvo Group, qualitative research

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## 1. Introduction

A common perception within organisational theory as well as international business literature is that knowledge is a crucial asset for corporations as it is a resource that is hard for competitors to imitate (e.g. Grant, 1996; Szulanski, 1996). Owing to increasing globalisation the ability to be competitive has generated much attention towards Multinational Corporations (MNCs) capabilities to transfer best practices worldwide (Gupta & Govindaranjan, 2000; Nohira & Ghoshal, 1997; Zander & Kogut, 1995). The ability to transfer knowledge within an organisation generates a competitive advantage due to the creation of efficient work methods, synergies of resources and business opportunities on both the local and global market (e.g. Grant, 1996; Gupta & Govindaranjan, 2000; Nohira & Ghoshal, 1997; Schlegelmilch & Chini, 2003; Szulanski, 1996; Zander & Kogut, 1995).

The existing literature on knowledge transfer in the international business context has mainly focused on identifying various factors that enable or prevent knowledge transfer (e.g. Björkman et al, 2004; Duan et al 2010; Jensen & Szulanski, 2004; Rosen et al, 2007). However, aspects concentrating on what happens after the knowledge has successfully been transferred have received less attention. In order to increase the understanding of knowledge as a strategically important asset it is crucial to comprehend how organisations can benefit and develop acquired knowledge after successfully transferring it. If organisations can enable utilization on created knowledge, this can result in new knowledge being created and hence further the competitive advantage. An important assumption made here is that not all knowledge transfer is effective by nature but it is rather how this knowledge is developed, implemented and applied that makes it contribute to the organisation by increasing its competitive advantage. This definition is in line with Bogner & Bansal (2007) who, through a regression analysis, found evidence that firm's growth rate is positively associated with its ability to generate rare and valuable knowledge, and to build on that knowledge. The ability to both create and transfer knowledge is important in order for it be a source of competitive advantage (Bogner & Bansal, 2007; Wang & Noe, 2010). However in order for knowledge management to be successful it must enable organisation to benefit from and develop acquired knowledge, hence facilitate a process of *knowledge exchange*. This is of special importance for MNCs as they must facilitate knowledge transfer across borders, hence enable subsidiaries to contribute with unique knowledge consequently making them strategic partners contributing to the performance of the organisation. This is in line with Bartlett & Ghoshal (1989) where they presented the view of subsidiaries as strategically important as the

transnational view. Miesing et al (2007:110) underlines this statement and noted that: “*The competitive advantage of a transnational organization lies to a great extent in its ability to identify and transfer best practices, particularly core competence and knowledge, between its geographically dispersed and diverse units*”.

The importance of facilitating knowledge exchange corresponds with the findings of Davenport & Prusak (1998) that argue that for knowledge transfer to lead to an increased value it has to lead to a change in behaviour or creation of new ideas. More recently, Persson (2006) calls for more research on the link between knowledge transfer and organisational performance, which further underlines the importance of understanding how to benefit from transferred knowledge. Following literature stressing the importance of knowledge (e.g. Ambos & Schlegelmilch, 2005; Gupta & Govindarajan, 2000; Nohira & Ghoshal, 1997; Zander & Kogut, 1995) this thesis takes its foundation in literature emphasising the need for further research on how knowledge is developed in a knowledge transfer process and exchanged within the organisation.

The static approaches (e.g. Hedlund, 1994; Kogut & Zander, 1996; Grant, 1996; Gupta & Govindarajan, 2000; Ipe, 2003) towards knowledge and knowledge transfer that exists today primarily conclude its importance however lack to explain how MNCs could move beyond the transferring and storing of knowledge and assure that knowledge is developed and utilized. Providing organisations with this understanding will enable them to facilitate and maintain the process of *knowledge exchange* between their global units. Recent research on knowledge management provide interesting comprehensions concerning the importance of intra-organisational relations in order to motivate employees to transfer, as well as to absorb, knowledge (e.g. Gnywaji et al, 2009; Miesing et al, 2007). The incorporation of intra-organisational relations, in particular research on what motivates knowledge transfer, with research concerning the structural organisational context of MNCs should provide a stable foundation to develop a deep understanding on how to exchange knowledge in an international business context, hence our research questions are;

- *What enables knowledge transfer, knowledge utilisation and development of new knowledge within MNCs?*
- *How can MNCs facilitate knowledge exchange?*

Knowledge as a strategically important assets has not only encouraged researchers trying to grasp the comprehensive field of research, but organisations themselves have increasingly emphasised the importance of understanding how to make use of acquired knowledge within the organisation.

The increasing importance for MNCs to comprehend how knowledge can be developed and exchanged can be further stated by the quote of Volvo Group's CEO, Olof Persson, in November 2011; *"Projects are and will be enormously important for us going forward. I see the processes like the rails that give us the structure and the direction and the projects being the trains that move the results forward. We will continue to make sure that we have a consistent development and training of our project managers in the group"*<sup>1</sup>. Drawing on this quotation it can be noted that what he suggests is important is the fact that knowledge is no longer only a resource but *the* resource and that it needs to be continuously developed in order for it to generate the competitive advantage of its potential. Hence Volvo Group is a highly suitable case for this type of study as it is a MNC who have identified the challenge and is actively attempting to create continuous knowledge exchange on a global scale throughout the organisation. This will consequently enable us to provide organisational insights on how to achieve knowledge exchange.

The *aim* of this thesis is to develop an understanding of how MNCs can benefit from and develop acquired knowledge – with special emphasis on the importance of intra-organisational relations. The thesis addresses a gap in research regarding how organisations can move beyond the static approaches of knowledge management and assure a process where transferred knowledge can be utilised and developed, hence a process of knowledge exchange. By linking existing research on knowledge and knowledge management in an international business context will enable the thesis to contribute to both fields of research. The thesis builds on the importance of intra-organisational relations in order to better understand how MNCs can facilitate knowledge exchange between geographically dispersed units.

## **1.1 Disposition**

The following disposition will be applied in this thesis. First, the general issue of knowledge and knowledge management in an international business context is presented and theoretical concepts relevant for the investigation are emphasised (Section 2). Special attention is assigned to the elaboration of the knowledge management value chain and the relevance of knowledge management across borders in MNCs is discussed. The comprehensive literature review reflects chosen strategic and organisational issues discussed in the research, which are drawn together to propose a conceptual model based of intra-MNC knowledge exchange (Section 3). The following section contains the methodological considerations made in connection to this study (Section 4). It explains the general research setting, the choice of research design, data collection method and

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<sup>1</sup> Corporate Presentation VGIPM (2013). Internal Document.

criteria for evaluating the case study. The empirical observations (Section 5) made in the case study of Volvo Group are then presented in the form of the conceptual model. The analysis and discussion (Section 6) is divided into main findings and a revised conceptual model is subsequently presented. The conclusion (Chapter 7) summaries the main findings and the contributions of this study while offering alternatives for future research as well as indicates managerial implications.

## **2. Previous research on knowledge management in an international business context**

Both international business and knowledge management are broad research areas spanning over vast publications and theories. The perspectives of interest within these two fields for this thesis are related to MNC theory and knowledge management within organisations. Owing to the fact that MNCs operate on the highly competitive global market, the ability to manage and transfer<sup>2</sup> knowledge is of special importance (Nonaka & Takeuchi, 1995). However, streams of literature (e.g. Ambos & Schlegelmilch, 2005; Gupta & Govindarajan, 2000; Jonsson, 2012; Nohira & Ghoshal, 1997; Zander & Kogut, 1995) has underline the importance of understanding how to make use of knowledge generated, hence not only facilitating knowledge transfer across borders but also enabling the organisation to benefit from and develop this unique knowledge. Research conducted on intra-organisational relations (e.g. Björkman et al, 2004; Chen & Lovvern, 2011; Easterby-Smith et al, 2008; Ghoshal et al, 1994; Nahapiet & Ghoshal, 1998) will offer an interesting perspective on knowledge development which combined with streams of literature within knowledge management and knowledge transfer should contribute to an increased understanding of how to achieve knowledge exchange within MNCs.

### **2.1 Conceptualising knowledge and knowledge management**

Previous research has concluded that knowledge is crucial for organisations performance (Grant, 1996; Szulanski, 1996) and extensive literature on the knowledge-based view of the firm have stressed it as the most important resource possessed by firms in order to achieve innovation and competitive advantage (Grant, 1996; Gupta & Govindarajan, 2000; Kogut & Zander, 1993; Nonaka, 1994). The important asset of knowledge has led to an increasing managerial interest of exploring what knowledge is and how to create, transfer, and use it more effectively, hence how to manage it. In order to manage a resource it is of importance to define that resource, however

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<sup>2</sup> Within the frame of reference, both knowledge transfer, knowledge sharing and knowledge distribution will be used interchangeably as it is not clear if there is a difference between the terms (Jonsson, 2007; Zander & Kogut, 1995)

owing to the fact that knowledge is a concept with no definite meaning it is consequently hard to define, Ipert (2007:104) expresses the complexity of the concept; “*Knowledge is one of those words: one knows exactly what it means – until forced to define it. Its illusive nature becomes obvious when one tries to pin it down in definite terms*”. This quote stresses a need to elaborate on the knowledge conceptualisation discussion in order to stress the standpoint of the authors.

The academic question of how knowledge should best be defined is a subject of lively epistemological debate that can be derived all the way back to Plato and Aristotle philosophical thinking’s (Shin et al, 2001; Hislop, 2009; Jonsson, 2012). Numerous studies (e.g Gourlay 2006; Tsoukas & Vladimirov, 2001; Styre, 2003) have examined what knowledge means in regards to knowledge management, and a general conclusion is that depending on how knowledge is defined, it has a significant impact on how to outline and design knowledge management practices which consequently underlines the importance of which definition one adheres to. Despite its important impact on organisations performance, knowledge is not a definite term with clear content.

Literature provides a diversity of quite different perspectives, however all schools of thought agree in presuming that knowledge is different than the adjacent concept of information and data. Despite the heterogeneity of literature two dominant approaches to defining knowledge have emerged in the academic society. The first approach considers knowledge as a resource that generates a competitive advantage; hence knowledge is seen as an object important for organisations performance (Hedlund, 1994; Kogut & Zander, 1996; Grant, 1996; Gupta & Govindarajan, 2000; Ipe, 2003). This objectivist approach has led to critique raising concerns arguing that this static approach to knowledge has had too much focus on information rather than the individual and her experiences and expertise (e.g Foss & Pedersen, 2004). This has resulted in the process-based approach, where knowledge is assumed to be embedded in, developed through and inseparable from people’s workplace, practices and the contexts in which they occur (Strati, 2007, Gerhardi, 2000; Nahapiet & Ghoshal, 1998). Recent literature has predominantly applied the integrative approach, which is a combination of the objectivist- and process based view of knowledge. This research is based on the belief that human and technological components have to be combined in order to reach an optimal result (Chini, 2004). The integrative approach is applied continuously in this thesis and hence it should be noted that in order for knowledge to be a factor for competitive success it cannot be a choice between the two approaches but rather requires both.

The influential and important asset of knowledge has led to an increasing managerial interest of exploring what knowledge is and how to create, transfer, and use it more effectively, hence how to manage it. The term knowledge management evolved from the understanding of the importance to

identify and facilitate the utilisation of knowledge and has since the mid-1990s been the “umbrella-term” for related theories of organisational learning (Jonsson & Tell, 2013). It is a broad research field covering a wide range of concepts within managerial practice that aims at furthering the usage of knowledge residing in organisations. As stated by Hislop (2009) there is no universally accepted definition within research, however knowledge management is the terminology that most researchers refer to in regards to the discussion concerning knowledge and hence the expression used in this thesis.

Regardless what the structure work of managing knowledge is phrased, what can be stated is that within the research area, one can observe a shift in recent years between first and second generation knowledge management literature, following the epistemological debate of defining knowledge. In the first wave of literature much focus was on the role of IT in the transfer process where the technological tool was used to store and transfer knowledge as a static object. The second generation literature opened up to a more process oriented perspective where the social dimension of an organisation is included and it is acknowledged as a mean to construct knowledge and transfer it within a social context (Jonsson & Tell, 2013). Many scholars have attempted to formulate and categorise the knowledge management research in order to create systematic frameworks to the fragmented research of how to facilitate successful knowledge management (e.g. Argote & Ingram, 2000; Birkinshaw, 1999; Buckley & Carter, 1999; Davenport et al, 2001). One influential framework was presented by Shin et al (2001) where a knowledge management value chain was depicted as a summary of researchers’ aggregate work in an attempt to structure the process of knowledge management in order to facilitate managerial application. The value chain consists of four steps that depend and generate each other, i.e. it constitutes the process of an effective framework of how to structure knowledge management within organisations in order to achieve competitive advantages.

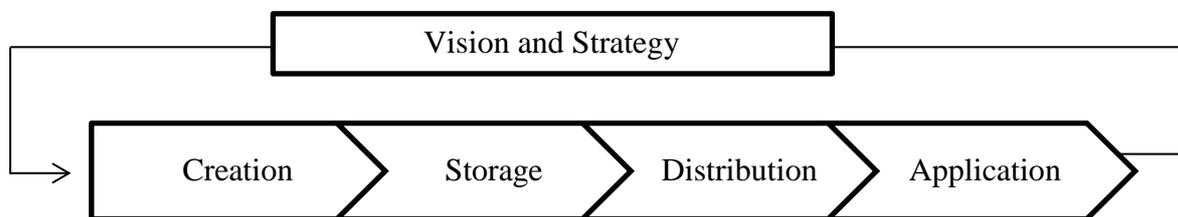


Figure 2.1; Knowledge management value chain  
Source: Shin, Holden and Schimdt (2001: 341).

Within each step in the value chain there are multiples of frameworks and literature using different terminology and approaches in order to establish an effective knowledge management within that specific context (e.g. Andersson, 2003; Hislop, 2009). The different classifications have varying

methods on how an organisation should approach the matter of managing knowledge, and by interpreting these, valuable insights can emerge which can aid in developing an understanding of how to reach and maintain the process of knowledge exchange.

### **2.1.1 Knowledge creation and storage**

The important prerequisite of creating knowledge, in combination with the global presence of MNCs, infers an advantage as MNCs can make use of existing globally dispersed knowledge within the organisation by collecting and distributing the already acquired knowledge instead of having to create new (Ambos & Schlegelmilch, 2005; Gupta & Govindarjan, 2000; Nohira & Ghoshal, 1997; Zander & Kogut, 1995). Another important notion in regards to knowledge creation in the context of knowledge management is individual and organisational knowledge. Some argue that there is a difference between the two, while others opine that individual knowledge is developed through the social context of the organisation (Jonsson, 2012). Organisational knowledge is stated by some authors to be norms and values within the organisation, while others state that it is the combined sum of all individuals' knowledge (Newell et al, 2009; Nonaka, 1994). Based on this understanding that knowledge to a large extent resides in the individual in combination with the increasingly importance of social interaction, this study will take both individual and organisational knowledge into consideration. In regards to knowledge creation and storage it is further important to distinguish between tacit and explicit knowledge. Shin et al (2001:337) provides an easy explanation of the difference, "*tacit knowledge resides in the individual's experience and action and "explicit knowledge is codified and communicated in symbolic form or language"*". Despite the discussion among researchers regarding the boundary between them (e.g. Nonaka, 1994; Spender, 1996) what can be stated is that knowledge, to some extent, is created within individuals through their personal experience.

Knowledge storage evolved from the understanding of knowledge importance on organisation performance, and organisations emphasised the importance of securing knowledge within the firm (Argote & Ingram, 2000; Bogner & Bansal, 2007; Chini, 2004). A common mantra within knowledge management has been the importance to store knowledge in order to make it accessible and secure it within the organisation (Jonsson, 2012). This static perspective has led to the development of methods on how to manage and control knowledge, emerging in a time where IT-technology and IT-systems gained traction, lead to knowledge management emphasising the importance of knowledge storage and securing (Jonsson & Tell, 2013). However, due to the fact that many storage attempts failed to achieve the expected benefits of the initiatives resulted in a discussion within knowledge management literature concerning the importance of tacit knowledge

and how to store this type of individual experience and expertise. Building on the understanding that tacit knowledge is hard to store in database and that this important knowledge foremost is stored within individuals, the significance of social processes e.g. social interaction and the ability to create trust within the organisation increased (DeFilippi & Arthur, 1998; Styrhe, 2003). The importance of social processes has contributed to an increasing understanding of how to store proven knowledge within organisations. Following this, the importance to not only store but to transfer knowledge within the organisation led to increasing attention towards the process of knowledge transfer.

### **2.1.2 Knowledge distribution and application**

Being able to distribute and apply acquired knowledge between units is considered crucial for organisations performance (Styrhe, 2003; Machlup, 1980). Owing the common conclusion of the importance of knowledge transfers, previous research has outlined the determinants for achieving this (e.g. Minbeava, 2007; Szulanski, 1996). Jonsson (2012) presents a summary of literature regarding what enables knowledge transfer and underlines the cognitive factors; meaning individual's ability to transfer knowledge, organisational factors; meaning the knowledge transferring tools provided by the organisation, and institutional factors; meaning the willingness to transfer knowledge as essential. However, knowledge transfer within MNCs is subjected to many challenges. As previously mentioned, knowledge is due to its nature often rooted in its context of origin, making it difficult not only to transfer but also to evaluate, in terms of its value for other subsidiaries (Persson, 2006). Knowledge transfer across borders is further complicated due to differences in time, space, culture and language (Jonsson, 2007). Individuals feelings of personal ownerships, fear of free-riders and public scrutiny are other examples of hinders in the process of knowledge transfer (Husted & Michailova, 2002; Schlegelmilch & Chini, 2003). Building on this, the fact that knowledge is predominantly related to the individual, infers the importance of understanding how to create the conditions for the transfer of knowledge between individuals (Davenport & Prusak, 1998). Many studies are based on the perception that all knowledge transfer achieved is in its nature successful, a conclusion often reached without taking the next steps in consideration, such as how the knowledge is developed, implemented and applied.

Following recent knowledge literature, a shift can be seen towards increasing literature regarding how to make use of the transferred knowledge (e.g. Davenport & Prusak, 1998; Minbeava et al 2003). A common conclusion is that if certain knowledge of a subsidiary is not used in other parts of the organisation it is of limited value, hence prompting the importance of applying the acquired

knowledge. Shin et al (2001) describes this as the application phase in the knowledge management value chain, where attention is given to the use of accessed and transferred knowledge. The concepts of disseminative capacity and absorptive capacity addressing the important aspects of how individuals absorb and detach knowledge have gained attention in regards to how organisations integrate and exploit knowledge (e.g. Zahara & Gerhard, 2002). Minabaeva (2007:583) explains disseminative capacity as *“the willingness of a sender to share knowledge with others”* and absorptive capacity as the *“receiver’s willingness and ability to absorb the knowledge transferred by others”*. However, in regards to the usage of transferred knowledge these concepts provide limited insight concerning how organisation can assure knowledge application. Another concept of attention is knowledge utilisation, which addresses how knowledge is exploited. Kalling (2003:67) states that knowledge utilisation is an important phase however notes that: *“knowledge is not always utilized, and that utilized knowledge does not always result in improved performance”* meaning that regardless if knowledge is transferred, codified and explicated it does not necessarily mean that routines and results are improved indicating a need for assuring that proven knowledge is furthering the organisation.

## **2.2 Knowledge development within a MNC**

Taking the integrative approach where knowledge is seen as both a resource of competitive advantage and a process that generates knowledge, the importance of organisations ability to benefit and develop existing knowledge becomes apparent in regards to the knowledge management value chain. Sumelius & Sarala (2008) stresses that for MNCs, where subsidiaries are seen as important contributors to the development of competitive advantage, knowledge development demands that subsidiaries themselves develop knowledge that can be transferred and used by other units globally. Owing to the fact that previous research commonly has focused on the importance of exploring and exploiting acquired knowledge (e.g. March, 1991) and the importance and facilitation of internal-MNC knowledge transfer (e.g. Chini, 2004). Literature does not, however, explore nor explain how to make use of acquired knowledge in order to create new knowledge, and hence achieve knowledge development within the organisation.

Jonsson (2012) opine that it is important to understand how to facilitate prerequisites for transferring knowledge between individuals within the organisations due to the fact that knowledge predominantly is related to the individual. This statement is further underlined by Prusak (2010:xv); *“Many organizations still struggle to make best use of the knowledge that exists within them. While individuals might use their knowledge on a daily basis and for their decisions,*

*frequently that knowledge is not shared and leveraged across the organization from one person to another*". This quotation infers that it is not enough to distribute acquired knowledge but that the essential understanding lies in organisations ability to benefit from established and proven knowledge and make use of this in order to create new knowledge that can lead to future efficiency, hence the importance of knowledge development. Building on the understanding that knowledge predominantly resides in individuals, the importance of social relations as a facilitator for knowledge development becomes interesting. The impact of social capital cannot be overstated in the aspects of facilitating and transferring knowledge, as brought forward within numerous researchers the social, informal ties between individuals are irreplaceable channels for knowledge flows (Hansen & Lovas, 2004). It was argued by Granovetter (1973) that social relations are in large responsible for the creation of trust in an economic environment. Furthermore, literature bring forth that strong ties are a foundation for mutual trust, often in a setting of close social proximity (e.g. Gnywaji et al, 2009). This is also advocated by Miesing et al (2007), whom state that informal communications appear to support innovative attempts as well as transferring results of these initiatives and Minabaeva (2007:578) whom state that *"knowledge transfer is possible only when close relationships are established between senders and receivers"*.

Network theory (e.g. Reagans & McEvily, 2003) stresses that strong ties; connected systems, reciprocal relationship, and mutual commitment all together facilitate information transfer. This literature is to a large extent centred round relationships with external actors, however it is important to underline that the network perspective does not necessarily have to refer to relationships with external actors. Jonsson (2007) presents an interesting discussion related to network theory and how the concept has been used in research focusing on MNCs. Following Forsgren's (2004) reasoning it is stressed that there is a difference between contingency theory, focusing on the structural dimensions of the organisation, and a business network approach focusing on the individual relationships. Building on this discussion it can hence be stated that in order for knowledge to be developed it needs both a structural dimension as well as a social dimension of being part of a global network. The importance of a relationship between the recipient and the source of knowledge in regards to the transfer process has previously been determined (e.g. Bartlett & Ghoshal, 1989; Chen & Lovvorn, 2011). A collective conclusion of these studies is that people are more willing to transfer and absorb knowledge if they have a social relationship with the receiving or sending person (e.g. Szulanski, 1996). This thesis argues that these social relationships are as critically important in regards to knowledge development as they have proven to be concerning knowledge transfer.

### 2.3 MNCs and the importance of managing knowledge across borders

Several researchers have stressed that by reproducing methods of operations and practices into new markets MNCs have a certain ability to transfer and use knowledge locally created on a global scale, which can be seen as a source of competitive advantage for the corporation (e.g. Ambos & Schlegelmilch, 2005; Gupta & Govndarajan, 2000; Nohira & Ghoshal, 1997; Zander & Kogut, 1995). Taking the transnational view of the MNC, where subsidiaries are considered strategic partners (Bartlett & Ghoshal, 1989), studies have underlined the importance of making use of certain subsidiary knowledge as it become a prerequisite for the flow of knowledge within the organisation (Foss, 2006; Gnywaji et al, 2009). These studies predominantly focus on the importance of transferring knowledge within the MNC (e.g. Argote & Ingram, 2000; Foss, 2006; Foss & Pedersen, 2004; Gupta & Govindarajan, 2000) and less on the creation and storage (e.g. Foss & Pedersen, 2004; Gnywaji et al, 2009; Newell et al, 2009). This shift of attention is in line with Miesing et al (2007:110) whom opine that *“The competitive advantage of a transnational organization lies to a great extent in its ability to identify and transfer best practices, particularly core competence and knowledge, between its geographically dispersed and diverse units”*.

By adopting a transnational view it is acknowledged that valuable knowledge can be created in all units within the MNC. It is therefore vital for the firm to focus on the organisational aspects and in particular knowledge transfer across borders. Hence the traditional flow of knowledge from headquarter to subsidiaries, as emphasised in transaction cost theories, no longer suffice (Nohira & Ghoshal, 1997). As stressed by Minbaeva et al (2003:587); *“MNCs are no longer seen as repositories of their national in print but rather as instruments whereby knowledge is transferred across subsidiaries, contributing to knowledge development”*. Because of its structural characteristics, spanning across multiple institutional environments, MNCs have the possibility to gain knowledge from various “pockets of expertise” (Persson, 2006). Through knowledge transfer, subsidiary knowledge can be made available to many different units in the organisation. New knowledge in the form of best practices, routines, and technologies that are developed by subsidiaries in various parts of the organisation can be transferred and subsequently exploited in multiple markets (Ipe, 2003; Szulanski, 1996). In this way, new ideas and solutions that otherwise would not have been thought of can emerge, and innovative processes can be enhanced (Hansen & Lovas, 2004; Subramaniam & Venkatraman, 2001).

A central activity for MNCs, in order to make use of geographically dispersed knowledge, lies in their ability to transfer knowledge from one unit to another (Kogut & Zander, 1993; Davenport &

Prusak, 1998). Holm and Sharma (2006:59) further note that the nature of MNC theory and operations has changed over the previous decades owing to the continuously evolving complexity of the market. These conditions force MNCs to work intensively to sustain and expand operations in an environment characterised by constantly increasing complexity. The demand for both structural and organisational changes (c.f. Forsgren, 2004; Kallin & Styhre, 2003) has resulted in MNC managers today being more concerned with the distribution and development of knowledge in the organisation. Building on this the authors of this thesis, based on the understanding that knowledge is bound to the individual, argue that the importance of creating and maintaining relations between individuals on globally dispersed sites is of essence in the evolvement of MNC theory.

### **2.3.1 Determinants of intra-organisational relations**

Adhering to the transnational view of the MNC infer the importance of assuring knowledge transfer across borders owing to the fact that knowledge resides within individuals and hence subsidiaries become strategic partners with great influence on the organisations competitive advantage. This was further noted by Argote et al (2003) who stressed that the relationships between organisational units are crucial elements for being able to map out the knowledge management context. Hence, if organisations manage to create these valuable relations, the possibility for achieving knowledge development increases.

In regards to facilitating knowledge development within the organisation, research focusing on social relations (e.g. Easterby-Smith et al 2008; Gooderham, 2007; Miesing et al 2007; Olivier, 1990; Chen & Lovvorn, 2011) has gained considerable attention in recent years. The increasing interest for this internal process is based on the common conclusion within this research that people are more willing to detach and absorb knowledge if they have a social relation to the other person (e.g. Argyris, 1994; Chini, 2004; Gnywaji et al, 2009; Miesing et al, 2007; Nevis et al, 1995; Nahapiet & Ghoshal, 1998). This consequently infers the importance of intra-organisational relations in regards to making use of transferred knowledge. As a prerequisite for knowledge development is that knowledge is created, stored, distributed and applied within the organisation it is insignificant whether this knowledge is created from external (inter) sources or internal (intra) sources, hence this thesis will take a broad definition on organisational relations and thereby consider both inter- and intra-organisational relations literature combined referred to as intra-organisational relations.

Nahapiet & Ghoshal (1998) argue that social capital facilitate the development of knowledge by affecting the conditions necessary for exchange and combination of different knowledge to occur. The authors identified three dimensions of social capital within MNCs; the relational dimension takes its expression by including trust, obligation and respect, while the cognitive dimension includes shared interpretations, language and codes and the structural dimension involves the network or social ties in an MNC. Levin and Cross (2004) investigated the importance of trust, and found it to be a critical mechanism underlying the benefits of strong ties in regards to knowledge transfer, especially functioning as a mediator of useful knowledge. Furthermore a difference between there being a relationship and a trusting relationship emerged, the findings of that study indicated that by creating stronger connection between units or individuals, meaning having a trusting relationship the rate of useful knowledge being transferred increased.

The perspective of network theory provides another view of interest when taking the transnational view of MNCs. The main argument in this stream of literature is that the flows of knowledge have changed from being between headquarter and subsidiary to rather flow in all directions, additionally flowing between subsidiaries and from subsidiary to headquarter. These flows and relations have recently emerged as a network theory of the MNC (e.g. Reagans & McEvily, 2003). The configuration can be said to respond to the magnitude of the issues facing MNC today being too large for a single unit to respond to alone, and the solution is considered to be located in working together (Newell & Swan, 2000). In line with these studies Miesing et al (2007:110) argue that the flow of knowledge needs to take several directions: *“This collection of corporate abilities, skills, and competencies is ideally a free-flowing pool within which subsidiaries have frictionless interaction and exchange”*. Furthermore in relation to using this network to access knowledge from different actors within the MNC this is considered to be a key premise by Inkpen and Tsang (2005). Tsai (2001) argue that by viewing a MNC in a network perspective it is clear that knowledge and ideas being shared and common meanings are developed though interacting between units. This involves to a high degree a social process where the different units interact with each other.

It is further stated by Björkman et al (2004) that the personal network was a crucial determinant for knowledge transfer, concluding that MNCs need to encourage the formation of the personal network within the MNC for the organisation to benefit from the intra-organisational relations. To enable this, Miesing et al (2007: 109) presented three factors as being critical for successful intra-organisational knowledge transfer: *(1) collective creation of knowledge as intellectual and social capital available throughout the organization; (2) trust-based collaboration among*

*geographically dispersed entities that form the transnational organization; and (3) the willingness and ability of organizational units to use that knowledge.* This thesis takes its standpoint in these determinants and argues that these are just as crucial in the development of transferred knowledge as it is in distributing the knowledge.

Recent researches, as depicted above, have investigated the different characteristics of intra-organisational relations to explain the creation and what they lead to. Taking a standpoint in recent research's contribution this thesis argues that the intra-organisational relations can play an equally important part of facilitating knowledge development as recent research have claimed it to be in distributing the knowledge. However this thesis does not intend to investigate how these relations are constructed or functions within the case study, but rather the importance of the intra-organisational relations in the knowledge exchange process.

### **3. A Conceptual model of the process of intra-MNC knowledge exchange**

Based on the extensive literature addressing knowledge management and international business this thesis has the perception of knowledge transfer that goes beyond the static approach to predominantly present in knowledge management literature where knowledge is seen and treated as a static object. Rather the authors of this thesis see knowledge as a continuously developing process, hence this thesis argues that there is a need for adding another link to the acknowledged knowledge management value chain to move beyond the static approach and embrace the process oriented view of knowledge. Based on this requirement the authors of this thesis have compiled complementary theory claiming that the next necessary step is development of knowledge. As the fifth link is introduced the nature of the link knowledge development transforms the model from being a static value chain into a value creating process based on a continuous knowledge exchange, hence knowledge exchange is defined as:

*“The process of assuring that transferred knowledge is utilized and developed within an organisation, thusly continuously creating a spiral of knowledge creation as individuals make use of other individuals experience and knowledge”*

Predominantly previous research takes a static approach towards knowledge transfer commonly presuming that knowledge transfer per se successful if conducted. The authors of this thesis argue that in order for proven knowledge to benefit the whole MNC the organisation cannot only facilitate knowledge transfer across borders, but that this proven knowledge must be developed following a transfer to be utilised and hence making the transfer successful. This includes an

adaptation of the knowledge transferred to the receiving context and utilisation of the knowledge. This is what earlier in the thesis has been referred to as knowledge development. Owing to the fact that most knowledge resides within individuals it becomes essential to motivate employees to detach as well as to absorb knowledge in a way so that it'll be incorporated in the individual's behaviour and used in a manner so that it generates the creation of new knowledge. Here, the social context has proven important in order to make people transfer knowledge.

This statement is in line with Davenport & Prusak (1998), whom argued that in order for knowledge transfer to increase value, the knowledge must lead to behavioural change or the creation of new ideas. Consequently the authors of this thesis opine that knowledge development is what makes knowledge transfer successful. Following the model of Shin et al (2001) the fifth step of knowledge development is, as the previous four steps of creation, storage, distribution and application, realised by certain conditions. As the base of knowledge development as described above is adapting and using the transferred knowledge a thorough literature review on existing research concerning these two aspects was conducted. Following that this thesis contends that intra-organisational relations are an influential determinant for knowledge development within MNCs (see figure 3.1).

Building on the knowledge management value chain, the authors maintain the belief that the links demand and generates each other. However, in order for a MNC to establish knowledge exchange, they need to enable knowledge development in order to be able to stay competitive in the increasingly competitive global market. This makes knowledge development especially important for MNCs. As recent literature has stressed, intra-organisational relations is an important facilitator as it increases the individual's willingness to detach as well as understand knowledge. The figure below describes the authors' conceptualisation of the revised literature and how intra-organisational relations generate knowledge development that in turn functions as a link in the process of knowledge exchange.

Knowledge exchange is thus the complete process of creating, storing, distributing, applying and developing knowledge within an MNC and between geographically dispersed units. It is an evolvement of the acknowledged knowledge management value chain presented by Shin et al (2001) has proved valuable as an important prerequisite for facilitating knowledge transfer; however it does not provide insights concerning how to make use of existing and transferred knowledge in order to achieve future knowledge creation. As argued previously this thesis adopts the view that the knowledge transferred hold no intrinsic value of it is not of use to the receiving partner. Hence the distribution of knowledge is not enough to create a competitive advantage,

rather adopting and developing the knowledge to fit the own context creates new knowledge that in the next step can be communicated back to the original unit who then can use this new knowledge to adhere to existing or future problems. Hence it is a process of knowledge exchange where the spiral contests the normative view of knowledge transfer, and creates further benefits. The conceptualisation is based on the revised literature is depicted in the figure below;

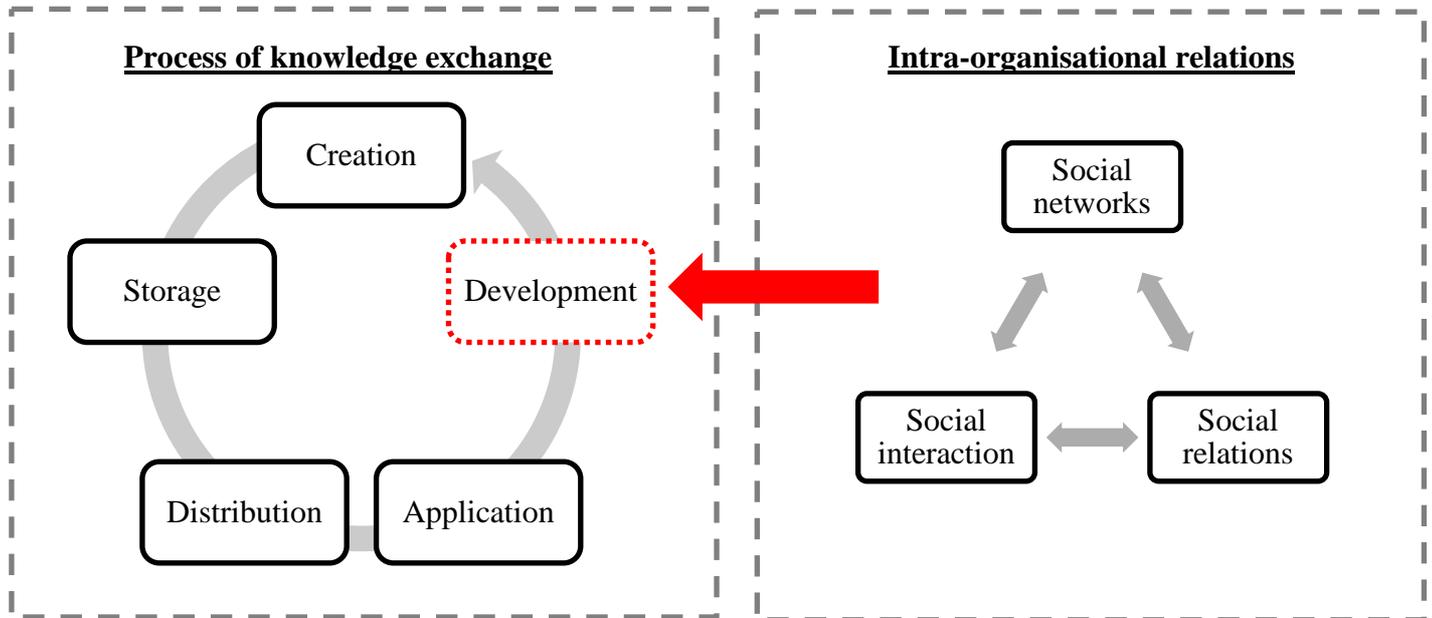


Figure 3.1; Knowledge development and the process of knowledge exchange within an MNC  
Source: Own conceptualisation

#### 4. Method

In this section the methodological considerations will be presented with the ambition to clarify the principal reasons for the selected research design in an effort to present the consideration made by the authors when analysing the empirical data. For the initial consideration of method and research design an understanding of what implications the aim of the specific study has on this choice need be understood. Silverman (2006) notes that it is the research topic that is of importance, and the method in itself holds no value.

In line with this the implication of conducting a study in the field of international business and knowledge management will be discussed below. International business has a history of rich qualitative research (e.g. Johanson & Vahlne, 1977) that created the foundation of the research field. With time a shift towards using more quantitative methods occurred as the demands for gaining legitimacy for the research field grew to become a “hard science” (Birkinshaw et al,

2011). As the field has an open nature the agenda have often been driven by opportunities and practical problems have emerged that have created a demand for theoretical attention, which have resulted in a fragmented research area. Doz (2011) opine that qualitative research methods offer the opportunity to move this specific field of research forward and create a more unified theoretical base.

Correspondingly studying the subject of knowledge has certain implications. As the concept has a large spectrum of definitions and equally indefinable adjacent concepts this affects *how* as well as *if* it is possible to study knowledge exchange. As this research attempts to develop an understanding of how an MNC can develop knowledge possessed by individuals a qualitative approach is suitable as it offers better possibilities to investigate how and why questions than quantitative methods (e.g. Eisenhardt, 1989; Doz, 2011) and views data as possible to interpret (Alvesson & Sköldeberg, 1994). This thesis adopts the view of qualitative research from Van Maanen (1979:520), who argue that it is an umbrella term that covers an “*array of interpretive techniques that can describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world*”.

As brought forward by Birkinshaw et al (2011), many studies applying qualitative methods are exploratory in nature, meaning seeking to understand phenomena that are inadequately comprehended. The qualitative research methods are in their opinion well suited for theory development, framed in existent debates within literature, a view the authors of this thesis adhere to. Doz (2011) argues that the multidisciplinary nature of international business makes qualitative research particularly valuable in that it allows researchers to build and test new theories as well as illustrate and exemplify new phenomena. Noted by Cheng et al (2009:1072): “*moving forward is not about reformulating novel dependent or independent variables: it is about addressing a phenomenon that can only be unpacked by combining theories, concepts, data and methods from multiple disciplines to explore the scope of boundary conditions of multiple disciplinary perspectives and the benefits of their integration*”. This thesis have chosen to take a qualitative approach as a consequence of the above mentioned reasons of why qualitative methodology can contribute to the field of international business and its suitability for the purpose of the study.

#### **4.1 Research Design**

The research design is a guide of how to plan and execute the investigation, thusly functioning as a framework for the collection and analysis of the data (Easterby-Smith et al, 2004). It is an indication of the priority of generalisation of the study, implying the ability to disconnect the

result from the specific context and bring it to a general level (Bryman & Bell, 2011). The applied research design was an iterative process between the theoretical background and empirical findings commenced by a comprehensive literature study.

A theoretical pre-understanding on the broad and fragmented concepts was necessary to be able to choose an effective research design. This facilitated the development of a research question and a research design, which in turn directed the conduct of the empirical observations and analysis (Miles & Huberman, 1994). Furthermore, a pre-understanding of theory may guide the choice of a suitable case (Merriam, 1998; Yin, 2003). The initial part of creating a theoretical foundation was of deductive nature, as it entailed processing literature on knowledge, knowledge management on a general level before narrowing the scope down to the links of the knowledge management value chain and international business. By presenting a theoretical framework the understanding of the selected theories and how they relate to each other became stronger, then combined into a conceptual model that take into effect the complex process of achieving knowledge exchange within a MNC.

The collection of empirical data and the subsequent analysis was characterised by the importance of words, the context and meaning, hence the individuals own perception constructed the foundation. Besides the primary data collected through qualitative methods additional data was used in the aim of broadening the picture, such as reviewing internal documents. The following step of conducting the empirical data investigation can be said to adhere to an inductive process. This as the interviews was of an open nature (see section 4.2.1) attempting to use the specific examples originated from respondents to create general propositions applicable in a larger theoretical context. According to Doz (2011) inductive theorising is more faithful to the richness of the phenomenon than deductive theorising as confronting various theories can lead to new conceptualisations. The same author argues that creating theories that recognise context, rather than abstract general theories that ignore its significance is important to international business and that qualitative case-based studies can contribute to the contextualisation of general theories. This further supports the choice of research design made in this thesis.

In line with Alvesson & Sköldbberg (1994) this thesis adheres to an iterative process of using an abductive method. The theoretical framework has continuously evolved during the early stages of the research progress as different perspectives were merged into the conceptual model. Hence the deductive approach to the literature laid foundation to the conceptual model, which the inductive approach to the interviews provided empirical examples to construct generalising propositions concerning the design of the conceptual model.

## 4.2 A qualitative case study

Birkenshaw et al (2011) state that it is often inappropriate to engage in large-scale cross sectional studies when trying to understand the complexities of knowledge and the differentiated contexts typical to the field of international business, where there is an the absence of well-developed theory. Instead the authors recommended providing thick descriptions and using exploratory research to focus in inductive theory building by using case studies. This statement is in line with Doz (2011) who argue that rich, thick descriptions can provide the basis for the use and possible synthesis of multiple theories into new conceptual development. He further contends that many of the most influential contributions of qualitative research (e.g. Bartlett & Ghoshal, 1989) combine richly textured description of a specific situation with insightful theoretical contribution, which emerges from a conceptual interpretation of the qualitative data. Based on this a qualitative case study is the best method for the purpose of this thesis, however the method have been questioned, below the limitations of the method will be discussed.

As a majority of previous studies on knowledge management in an international business context mainly has focused on quantitative research methods (e.g. Bogner & Bansal, 2007; Chini, 2004) this thesis contributes by taking a qualitative approach. The choice of conducting a case study was made owing to Yin (2003) and Dyer & Wilkins (1991) who stress that this is a good method when searching for meanings rather than truths. However, it is important to stress the critique raised towards case studies arguing that it is difficult to make generalisations (Bryman & Bell, 2011; Yin, 2003). As a reply to this Jonsson (2007:92) argues that it is perhaps not so interesting to generalise but “*rather to learn from the interaction between a phenomenon and its context*”. As the aim of the thesis is to develop an understanding of how MNCs can benefit from and develop acquired knowledge – with special emphasis on the importance of intra-organisational relations, analytical generalisations will be made rather than statistical. This further underlines the choice of an in-depth case study (Foss & Pedersson, 2004; Jonsson, 2007; Yin, 2003).

Furthermore, a limitation of a qualitative research design is often argued to be related to the researcher’s willingness to present all findings, i.e. to describe everything without being selective. As this thesis is in a case study preformed on a specific MNC additional issues interesting to further develop and observe have been made. However in line with Dubois & Gadde (2002), who opine that it is important to stick to findings related to the specific chosen theory and leave additional interesting observations as a starting point for further qualitative studies, these aspects of interest have been left to future research to explore deeper (see section 7.1). The choice to focus

on a single case was made building on Jonson's (2007:93) research on IKEA and knowledge sharing across border, where it is stressed that, and by using Eneroth (1997:17) arguments, that one case is preferred when a multiple perspective approach is taken, hence when focus is to gain deep insights rather than broad.

#### **4.2.1 The chosen case – Volvo Group**

Concerning manufacturing of trucks, buses, construction equipment, marine and industrial engines and financing and service solutions, Volvo Group is world leading. The MNC employs around 115,000 people in their global operations, have production facilities in 19 countries, and sells the corporations products in over 190 countries, which in 2012 amounted to approximately SEK 304 billion. The MNC headquarter is located in Göteborg, Sweden; the same city in which it was founded in 1927 (Volvo Group, 2013). An important part of Volvo Group is “The Volvo Way”, which is a concept of corporate culture within the MNC that define and develop the company in the right direction. It is seen as a foundation for emerging into the world's leading provider of sustainable transport solutions, as it takes the supportive role of being a recipe for success that expresses the culture, behaviours and values shared across the MNC. The concept is based on the opinion that every individual has the capability as well as determination to improve the MNCs business operations as well as the desire to develop professionally. This is supposed to be embodied by containing dialogue between leaders, within teams, and among colleagues globally, and by this work, change and build a future together (Volvo Group, 2013).

To be able to accrue the desired results the case needed be narrowed down from the MNC level to a global function being representative for the same issues characterising the general level of Volvo Group. Hence the strategically important function of Project Management was elected as case-sample, with over 3000 project managers active centred on six main locations (Brazil, France, India, Japan, Sweden, and USA). With over thousands of projects running every year within the MNC over all global units and functions on every level of the Volvo Group, this made for a compelling case. In recent years the shift of focus within the MNC towards more efficient usage of knowledge a supportive function was developed (Volvo Group Institute for Project Management: VGIPM) that became fully operational in 2012. During 2013 the department will roll out several large profiled projects with an operational plan in place. Two of the objectives are to enhance knowledge transfer between project managers and stimulate/sponsor knowledge transfer networks, hence providing incentives to review knowledge exchange within this unit as the topic is currently much discussed among potential respondents (Corporate Presentation, 2013).

Throughout the empirical fieldwork, that started in March 2013 and ended in May 2013, the authors of this thesis have had an office space at the site of the respondents in Gothenburg, Sweden as well as preformed a visit at the site of Tokyo, Japan. Being able to be present on site for the most part of the investigation have enabled a deeper understanding of the context and hence provided the authors with preferable prospects to achieve reliable results. The ability to observe the social dimension and organisational culture of a location for a longer duration of time have aided in the understanding and interpretation of the empirical context.

Throughout the process of conducting this case study contact have been maintained with several divisions of Volvo Group, which have enabled a chance to evaluate and validate the results continuously. Furthermore the result of this thesis is to become a pilot project based on the findings, as the MNC wants to further develop and elevate knowledge exchange between the global sites. Furthermore the contact person at Volvo Group has been more than helpful, as he served as a guide through the organisation and opened necessary doors and provided secondary data. Moreover a continuous contact have been held with the initial contact as Volvo Group, she have provided feedback and comments on analysed material, which have been very helpful for this thesis. It should be emphasised that the generous access to Volvo Group, including access to respondents, corporate materials, and the corporation's intranet, have enabled an open and informal approach.

### **4.3 Data collection method**

The main focus of this thesis has been data collection through interviews; however access to the Volvo Intranet, Violin, during the writing process was provided and hence access to internal documents have provided a background and understanding for the research topic in the context of Volvo Group. Furthermore, as a result of the authors being present on the site has allowed for the possibility to make observations. Building on research regarding qualitative methods (e.g. Denzin & Lincoln, 1998; Silverman, 2006), as well as previous research on knowledge transfer in an international context (c.f Jonsson, 2007), it can be argued that the use of multiple techniques enables the researchers to find new interpretations of phenomenon. This is described by Silverman (2006) as triangulation, and is depicted as a means for increasing reliability.

#### **4.3.1 Interviews**

The foundation of the empirical investigation in this study is in-depth interviews with project managers and their site managers, in total 23 interviews have been made in Brazil, France, Japan and Sweden (see appendix 9.1). In order to gain an understanding of the respondents'

interpretations semi-structured interviews were chosen to built on themes in order to offer a discussion and open conversation between the interviewer and the respondent. The choice of an open approach was in line with Taylor and Bogden (1998) who opined that it offers the respondents the opportunity to speak freely in their idiom. This also enables the researcher to connect back to interesting topics related to the aim of the study that emerged during the interviews. The interview guide (see appendix 9.2) was created in accordance with the conceptual model, building on the five steps within the knowledge exchange process. As the interview is of semi-structured nature the questions listed below each theme are examples of the questions that were discussed. To be able to accrue as much relevant data as possible the nature of the interview was rather an informal conversation aiming at creating a discussion on the themes thusly following the respondent's path of conversation.

The initial contact with potential respondents was made via e-mail by the site manager of the respective four units to the project managers, where a short introduction of the scope of the thesis was provided as well as an explicit encouragement to the employees to participate. A short example of the questions that may be asked was also attached, but it was specifically noted that the interviews was of a semi-structured arrangement where the intention was rather to discuss knowledge utilisation and development between global sites. The language barrier was not of large importance as all respondents either spoke Swedish or English fluently, as the authors of this thesis also does, hence it was no issue to communicate and understand each other. All respondents had the position of Chief Project Manager (CPM) at one of the Project Management unit at a site or were the site manager; hence the respondents represent a similar professional context and face the same issues and environment, but naturally differed in their previous experience. The sites included in this study is Gothenburg, Sweden; Tokyo, Japan; Lyon, France; and Curitiba, Brazil, the offices in Charlotte, USA and Bangalore, India was exempted from this study as a result from time pressure. Face-to-face interview was conducted at the offices in Sweden and Japan, and the interviews with Brazil and France was conducted via online telephone conference. On average the interviews took around 45 min, and were subsequently transcribed with the aid of notes and audio recording directly after the interview was performed.

Due to the sensitivity of the data, as much is of personal experience and nature, it was asked of respondents that their nationality was to remain unknown due to the circumstances making it easy to identify the specific respondent. As Volvo Group is a global company where many employees rotate office sites the specific site where the respondent worked was not of as sensitive nature, and

hence that information is made available in the respondent overview (see appendix 9.1) but the nationality of the respondent will remain undisclosed.

### **4.3.2 Secondary data**

Documents and other corporate material have been collected, as access was given to internal reports concerning VGIPM, where a lot of information resides on how Volvo Group uses and transfer knowledge. Furthermore the authors was given complete access to Volvo Group Intranet (Violin), hence the opportunity to collect data by accessing the current process and tools used in order to facilitate knowledge transfer as well as what knowledge is made available there. From the official website facts on the company have been accessed, which combined with information accessed via documents in the internal intranet have provided the authors of this thesis with different perspectives on the company culture and how employees experience the company. The secondary data have thus foremost been used to provide an understanding of the Volvo Way, which enabled a more open dialog with the respondents in regards to the subjects of transferring knowledge between sites as the Volvo Way stresses the importance of a sharing environment within the company. This official communication have however been seen in the light of that it is messages Volvo Group intends to communicate to the public and should not, nor have been, seen as an absolute truth.

### **4.3.3 Analysis of data**

In case studies the analysis is the main source for building theory, as it is harder to codify qualitative data the process of how the analysis was conducted becomes specifically important to clarify, meaning explaining how the data was transformed into conclusions (Easterby-Smith et al, 2004; Eisenhardt, 1989). Besides the vast amount of data stemming from interviews, the informal conversations and data provided from the Volvo Group Intranet the empirical data was substantial. Yin (2004) developed a "pattern-matching" method to preform analysis in qualitative research, where conclusions are drawn by comparing empirical and theoretical patterns. As stressed by Ghauri and Grønhaug (2002) a study need not necessarily contain statistical testing to be able to draw conclusions, however a systematic pattern need be found.

During the interviews notes containing ideas and connection to theory was made, which have been most beneficial during the analysis combined with the transcribed interviews. Moreover in line with Jonsson (2007) both authors kept an impression diary during the empirical fieldwork reflecting the observations in relation to the theory and conceptual model. Once coding was done,

as suggested by Eisenhardt (1989), the case was reviewed in different manners as to avoid drawing false conclusions in an effort to find similarities and differences. Hence a cross-analysis between Brazil, France, Japan and Sweden, as well as data collected from different levels of management and sources (i.e. interviews and documents) was conducted, following to the need of triangulation. The structure of the analysis follows the five themes used in the interview guide, which are also present in the conceptual model to ensure the validity of the study as discussed below.

#### 4.4 Criteria for evaluating the case study

In evaluating the contribution of a study it is of essence for the authors to justify the choice of methodology in a clear and logical manner. This as a thesis need to provide the reader with insights in how the process of collecting and interpreting data was made (Birkinshaw et al, 2011). This is achieved by supplying complete account of the methodology, however in the case of qualitative studies this can be more difficult since there is no commonly accepted template for writing up such research (Pratt, 2009). The common concepts in such an evaluation are *reliability* and *validity*, which aid in the evaluation of whether or not the study is credible (Silverman, 2006).

In regards to *validity* it concerns the integrity of the conclusions drawn from a specific study, meaning the level of trustworthiness. The internal validity concerns if the result corresponds with reality. To increase the integrity within this paper and in extension the validation of the result triangulation has been central. Silverman (2006:291) expresses triangulation as combining theories and methods to achieve a “*more accurate, comprehensive and objective representation of the object of study*”. This entails the usage of more than one source of data to study a social phenomenon, thus executing the empirical investigation by applying usage of multiple data collection method, sources, theoretical perspectives etc. (Bryman & Bell, 2011; Merriam, 1998). Construct validity concerns whether a study is in fact measuring what it intends to measure (Bryman & Bell, 2011). Several actions were taken to ensure high construct validity, the methodology have been explicitly described in detail, and a complete picture of the background and context of the research have been provided, which Doz (2011) argues is the base for a successful qualitative study.

External validity concerns the possibility to generalise the conclusions drawn, hence going beyond the specific context, and meaning if the case sample is representative for other contexts as well. In qualitative research this often signifies in what degree the findings can be applied in a general social setting, where the transferability is eased by providing thick descriptions enabling other

researchers to determine for themselves if it is transferable (Bryman & Bell, 2011; Doz, 2011). Dyer & Wilkins (1991) argue that a case study is applicable when questioning old theories in an effort to see new theoretical connections. This is why the method of “pattern-matching” by Yin (2003) is applied, as this enables the authors to compare empirical findings with theoretical patterns to identify prospects of further expanding theory. Connected to this, as mentioned (section 4.4), this study resolves in finding empirical generalizability, which is in line with Alvesson and Deetz (2000) who argue that qualitative research should endeavour towards empirical generalizability rather than theoretical generalizability.

Concerning reliability on whether the results of the study will emerge if the study is repeated is of concern to qualitative case studies as these are bound by the context to some extent (Bryman & Bell, 2011). According to Silverman (2006) this can be heightened by providing rich descriptions on the theoretical discussions and perspectives used as well as how the case study was performed, as is provided in this thesis.

## **5. The process of MNC knowledge exchange: Empirical observations in the Volvo Group case**

The Volvo Group case will be presented below following the framework presented in the theoretical section as this constituted the basis for the interview guide (see appendix 9.2). Noteworthy in the observations are that there were no substantial difference between the sites, as might have been expected noting the difference in culture in the four countries in the opinion of project managers. However some differences were found in the observations distinguishing operational management and the project managers from each other, meaning that the site managers had a different interpretation, as will be viewable in the data presented below.

### **5.1 Knowledge creation and storage**

With regards to the value of creating and storing knowledge within Volvo Group all respondents expressed the importance of knowledge as a strategic resource. A common perception was that knowledge is a dominating asset and of great important for the future development and success of the company in the global environment.

*“Knowledge is the most strategically important asset Volvo has.”*

- *Manager G, Sweden*

However it should be noted that approximately half of the managers were doubtful if knowledge is being treated as a strategically important resource, and they were unsure regarding the expression of knowledge value in the organisation. When asked to define knowledge the respondents had many different interpretations of the meaning of the concept. However a main theme was detectable; knowledge was in large considered to be based on the individual's combination of the own capabilities, experiences and expertise in combination with information gathered from other sources.

*“Knowledge is the capacity to do things; when you are using information and your skills to accomplish things.”*

- *Manager C, France*

In regards to creating new knowledge the common opinion stated was that Volvo Group continuously evolved new insights, experiences and expertise through internal process of running projects. This knowledge was stated to predominantly be created locally in respective site and was to a large extent dependent on the individual's previous experience. Knowledge as a resource was foremost considered to be created and reside within individuals and a common belief within the group of respondents was that the organisational knowledge is the combined sum of all individuals' knowledge expressed by the positivistic explanation of Volvo Group's large knowledge supply. The main process of creating new knowledge among the respondents was thought of as being the individuals themselves continuously creating knowledge as single employees running projects on a daily basis thereby gaining new insights and experiences. Some of the managers stressed that in order for knowledge to be created a desire within the individual to learn need to first be concerned in order for this process to occur. A common opinion among the respondents was that all knowledge necessary to solve any issues or questions that may arise during a project or in an occupational capacity is present within Volvo Group, as expressed by one manager;

*“There are no black holes of knowledge within Volvo Group. Somewhere in the organisation someone has experience or information regarding your problem.”*

- *Manager H, Sweden*

This infers the importance of supporting the internal processes of transferring knowledge within the organisation rather than seeking for knowledge through external sources. However, when asked whether they knew how to gain access to this knowledge, many managers noted that the demands for efficiency and time- as well as cost-restraints hindered global collaboration and consequently hindered the creation of new knowledge.

*“The natural way to create knowledge between global sites is by working together in projects, but that takes too much time.”*

- *Manager D, France*

With regards to storing knowledge within the organisation more critical voices were heard. Volvo Group offers a variety of tools; however the usefulness of these is debated. The respondents described a multitude of databases with lessons learnt and proven knowledge that was thought off as too difficult to navigate and search to find anything relevant or specific enough for their need. The tool that was discussed most was the “white book” where project managers are supposed to write down the result of the project as well as an explanation how these were achieved.

*“[...] maybe there is only 10 people in the world that can do what I need to be done in my projects, so when he tells me that he has to store his proven knowledge from his last project I tell him to do it later and focus on my current project, and then he never stores it and that knowledge is lost.”*

- *Manager L, Sweden*

Many managers also expressed the importance of gaining access to personal experience rather than the results of a previous project.

*“Our specialists are our key components.”*

- *Manager V, Japan*

Another point of view brought forward in the connection to the white books was that the benefits of making them are not being communicated and most managers thought of them as a mandatory part of the job as project manager. Some respondents expressed a will to read white books, however stressed that the difficulty of accessing them was a concern, as one may not find a specific white book without a specific reference number. Hence the person in search of information must know exactly which project one wants to read about as it is not possible to search for key words. Additionally many white books are sealed as they are considered to contain strategically secret information and are therefore not available at all. This was according to many respondents why they did not spend time writing good white books on their projects as they in their opinion thought nobody would be able to access it afterwards.

*“I have done too many white books without getting anything in return from other white books.”*

- *Manager I, Sweden*

The respondents understood the intention of the white books; however a common opinion was that due to the fact that they were loaded with too much information the respondent considered them to be too dense, and hence ignored to read them when starting a new project.

*“Nobody reads the white books. You don’t get any insights from reading.”*

- *Manager R, Brazil*

It should be noted that the respondent felt that they could learn from other managers and regarded lessons learnt from previous projects as an important source of insights. Due to the complexity of the white books the respondents instead turned to the person closest and asked about that person’s experience in the matter, or if they had someone to recommend that may have some insights on the subject.

## **5.2 Knowledge distribution and application**

The organisational culture “The Volvo Way” works as an efficient facilitator for achieving knowledge transfer as a majority of the interviewed managers are identifying themselves with the values communicated through the Volvo Way and feel proud over Volvo and its products. This consequently results in a working environment that stimulates knowledge transfer as it is seen through the Volvo Way that explicitly encourages and expects employees to distribute their knowledge and experience with co-workers.

*“We have a large whiteboard; if anyone has a problem you write it on the board and then if someone sees it they will come to you and help.”*

- *Manager C, France*

In regards to the global transfer of knowledge most of the respondents expressed a desire to interact more with other sites, and felt there was much too gain by furthering distribution of knowledge with individuals with different background and experience. However a prerequisite for this was mentioned at several interviews; the awareness of what type of projects was under-going presently and had been performed in the past to be able to pick up the phone and inquire for advice. Most of the respondents mention that the awareness of what projects are undergoing or have been done at other units is low. It was mentioned that this makes it more difficult to know whether or not any of the other units have experience in the relevant areas.

*“Most of us don’t know what the other sites are doing; we only know the few large strategic projects.”*

- *Manager K, Sweden*

Often noted by the respondents was that the utmost importance of personal networks when it came to distributing knowledge. Often the manager confronted with a demand for previous knowledge asks someone within the professional network, who then in turn recommends another name for contact, who might in turn reference someone else and so on. By having access to people all over the world, this type of entry channels provides most employees access to knowledge within the firm. However the respondents noted that even though Volvo Group offered opportunities to contact people on a global scale, they often found the right person in the end. Many managers came with suggestions of whether or not it would be more beneficial to enable distribution of knowledge by creating systems that would shorten this effort to find the right. Understanding that this might not be the most efficient way in terms of maintain knowledge, all of the respondents underlined the importance of personal relations in the process of distributing knowledge.

*“It’s not important to know, it’s important to know who knows.”*

- *Manager F, Brazil*

In line with this was the opinion by most of the respondents that the probability of them applying the transferred knowledge would drastically increase if they knew the person, or new someone who recommended the person, that was communicating something new and different. Several respondents felt that this was not enabled within the organisation, which hindered the give-and-take between sites.

*“Volvo does not take the necessary step that is needed to share; we really do need to have multicultural inputs.”*

- *Manager J, France*

A few managers communicated their disbelief in the possibility of creating efficient global knowledge distribution within the organisation. To these respondents a prerequisite for efficient and beneficial knowledge transfer an application was determined by the strength of the social relationships between individuals. In their opinion the relationships could never become strong enough between global sites without the day-to-day contact; hence they saw the initiative to foster such transfer as a waste of time.

*“Everyone in a global group would have different loyalties and priorities that would make the synergies non-present; there is a too romanticised picture of what cross-cultural groups can achieve.”*

- *Manger Q, Sweden*

Several respondents noted that they themselves would be more likely to take the necessary time to adapt and develop transferred knowledge of they observed that behaviour in the management. Several respondents noted that the operational leaders did not reciprocate the large push from top management to further and support the exchange of knowledge within the organisation between global sites. A few respondents questioned whether or not all knowledge needs distribution and application owing to the perception that much of the knowledge is based on a specific situation thus making it less applicable in other projects.

*“It doesn’t help to spread all knowledge everywhere; it has to be useful knowledge.”*

- *Manager H, Sweden*

### **5.3 Knowledge development**

A common theme in the interviews conducted was the current situation of the knowledge being created, stored then to certain extent distributed and applied but not as frequently developed.

*“Many people think that it is their job to deliver in their current project and that the rest is not relevant. Many people do a good-enough job, but that little extra that will lift the company to a new higher level cannot be done without knowledge transfer.”*

- *Manager P, Sweden*

When asked about how the knowledge is distributed in the organisation and if it is used to improve new projects a common picture emerged. Many reflected that the focus is in large on storing knowledge for others, not on reading and reflecting on what already is stored.

<i>“Do we have tools to store knowledge?”</i>	<i>Yes</i>
<i>Are they used in order to improve the next project?”</i>	<i>Maybe</i>
<i>Are proven knowledge from previous projects easy to find?”</i>	<i>No”</i>

-*Manager L, Sweden*

In regards to enabling knowledge application of distributed knowledge the time aspect was a reoccurring theme. Several respondents mentioned that to be able to apply the knowledge that one receives one has to be given the time to reflect and adapt this to the own context. Without this effort of making it fit into the own project many saw the transfer of knowledge as pointless as it then would not have implications for the own work.

*“It is important to respect that it needs to be a transfer, and that it will take time. We need space to think, what does this mean to me and how should I apply it? It is the responsibility of the individual to think but the responsibility of the organisation to provide the time to think.”*

- *Manager P, Sweden*

This was by some respondents connected back to the company culture of Volvo Way, which specifically notes that transfer between employees are to take place. However the culture does not specify that this knowledge is to be utilised and then developed further. Several respondents noted that constant communication promoted the own accumulated knowledge by gaining input in different tools used by others. However the step on how one is supposed to acknowledge, listen, absorb, and use others insights are not communicated to the same extent. Hence a common theme of the interviews was that a large portion of the knowledge transfer culture within Volvo Group only concerned the input of knowledge, while time to take the output and apply it was not prioritised. Many expressed a desire to learn from other sites and use the accumulated acquired knowledge however the accessibility of this knowledge was questioned. The respondents wanted to change this into a corporate culture where a more dynamic approach was taken.

*“We don’t have a knowledge sharing culture – but that is what we are about to change.”*

- *Manager A, Sweden*

Operational managers expressed the difficulty in working in cross-cultural teams across sites, however while some expressed that it is no use to try others saw the potential benefits of engaging in such challenging activities. Moreover one operational manager expressed that in current situation it is not viable to attempt at the Japanese site. This owing to the fact that the site only has been part of the Volvo Group since 2007 and the employees have not yet had time to integrate into the Volvo Way as this work approach is not in line with the present national culture. The operational manager further expressed that there is a great desire to integrate into and contribute to Volvo Group, as supported separately by the project manager respondents from the Japanese site. But for that to be realised time has to be given to Japanese project managers to reflect and adapt. Currently the operational manager of the site opine that the same situation was displayed when the French site was acquired, but that now after 13 years they have been aligned and adapted to the Volvo Way. Building on this the respondent further noted that even though the Japanese society have started questioning whether or not it is going to be able to continue on this path, or if they have to adapt to the global society that is emerging. The strong identification of being a self-

sufficient nation and culture is being questioned, and according to the respondent it will take time for this powerful culture to change.

*“This shift of being emerged into the Volvo Group is happening for them at the same time as the Japanese society in large is going through an emerging awareness of the importance of becoming part of the global society. The integration is going to take time, its hard for them to realise they can’t do it all by themselves. They will become part of the Volvo Way, but they have to be given time to reflect and adapt first.”*

- Manager X, Japan

Most respondents stated that the personal motivation to commit, engage and contribute to knowledge exchange in large stemmed from the persons own personality and attitude. A natural curiosity and willingness to learn where some of the traits mentioned as key in having a drive to utilise and develop knowledge that came natural, however these can be nurtured and evolved with the right support from management according to respondents. As the empirical observations indicate, there are knowledge transfer tools available within Volvo, however the assumption that in order for knowledge to be beneficial and hence a competitive advantage it needs to be incorporated in work structures and consequently it must result in employees changing their behaviour is a common statement found among the respondents.

*“We have to do transition between today’s problems and tomorrows projects so that we can predict and not keep going in to a day-to-day mode and instead predict and get ahead. We are not doing this today; we are on a constant normal mode. The future is forgotten.”*

- Manager K, Sweden

This concurs with the common opinion among respondents that the proven knowledge accumulated in the past is not being used to solve the issues arising in today’s projects. It is expressed by several mangers that the time pressure to focus on the immediate task on the table in a timely manner makes one forgo the opportunity to develop the existing knowledge into something more superior and instead only do the bare minimum.

*“Instead of performing excellent on the work task, that later on may save us time, we do it good enough to instead quickly move on to the next thing.”*

- Manager G, Sweden

When discussing with managers how to assure that knowledge not only is stored and transferred but also applied and developed a common opinion stated that it must be easy and efficient to gain access to others proven knowledge and you must be able to see the benefits. This so that oneself

can use the time that otherwise would be spent re-inventing the wheel to instead develop a superior wheel based on existing printings as expressed by several respondents. In regards to being able to make us of this knowledge into the own context, hence develop it, several of the respondents clarify that the foundation for this need to be synchronised, however if constructed to strictly by large guidelines as it will rather inhibit the development of proven knowledge.

*“To have a set routine helps, but to have to follow this by letter does not work. One has to be able to think by one self to develop knowledge to the own context.”*

- *Manager N, Brazil*

Furthermore the ability to take in the knowledge and being able to adapt it to the own context is being communicated as dependent on the possibility to discuss with the knowledge source. Several of the managers have expressed a desire of having the person responsible for a project come and talk with the team that is supposed to do something related. A suggestion by one of the manager is to have an initial presentation of how the former project was conducted, why it was successful and what they struggled with and then open up for a discussion where the topic can be directly connected with the future situations. Managers have repeatedly expressed that they want to talk straight to the source of the knowledge to be able to ask what they think of the specific project in the new context to be able to have more of a discussion with the person holding the experience, as this would increase the potential benefits for them.

*“We should be able to invite the people that were in the actual project so that they can describe in their own words and answer direct questions in the context.”*

- *Manager P, Sweden*

This was connected to the importance of trusting the source and some managers noted that trust is important in knowledge transfer, and that the current modes of storing knowledge this factor is not included making it difficult to use this knowledge. The importance of social networks was a recurrent theme and many managers expressed a willingness to further listen to others knowledge if someone in the own network is recommending that person. Some further elaborated on this and argued that knowledge gained from another person is of higher value and more worth listening to if the source of the knowledge has credibility with someone you yourself trust.

*“Before you start trusting the correctness of the data you need to have confidence in the source, this is very hard to get when just reading the detached information. If I trust the one that have recommended the third person then my belief that the knowledge will benefit me makes it more likely to take the time to listen and then try to use it in my project.”*

- *Manager H, Sweden*

The suggestions from the managers revolve around simplifying connection between managers.

*“Volvo today has a large focus on sharing knowledge, but they roll out large projects and like to create structures and guidelines for it. But this is too big and complicated! Make it easy; just connect us to each other instead. If a pairing system was in place I would contact other units more often.”*

- *Manager E, Sweden*

### **5.3.1 Determinants for intra-organisational relations**

As part of the VGIPM one of the objectives is to stimulate knowledge transfer between project managers globally within the Volvo Group. One of the linked activities is to define and implement VGIPM relationships with project managers. Facilitating stronger relations between employees was commonly considered as something enabling the creation of trust and social networks. When asked how to achieve this, an overlapping theme revealed the importance of face-to-face interactions.

*“It is easier to understand a person when you see them. The person might say yes but at the same time shake their heads meaning that they don’t understand. You will not know this if you don’t see the person.”*

- *Manager L, Sweden*

Owing to the tough global economic environment, Volvo Group has tightened the financial spending and promotes cost awareness among the employees. A general disappointment over the cost reduction was expressed as this hindered travelling to other sites. It was stated that the difficulties of proving the results and/or gains for creating stronger relationships made it hard to promote high costs due to travelling, kick-offs, and meetings in the beginning of projects even though the managers knew that this would probably lead to a more efficient and faster project.

*“The project might last for many years and even though this type of social integration will make the project more efficient in the end, you will be questioned if you initially have too high expenditures.”*

- *Manager J, France*

A critique put forward by one of the managers in regards to this initial personal integration was the fact that social relations need to be maintained continuously and that the time in-between these meetings are of greater importance.

*“You don’t get to know a person by meeting them for a few days. A relationship is created by continuously meeting and sharing personal information on a daily basis; by having a coffee, lunch or riding the bus to work together every day”.*

- *Manager Q, Sweden*

However, it was stressed by a majority of the respondents that the importance of interacting face-to-face was important during the implementation phase of projects. The common perception stated that relations are impossible to create virtually however possible to maintain this way.

*“If I have met a person at a conference or meeting and I know that that person also knows me, it will make it more likely for me to call that person if I need help with something”*

- *Manager F, Brazil*

In order for these relationships to be maintained, the managers inferred a demand for a common understanding on how to communicate, as this would make these relationships through an easier way to collaborate. Another factor underline by the respondents in regards to determining intra-organisational relations was the importance of knowing where the competence existed. A suggestion in regards to this was a multi-cultural way of working; where people from different site were put together in order to achieve new competence through a possibility of communicating previous experiences and insights. Those managers that primary worked in these types of multi-cultural projects presented a work environment characterised by knowledge transfer through face-to-face social interaction on a regular basis however foremost felt satisfied with the virtually communication as they knew the person.

Everyone felt that people where reaching towards the same goal and everyone wanted to perform the best, and even though you knew that someone has experience of a similar problem it was hard to know how to get in contact with that person. Here, personal motivation was predominantly mentioned as it was stressed that in order to acquire this information you had to put in a lot of efforts searching through databases. Therefore most respondents used the easiest way and asked the colleagues on the same site. Some respondents emphasised that it was likely that they sometimes settled for good-enough answers from someone they knew rather than contacting a new person that more likely would provide time with better information.

Noteworthy in this context is the value of sharing a communal language, in so far as of three of the sites (Brazil, France and Sweden) the respondents all discussed the importance of creating a communal project manager language that would enable better communication and transfer of knowledge. In the case of the Japanese site the operational manager as well as the project manager

respondents expressed the difficulty of not being as bilingual as the other sites. It is not as natural for a Japanese project manager to learn English, however some of them have started after experiencing difficulty in exchanging experiences with other sites. Significant is that some respondents from the Japanese site experience that as a consequence of the language barrier the belief in other sites is that the Japanese participant in for example a telephone conference cannot contribute and as a consequence sometimes ignored and overlooked, hence damaging the social relations.

## 6. Analysis and Discussion

*“Sharing knowledge creates better knowledge”*

However, owing to the empirical data of the Volvo Group case it must be stated that sharing knowledge only has the potential to create better knowledge, and for that potential to be realised a development of shared knowledge needs to be induced to create a process of knowledge exchange.

The findings of this study have, in line with previous studies (e.g. Argote & Ingram, 2000; Birkinshaw, 1999; Buckley & Carter, 1999; Davenport et al, 2001) confirmed the importance of creating, storing, distributing and applying knowledge, known as the four steps in the knowledge management value chain presented by Shin et al (2001). Owing to the understanding of knowledge and its influence related to firms’ performance and competitive advantage, the authors of this thesis argue in line with e.g. Bogner & Bansal (2007) and Jonsson (2012) that in order for knowledge to benefit the organisation it has to be applied and developed to generate new knowledge, a research area existing studies has failed to explain.

Building on this perception, in combination with an extensive literature review, a conceptual model proposing a fifth step in the acknowledge knowledge management value chain was presented (see figure 3.1) proposing that by enabling a reuse and development of knowledge a MNC could facilitate a process of knowledge exchange. The empirical findings confirmed this statement and stressed that knowledge is often transferred and stored, but is to a limited extent reused in an efficient manner. As expressed by Mårtensson (2000) there are limitations to using this static approach to knowledge management which is illustrated by the Volvo Group case study as the organisation have foremost focused on the storing of knowledge, but have to a limited extent enabled this knowledge to be used, inferring that the organisation have followed the stream of static knowledge management initiatives. As a result of this approach there are a number of available tools for storage and accessing knowledge, however the usefulness of these was

questioned at all sites. Connecting back to the quote of Manager I (see pp. 27), being representative for the common perception among the respondents; *“I have done too many white books without getting anything in return from other white books”*. This indicates that Volvo Group have failed in moving beyond the step of storage and therefore knowledge is not transferred, applied, utilised or developed, inferring the organisation repeatedly spending resources on knowledge management initiative without accruing the expected benefits.

An interesting observation made in this study was the common definition among all respondents concerning the characterisation of knowledge; they all stressed knowledge as being the capacity to do things, hence confirming the standpoint of the thesis that knowledge is not a static resource but rather a process where it is used. Furthermore the observation of the process of creating knowledge being interconnected with the day-to-day operation of running projects, giving individuals insights and new experience, gives the deduction that it is the individual, not the organisation, which creates the knowledge. Hence for the creation of knowledge to occur, the desire to learn and develop needs to be present and encouraged within the individual. In regards to global transfer of knowledge the respondents stressed a will to interact more with other sites, and thought that there was much to gain from exchanging knowledge with individuals with different backgrounds and experience. This is an example of the willingness of the different sites to contribute to Volvo Group, and aid in the development to improve the organisation, which is in line with Bartlett & Ghoshal (1989) where the sites want to become strategic partners. This consequently verifies the authors perception that MNCs must move beyond the static approaches of the knowledge management value chain in order to benefit from existing knowledge, hence endorsing the author’s conceptual model (see figure 3.1) of the importance of knowledge exchange in an international business context.

### **6.1 Facilitating the process of knowledge exchange within a MNC**

In regards to facilitating knowledge development and thereby in extension enabling knowledge exchange, research addressing intra-organisational relations was given attention owing to recent research (e.g. Easterby-Smith et al, 2008, Miesing et al, 2007 and Chen & Lovvorn, 2011) prompting the importance of the social context in regards to making use of transferred knowledge. The importance of intra-organisational relations, meaning social relations, social interaction and social networks, has foremost been argued as a facilitator for enabling knowledge transfer (e.g Argote & Ingram, 2000; Ciabushi, 2005; Kalling & Stythe, 2003). Initially this research focused on the four steps of the knowledge management value chain, hence knowledge creation, storage,

distribution and application. Owing to the perception of the importance of creating a process where knowledge continuously was created and exchanged within the organisation, a fifth step of knowledge development was added. In order to enable knowledge development, the authors of this thesis searched within existing literature to find equivalent prerequisites or factors, and discovered that previous research pointed towards intra-organisational relations. Consequently the factors concerning the other four steps were not considered to be prerequisite in the step of knowledge development. However by adopting a qualitative method this investigation was open for illuminations from the empirical observations, which prompted a realisation that some of the factors applicable to the other four steps additionally should be considered as prerequisite for the step of knowledge development.

Owing to the empirical data from the Volvo Group case this study relates to Minbaeva (2007) findings of social relations importance as a facilitator for knowledge, however builds on this by illustrating the importance of intra-organisational relations as a facilitator for knowledge exchange. In this case study it seems as by creating strong ties where social interaction and networks are created among colleagues globally trust to each other's competences and support is fostered. This is further in line with recent research within knowledge management literature stressing the importance of trust and confidence (e.g. Kalling & Styhre, 2003; Levin & Cross, 2004) as it results in a beneficial environment for exchanging knowledge. Following the ideas about the transnational corporation, creating relations among individuals is of greater importance in order to make each sites knowledge accessible for the organisation; a statement proved by the quote from one respondent *"There are no black holes of knowledge within Volvo Group. Somewhere in the organisation someone has experience or information regarding your problem"*.

In line with research opining that individuals' willingness to detach and absorb knowledge is connected to the level of social interaction (e.g. Miesing et al, 2007; Nahapiet & Ghoshal, 1998) the authors stress that this is of greater importance for MNCs owing to the fact that they are spread over geographically dispersed units. This argument is supported by the empirical finding that social relations is foremost created through face-to-face interactions as knowledge exchange is a more common activity within the project groups that interact and work together. In contrast to smaller firms active on a single market where the employees interact on a daily basis, MNCs have to work actively in order to create and maintain these relations. Consequently the empirical observations can confirm the authors' statement that the creation and maintenance of intra-organisational relations facilitates knowledge exchange is a crucial activity for a MNC in order to accumulate the benefits of being active in an international business context.

Building on the figure 3.1 it can consequently be stated that the model was accurate in regards to the importance of intra-organisational relations as a facilitator for knowledge development and by extension knowledge exchange. However, the findings based on the Volvo Group case infer that this influence moves beyond the facilitation of knowledge development and is an important prerequisite in order to enable organisations to develop the static approach of the knowledge management value chain and enable a process of knowledge exchange. Furthermore, the empirical observations inferred two additional prerequisites in regards to facilitating knowledge exchange within MNCs. The three observed prerequisites of 1) management involvement, 2) personal dedication and 3) intra-organisational relations lay foundation for a revised conceptual model presented in the end of this section (see figure 6.1). The empirical data suggest that these three prerequisites are interdependent and thus closely linked affecting each other. The following section will entail a deeper discussion on these three by exploring what the empirical data and existing literature suggests, what aspects need to be explored further, as well as the authors' own reflections on the matter resulting in a revised conceptual model (see figure 6.1).

### **6.1.1 The importance of management involvement**

The importance of prioritising management involvement in knowledge management activities is in line with previous studies (e.g. Fahey & Prusak, 1998), however, the empirical findings of the Volvo Group case contributes further to this research and stress that management involvement is a prerequisite for facilitating knowledge exchange within a MNC as it works as an originator for this process.

The case study of Volvo group illustrated that management involvement was a recurrent theme and many respondents returned to not only when discussing the need for encouraging an initial knowledge transfer but also to a larger extent when discussing a continuous knowledge development and exchange. An observation made was that a majority of the respondents communicated that the process of debriefing and reflecting needs be made better and improved in order for knowledge to be developed and by extension exchanged. The influence of debriefing in regards to knowledge management it is a research area that has been addressed to a limited extent. However, owing to the findings of this thesis that debriefing has the potential to further the process of knowledge exchange within organisations the importance of gaining more understanding on the topic is inferred.

As the respondents thought of utilising and adapting knowledge as a time-consuming activity it was implied that they considered whether or not operational management would support a large

allocation of time into this type of activity before engaging in it. This finding consequently infers that operational management must involve and prioritise these activities in order for the project managers to do the same. For knowledge to be developed and be a generator for new knowledge, operational management must communicate its importance on a continuous basis to assure that knowledge exchange merges into the work description and becomes natural in the performance of activities. This is in line with previous research (e.g. Osterloh & Frey, 2000) focusing on the importance of management involvement for successful knowledge transfer projects. However the case study of Volvo group contributes further stressing that it is a prerequisite in order for the organisation to facilitate a process of knowledge exchange. To know how to conduct this managerial involvement within MNCs more attention has to be put on the specifics of how to manage knowledge development, how to promote the benefits, an understanding that will be of great importance. Within the field of international business the motivational forces need be examined further, drawing on previous research (e.g. Herzberg et al, 1959; Ryan & Deci, 2000) but adapting it to the specific context of international markets.

Furthermore, the prerequisite of management involvement also concerns the pressure of cost awareness, as several respondents noted this had become a hinder in the execution of knowledge exchange within the MNC as it put restraints on accessing knowledge by restraining global collaboration. Building on the fact Volvo Group's previous static approach on knowledge has led to a situation where they have got stuck in the storage step it is of great importance that the organisation realises that in order to facilitate knowledge exchange the organisation must devote time and resource on a long-term basis. The authors of this thesis opine that an understanding among decision-makers that initial high costs will create long-term benefits. Hence an understanding that an allocation of time and cost will in time create a more efficient organisation, entailing that the operational management will feel supported by the strategic management and not fear repercussions if the current projects are taking more time than usual as a result of the integration of knowledge exchange into the work process. Hence even if the operational management have understood the importance of knowledge and communicates this to the project managers, it will be hard for knowledge management initiatives to gain ground as long as it is considered more important to be cost effective on a short term basis by the strategic management.

In summary, the importance of management involvement can be condensed into two actions; continuously promoting knowledge development and its benefits and accepting efforts and resources demanded in knowledge developing activities. These actions are in line with research focusing on leadership (e.g. Spender, 2008) stressing the importance of the leader to set the

agenda. However, the authors of this thesis further note that as the enthusiasm to engage is based on the individuals' willingness and abilities to devote time and efforts it consequently infers the importance of personal dedication.

### **6.1.2 The importance of personal dedication**

The second prerequisite address the importance of encouraging the employee to take the time to listen to what other sites have to offer in the form of proven knowledge and experience, in combination with the ability to question and develop this knowledge to the local context. The empirical data stress, in line with motivational theory (e.g. Herzber et al, 1959; Ryan & Deci, 2000), that personal motivation is a positivistic factor in enabling knowledge transfer. However, in regards to knowledge development this thesis further states that the significant aspect is rather personal dedication, meaning motivation, intention and understanding in connection to the process of exchanging knowledge with other sites. This personal dedication concerns the determination and choice to share knowledge with others, but also being willing to listen to others experience and advice. Personal dedication is related to motivational theory, however infer more then only motivation, it is also a reflection and devotion of time for adaption.

This definition adheres to the findings of the Volvo Group case study as it illustrates that if not accurate structures and methods are provided by the organisations individuals will not engage in knowledge transfer activities and hence knowledge exchange will not be facilitated. This finding is in line with Kalling & Styhre (2003) as they argue that the organisational factors of tools and methods are of importance in order to facilitate intra-organisational knowledge transfer. Owing to the fact that several respondents regarded the personal characteristics of being an outgoing person with a large desire to learn from others a determinant for knowledge exchange indicates that Volvo Group should provide structures for these types of processes rather than the current static approach of databases. It was communicated that the motivation to engage and adhere to others was often diminished since operational management did not actively encourage it. It was further stressed that in order to gain access to others knowledge the individuals must want for themselves. The empirical observations inferred that knowledge transfer is more likely to occur when the individual sees the benefits of the knowledge exchange. Often there often are the champions of knowledge management, enthusiasts' who think it is important for the organisation, but if the individuals who are working in the day-to-day operations and are supposed to implement it does not see the benefit of it most of the initiatives will be lost. This relates to Hislop (2009) findings regarding the individuals' incentives. Thus by focusing on knowledge exchange, this research

contributes further to the reasons behind individuals' willingness to transfer knowledge as it also results in a continuous process of knowledge exchange.

The Volvo Group case study illustrates that personal characteristic works as a facilitator for knowledge development in line with the empirical findings that showed upon the importance of a self-driven will in order to gain access to co-workers proven knowledge. Of importance to comment is that many managers stressed that the common way of gaining access to other sites proven knowledge was to contact this site directly, having the drive for taking personal action, the importance of personal deduction can be further confirmed. The observations indicate that it is in large dependent on the personality of the individual that sets the prerequisite for whether or not one is likely to engage, hence making it important to identify these traits in potential personnel during the recruitment phase. While conducting recruitment the assurance that the individual adheres to the Volvo Way culture as this emphasises the importance of knowledge exchange is of utmost importance.

There are several studies conducted on the topic of motivational aspects in regards to knowledge transfer however most are related to IT (e.g. Hendricks, 1999). While these can serve as a foundation a further development need be made to adapt the research to the process oriented approach instead of the static perspective of knowledge. Following the idea of communication and its benefits to the individuals, prompting a dedication based on motivation and personal reflection, which in the opinion of the authors of this thesis can enable and accelerate the process of knowledge exchange.

In summary, personal dedication involves motivation, understanding, determination, intention, engagement and attitude. Furthermore, due to the complex databases illustrated by the Volvo Group case it infers that in order to gain access to other sites proven knowledge personal dedication evolved as an important factor in order to promote managers to acquire knowledge. Consequently, personal dedication is of importance in the facilitation of creating intra-organisational relations, as this is where knowledge is distributed in the case of Volvo Group.

### **6.1.3 The importance of intra-organisational relations**

The conceptual model (figure 3.1) was created based on the revised literature inferring intra-organisational relations as an important factor in facilitating knowledge development and thereby knowledge exchange. This perception has been confirmed by the Volvo case study to an even stronger degree than expected, building on project managers' opinion that it is *the* defining aspect

when considering utilising and developing knowledge from other global sites. However the observations also indicate that in order for intra-organisational relations to be created and maintained it depends on the two above mentioned observations. Hence the utilisation of the intra-organisational relations to the purpose of developing and exchanging knowledge will not occur if there is not management involvement or personal dedication encouraging the individual to do so. Combined, these create a willingness to participate and devote time to a social network; the intra-organisational relations have been observed to be the largest reason behind the choice to utilise someone else's knowledge and experience. Furthermore the observation have been made that the intra-organisational relations are the determining factor for a continuous knowledge exchange process. The observation has been made within all sites that it is not about finding knowledge; it is about finding the person with the knowledge illustrated by the quote of manager F; *"It's not important to know, it's important to know who know"*. This can be connected back to the importance of the individual as a holder and creator of knowledge, yet again inferring in line with the transitional view, the importance of all sites as potential sources of strategic value.

As previously mentioned, all respondents emphasised the importance of social interaction, predominately this was the topic that everyone underlined. Building on the reasoning that if one have met a person and have a social relation one is more willing to share knowledge, as well as to absorb and implement that person's proven knowledge. This statement is in line with the recent research presented (e.g. Gupta & Govindarajan, 2000; Foss & Pedersen, 2004; Frost & Zhou, 2005; Minabaeva et al, 2003) and was used in order to construct the conceptual model. In that respect theory and empirical data concurred. It is of foremost important according to the empirical data to engage in the initial contact via face-to-face meetings in order to create these strong and trustworthy relationships, and by extension knowledge exchange. The base of this was, as communicated by many of the respondents, trust. The receiving individual had to have a preconception of the sending individual in order to believing it to be a credible and useful source for the knowledge to be used and further developed. This was communicated by the respondents to be subject to one knowing each other and having met before the transfer. The will to listen, use and develop knowledge was expressed by many to increase drastically if one had the source in the personal network. This relates to Inken & Tsang (2005) findings of networks as a key source to knowledge within MNCs, and this thesis consequently confirms the importance of facilitating the creation of these relations, and by extension also indicating the importance of intra-organisational relations.

Furthermore, an additional aspect was observed when discussing the matters of knowledge exchange with operational managers. A tendency towards a less positive attitude against what initiatives on furthering relations and exchange between sites can achieve was observed. All the respondents on project manager level were very positive towards creating closer relationships with other sites, more cross-cultural groups with discussions and exchanging experience and knowledge. This observation is in line with Lagerström (2001) whom stressed that joint projects across borders could be viewed as a method for increasing knowledge transfer. Owing to the quotation by Volvo Group's CEO Olof Persson (see pp. 3) the importance of fostering these types of global relationships are also of great importance in the view of strategic top management. The operational managers who are caught between these two groups have displayed another viewpoint. It was expressed that with the long distances, referencing to time difference, cultural differences, language barriers and costs associated with travelling, it would become a half-measure at best establishing the necessary global social networks. The arguments put forward by the operational managers are in line with previous research (e.g. Schlegelmilch & Chini, 2003) as factors that hinder knowledge transfer across borders; however this thesis cannot confirm this statement. Rather the thesis has observed, in line with Frost and Zhou (2005) whom stress the importance of integrative projects as a facilitator for knowledge transfer, that in those projects where individuals interact on a daily basis these factors are not relevant. Consequently the author's stress that by creating strong intra-organisational relations through social interaction and networks previously hindering factors becomes less influential. Hence, this thesis stresses the evident importance of creating intra-organisational relations in order to facilitate the process of knowledge exchange within MNCs.

Following the idea of Schlegelmilch & Chini (2003) it can be stated that national culture may initially function as a hinder in the process of knowledge exchange. This relates to the observations connected to the integration of the relatively newly acquired Japanese site into the Volvo Way indicated that there currently was a concern of the dominant nature of the national culture in Japan and whether or not the Volvo Way would be able to overcome this. An operational manager expressed that there is a large outspoken determination and willingness to participate in collaboration and become part of the Volvo Group to the same extent as other sites. In the opinion of an operational manager the French site was in the same predicament when they were first acquired, but after been given time to reflect and adapt the organisational culture of Volvo Group they became intimately connected to the internal network as a result of having numerous common projects and interaction performed on a daily basis with the Swedish site, Hence the strength of the organisational culture can be used as an enabler for knowledge

exchange, if given time the intra-organisational relations may overcome the barriers of knowledge transfer, such as those brought forward by Schegelmilch & Chini (2004).

In summary the authors of this thesis argue that instead of seeing intra-organisational relations as a factor that enables knowledge transfer it should be seen as generating factor in order to facilitate knowledge development and thereby in extension knowledge exchange. These intra-organisational relations have been observed in the Volvo Group case to be created in the day-to-day operations where knowledge is exchanged as a natural part of the work process. Building on Lagerström (2001) and Frost & Zhou (2005) findings, the authors of this thesis stress that continuous global interactions and constantly maintaining global collaboration and networks are an absolute prerequisite for creating more usage and development of knowledge.

#### **6.1.4 Revised conceptual model**

Owing to the Volvo Group case and the insights gained from the empirical data the analytical discussion infer that the conceptual model conducted based on the theoretical literature (see figure 3.1) needs to be revised into a new model in order for it to be representative for the context of knowledge exchange within MNCs. The empirical observations was in line with the conceptual model (see figure 3.1) in regards to the importance of intra-organisational relations in order to facilitate knowledge development, and hence by extension knowledge exchange. However, as the empirical data inferred observations in regards to additional factors of importance in order to generate a business environment that produces these relations, the model must be rectified where additional steps need be added. Below the revised conceptual model (see figure 6.1) and explanation of its structure will be provided.

Following the observations and findings in the Volvo Group case study it can be stressed that there is a need for 1) management involvement, 2) personal dedication, and 3) intra-organisational relations in order for a MNC to facilitate knowledge exchange in an international business context. The observations confirmed the importance of adding the fifth link of knowledge development, as this is in line with how the respondents express how they view the process of exchanging knowledge between global sites. The additional factors observed during the investigation is summarised below.

***Management involvement*** is the first prerequisite in order for MNCs to facilitate knowledge exchange. If knowledge is not considered a strategically important resource by management, knowledge transfer activities will not be promoted as something employees should engage in and

hence they will not and knowledge will therefore not be exchanged within the organisation. Regardless if top-management has understood the influential role of knowledge in regards to competitiveness and innovation it is still of importance that operational management believe in, promote it and to some extent also engage in it in order to communicate its value and benefits.

**Personal dedication** is the second prerequisite in order for MNCs to facilitate knowledge exchange. Individuals' must be willing to gain access to others proven knowledge in order for it to be transferred and potentially used to develop new knowledge. This type of personal motivation is furthered by an understanding of its benefits for the individual as a person, to understand how it would benefit the individual on a daily basis. It can further be stressed that within a MNC knowledge exists but the individual must actively seek it, entailing that the process also demands personal drive and dedication.

**Intra-organisational relations** are the third and last prerequisite in order for MNCs to facilitate knowledge exchange. Owing to the fact that people are more willing to not only detach but also absorb knowledge if they trust the person they are transferring knowledge with, the importance of creating intra-organisational relations within organisations is inferred. The empirical observations further indicated that these relations as created through face-to-face meetings and are based on trust. As MNCs operate on multiple markets they are exposed to difficulties in regards to creating relations across borders owing to the fact that individuals within the organisation only interact to a limited extent. Below the revised conceptual model depicts the statements stressed above.

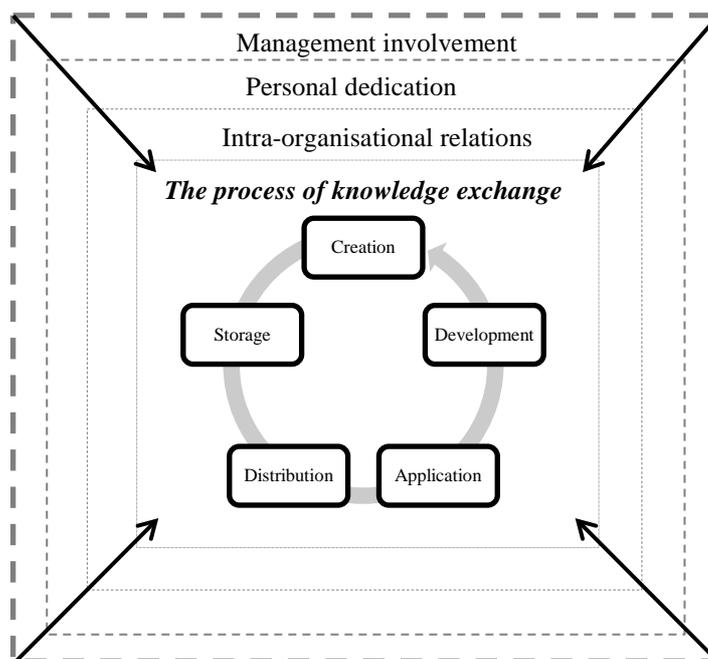


Figure 6.1; The process of knowledge exchange within MNCs  
Source: Own conceptualisation

As the model 6.1 depicts, the authors' stress, based on the Volvo Group case, that the process of knowledge exchange can only be facilitated if the organisation has strong intra-organisational relations where employees are willing make use of previously proven knowledge. It is further argued that in order for this to be achieved the individuals must understand the benefits of knowledge exchange to be willing to engage in the process and devote time to the activities. Here, the authors' argue that management must be involved and promote the facilitations of knowledge exchange in an international business context.

## 7. Conclusions

The aim of this thesis was to develop an understanding of how MNCs can benefit from and develop acquired knowledge – with special emphasis on the importance of intra-organisational relations. As a result of lacking previous research on knowledge exchange this thesis was able to reinterpret and re-evaluate existing literature on knowledge management in an international business context, therefore contributing to both fields of research. By adopting an intra-organisational perspective an understanding was achieved on how MNCs can facilitate knowledge exchange between geographically dispersed units building on the importance of social interaction.

A conceptual model was constructed based on the established knowledge management value chain by Shin et al (2001), which contain the four links of creation, storage, distribution, and application. The authors of this thesis recognised the importance of adding a fifth link, knowledge development, to reflect recent research's discussion concerning the need of utilising and developing knowledge within MNCs. Hence moving beyond the static approach to knowledge towards a process oriented model, and creating a conceptual model of the knowledge exchange process. Recent research indicates that for knowledge to be utilised and developed within an MNC intra-organisational relations, meaning social relations, social networks and social interaction, are of great importance as a facilitator for individuals' willingness to detach and make use of knowledge (e.g. Easterby-Smith et al, 2008; Gnywaji et al, 2009; Miesing et al, 2007). Hence intra-organisational relations were used as the facilitating factor for the fifth step of knowledge development, as this reflected the view of recent research.

The research questions, which guided the process of this thesis, have been answered. In regards to what enables knowledge transfer, knowledge utilisation and development of new knowledge within MNCs it was confirmed that intra-organisational relations was of evident importance. It was communicated by all respondents that to increase the willingness to use and develop

knowledge the social intra-organisational relations between individuals in the different sites of the MNC was most important. In regards to how the MNC can facilitate the process of exchange additional factors enabling this was found beyond the intra-organisational relations. To enable a knowledge exchange process co-workers within a MNC have to be encouraged by managerial involvement, personal dedication and intra-organisational relations. The empirical observations implied an inter-dependent relationship between these three facilitators that all influenced the knowledge exchange process.

As the concept of knowledge exchange was defined initially in this thesis based on the theoretical pre-understanding this definition have been redefined following the observations made in the case study, and henceforth the process of knowledge exchange is defined as:

*“The process of facilitating a continuous process of creating, storing, distributing, applying and developing knowledge within an organisation, through the encouragement of management involvement, personal dedication and intra-organisational relations.”*

The observations in the case study partially supported the initial conceptual model and established that intra-organisational relations were of great importance concerning facilitating knowledge development. However two additional aspects emerged as complementary facilitators, the importance of management involvement and personal dedication. The importance of management involvement concerned promoting and enabling activities connected to knowledge exchange as well as communicating the benefits of participating for both the individual and the organisation. The importance of personal dedication concerned the individuals’ willingness to participate in knowledge exchange by sending, using, and developing knowledge. This willingness is based in a personal motivation, intention, reflection, and understanding, which form a personal dedication to the knowledge exchange process.

## **7.1 Contributions and future research**

The results implicate that in order for an organisation to facilitate knowledge exchange it is important to create strong intra-organisational relations; where employees know and trust each other, as this increases the possibility for individuals to develop other employees’ proven knowledge into their own context and hence generate new knowledge for the organisation. The importance of assuring application and development of knowledge as argued in the introduction, and in line with Bogner & Bansal (2007) and Jonsson (2012), can be confirmed in this thesis. Furthermore, when linking this with a transnational view of the MNC (Bartlett & Ghoshal,

1989) management involvement, personal dedication, and intra-organisational relations was found crucial to enable a process of knowledge exchange. By determining these facilitators this thesis contributes to existing literature within knowledge management by providing insights on how organisations can increase performance through knowledge exchange. Owing to the fact that knowledge management research predominantly has been studied on a national basis and mainly through quantitative methods the scope of this study consequently contributes with valuable insights adding to the research of managing knowledge in an international business context. By bridging the two research fields of knowledge management and international business this study contributes by answering the recent call for more research on the challenges and peculiarities with sharing knowledge across national borders (e.g. Jonsson, 2007; Lagerström & Andersson, 2003; Persson, 2006).

The results indicate that the challenges for MNCs are to overcome the barriers of exchanging knowledge across borders. This thesis contributes to the stream of international business literature by pinpointing three facilitators enabling this process. Owing to the fact that many MNCs currently are addressing the importance of knowledge, knowledge management initiatives will become more frequent within these organisations. This study provides valuable insights and an understanding of how MNCs can facilitate more than just knowledge transfer across borders, but also how to assure that this knowledge is used, develop and exchanged within the organisations.

With these contributions a number of new research questions have been derived as a consequence in this study. Having identified the facilitators the next step for research is test a large-scale implementation to discover appropriate methods and tools. Within the stream of international business the issue of motivation have not been investigated thoroughly in the global context. As this thesis expanded motivational factors to also include personal reflection and understanding the concept of personal dedication could be an interesting subject for future research.

Furthermore the distinction between operational management and project managers that emerged during this study would be interesting to investigate, finding reasons behind this divergent opinions may shed more light on how to succeed in future efforts of knowledge exchange. Likewise a larger study applying the process of knowledge exchange model in the context of the up-coming large generational shift within MNCs would be curious. As the largest generations are heading into retirement this represents a large threat to MNCs as the knowledge that have been accrued by these individuals risk being lost and hurt the competitive advantage.

## 7.2 Managerial implications

Since this thesis conceptual model has its foundation in a well-known and often used model, the knowledge management value chain, this simplifies the adaption and usage of the process of knowledge exchange model for managers. In previous knowledge management initiatives the focus have often been on securing the knowledge by storing it, in line with the static approach to knowledge, instead of how to make use of and develop knowledge according to the process oriented perspective. By building the foundation on the latter approach this thesis aids managers in being able to take the next step of knowledge management by providing insights on how to achieve the desired output of a higher exchange in an international business context.

The managerial contribution towards creating a favourable environment for knowledge exchange is, as presented in the revised conceptual model (see figure 6.1), of utmost importance in an international environment. The application and utilisation of knowledge have been shown to be dependent on managerial support and indicated what type of management actions are necessary to promote such activities. Respondents commonly requested more communication concerning the benefits on knowledge transfer to both the organisation and the individual, as well as operational management displaying the importance of these activities by allocating time to prioritise the process. A prerequisite for successful knowledge exchange is thus the leadership of individuals in order to favour the organisation as a whole. Hence this thesis contributed by providing insights on the matter of how to utilise and develop knowledge within a MNCs international context.

## 8. Bibliography

- Alvesson, M., & Deetz, S. (2000). *Doing critical management research*. London: Sage .
- Alvesson, M., & Sköldeberg, K. (1994). *Tolkning och reflektion: vetenskapsfilosofi och kvalitativ metod*. Lund Studentlitteratur.
- Ambos, B., & Schlegelmilch, B. (2005). In Search for Global Advantage. *European Business Forum*, 21, 23-24.
- Andersson, M. (2003). *Creating and sharing subsidiary knowledge within multinational corporations*. Uppsala: Uppsalatryckeriet: Doctoral thesis: 97/Department of Business Studies.
- Argote, L., & Ingram, P. (2000). Knowledge Transfer: A Basis for Competitive Advantage in Firms. *Organizational Behaviour and Human Decision Processes*, 82(1), 150-169.
- Argote, L., McEvily, B., & Reagans, R. (2003). Managing knowledge in organizations: an integrative framework and review of emerging themes. *Management Science*, 49, 571-582.
- Argyris, C. (1994). Initiating Change that Perserves. *Journal of Public Administration Research and Theory: J-Part*, 4(3), 343-355.
- Bartlett, C. A., & Ghoshal, S. (1989). *Managing Across Borders: The Transnational Solution*. Boston, MA: Harvard Business School Press.
- Birkinshaw, J. (1999). The determinants and consequences of subsidiary initiative in multinational corporations. *Entrepreneurship Theory and Practice*, 24(1), 11-38.
- Birkinshaw, J., Brannen, M. Y., & Tung, R. L. (2011). From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in international business research. . *Journal of International Business Studies*, (42) p. 5.
- Björkman, I., Barner-Rasmussen, W., & Li, L. (2004). Managing knowledge transfer in MNCs: the impact of headquarter control mechanisms. *Journal of International Business Studies*, 35(5), 443-455.
- Bogner, C. W., & Bansal, P. (2007). Knowledge Management as the Basis of Sustained High Performance. *Journal of Management Studies*, 44(1), 165-188.
- Bryman, A., & Bell, E. (2011). *Business Research Methods*. Oxford: Oxford University Press.
- Buckley, P., & Carter, M. (1999). Managing cross-border complementary knowledge. *International Studies of Management & Organisation*, 29(1), 80-104.
- Chen, J.-S., & Lovvorn, S. A. (2011). The speed of knowledge transfer within multinational enterprises: the role of social capital. *International Journal of Commerce and Management*, 21(1), 46-62.
- Cheng, J., Henisz, W., Roth, K., & Swaminathan, A. (2009). Advancing interdisciplinary research in the field of international business: Prospects, issues and challenges. *Journal of International Business Studies*, 40(7):1070-1074.

- Chini, C. T. (2004). *Effective Knowledge Transfer in Multinational Corporations*. New York: Palgrave Macmillian.
- Ciabuschi, F. (2005). IT Systems' Contribution to Knowledge Sharing in MNCs. A Lesson from Siemens AG. *Knowledge Management Research and Practice*, 3(2), 87-96.
- Corporate Presentation, V. (2013). VGIPM. Internal Document.
- Davenport, T., & Prusak, L. (1998). *Working knowledge: how organisations manage what they know*. Boston: Harvard Business School.
- Davenport, T., DeLong, D., & Jacobsson, A. (2001). Data to knowledge to results: building analytical capability. *California Management Review*, 43(2), 117-138.
- DeFillippi, R., & Arthur, M. (1998). Paradox in Project Based Enterprise: The case of Filmmaking. *California Management Review*, 40(2), 125-139.
- Denzin, N., & Lincoln, Y. (1998). *Collecting and interpreting qualitative materials*. London: Sage.
- Doz, Y. (2011). Qualitative research for international business. *Journal of International Business Studies*, (42) p. 582-590.
- Duan, Y., Wanyan, N., & Coakes, E. (2010). Identifying key factors affecting transnational knowledge transfer. *Information and Management*, 356-363.
- Dubois, A., & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, 55(7):553-560.
- Dyer, J., & Wilkins, A. (1991). Better Stories, Not Better Constructs, To Generate Better Theory: A Rejoinder to Eisenhardt. *Academy of Management Review*, 16 (3) 613-619.
- Easterby-Smith, M., Lyles, A. M., & Tsang, W. E. (2008). Inter-Organisational Knowledge transfer: current themes and future prospects. *Journal of Management Studies*, 45(4), 677-690.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (2004). *Management Research: An Introduction*. London: Sage.
- Eisenhardt, K. (1989). Building theory from case study research . *Academy of Management Review*, 14(4):532-550.
- Eneroth, K. (1997). *Strategi och kompetensdynamik – en studie av Axis Communication*. Lund: Lund Univ. Press.
- Fahey, L., & Prusak, L. (1998). The Eleven Deadliest Sins of Knowledge Mangement . *California Management Review*, 265-276.
- Forsgren, M. (2004). The Use of Network Theory in MNC Research . In V. Mahnke, & T. Pedersen, *Knowledge Flows, Governance and the Multinational Enterprise: Frontiers in International Management Research* (pp. p.18-37). Palgrave Macmillian.

- Foss, J. N. (2006). Knowledge and Organization in the Theory of the Multinational Corporations: Some fundamental issues. *Journal of Management & Governanace*, 10(1), 3-20.
- Foss, J. N., & Pedersen, T. (2004). Organizing knowledge processes in the multinational corporation: an introduction. *Journal of International Business Studies*, 35(5), 340-349.
- Frost, C., & Zhou, T. (2005). R&D co-practice and "reverse" knowledge integration in multinational firms. *Journal of International Business Studies*, 676-687.
- Gerhardi, S. (2000). Practice Based Theorizing on Learning and Knowing in Organizations. *Organization*, 7(2), 211-223.
- Ghuri, P., & Grønhaug, K. (2002). *Research methods in business studies: a practical guide*. Harlow: Financial Times Prentice Hall.
- Ghoshal, S., Korine, H., & Szulanski, G. (1994). Interunit communication in multinational corporations. *Management Science*, 40, 96-110.
- Gnywaji, R., Singal, M., & Mu, S. (2009). Knowledge ties among subsidiaries in MNCs: A multi-level conceptual model. *Journal of International Management*, 15, 387-400.
- Gooderham, P. N. (2007). Enhancing knowledge transfer in multinational corporations: a dynamic capabilities driven mode. *Knowledge Management Research & Practice*, 5, 34-43.
- Gourlay, S. (2006). Conceptualizing knowledge creation: A critique of Nonaka's theory. *Journal of Management Studies*, 43(7), 1415-1436.
- Granovetter, S. M. (1973). The strenght of weak ties. *American Journal of Sociology*, 7(6), 1360-1380.
- Grant, M. R. (1996). Prospering in Dynamically-Competitive Environments: Orgnizational Capability as Knowledge Integration. *Organizational Science Vol. 7 (4)*, 375-387.
- Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21, 473-496.
- Hansen, M., & Lovas, B. (2004). How do multinational companies leverage technological cometenecies? Moving from sing to interdependent explanations. *Strategic Management Jousnal*, 25, 801-822.
- Hedlund, G. (1994). A model of knowledge managment and the n-form corporation. *Strategic Managment Journal 15*, 73-90.
- Hendricks, P. (1999). Why Share Knowledge? The Influence of ICT on Motivation for Knowledge Sharing. *Knowledge and Process Management*, 6(2), 91-100.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *Motivation to work*, 2nd ed. New York: Wiley.
- Hislop, D. (2009). *Knowledge Management in organization*. Oxford: Oxford Univeristy Press.
- Holm, U., & Sharma, D. (2006). Subsidiary marketing knowledge and strategic development of the multinational corporation. *Journal of Interntaional Management*, 12, 47-66.

- Husted, K., & Michailova, S. (2002). Diagnosing and fighting knowledge-sharing hostility. *Organizational Dynamics*, 31(1), 60-73.
- Inkpen, C. A., & Tsang, W. E. (2005). Social capital, networks, and knowledge transfer. *The Academy of Management Review*, 30(5), 146-165.
- Ipe, M. (2003). Knowledge Sharing in Organizations: A Conceptual Framework. *Human Resource Development Review*(2), 337-361.
- Ipert, O. (2007). Towards a Geography of Knowledge Creation: The Ambivalences between 'Knowledge as an Object' and 'Knowing in Practice'. *Regional Studies Vol. 41 (1)*, 103-114.
- Jensen, R., & Szulanski, G. (2004). Stickiness and the adaption of organizational practices in cross-border knowledge transfers. *Journal of International Business Studies*, 35(6), 508-523.
- Johanson, J., & Vahlne, J. (1977). The Internationalization Process of the Firm - a Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, pp.23-32.
- Jonsson, A. (2007). *Knowledge Sharing Across Borders - A Study in the IKEA World*. Lund: Lund Business Press.
- Jonsson, A. (2012). *Kunskapsöverföring & Knowledge management*. Malmö: Liber AB.
- Jonsson, A., & Tell, F. (2013). Knowledge management. In L. A. Strannegård, *Management* (pp. 75-98). Lund: Studentlitteratur.
- Kalling, T. (2003). Knowledge management and the occasional links with performance. *Journal of Knowledge Management*, 7(3), 67-81.
- Kalling, T., & Styrhe, A. (2003). *Knowledge sharing in organizations*. Malmö: Liber.
- Kogut, B., & Zander, U. (1993). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24(4), 625-645.
- Kogut, B., & Zander, U. (1996). What Do Firms Do? Coordination, Identity and, Learning. *Organizational Science*, 7(5), 502-518.
- Lagerström, K. (2001). Knowledge flow in MNCs through cross-border and cross-functional projects. In H. Håkansson, & J. Johansson, *Business Network Learning* (pp. 206-225). Amsterdam: Oxford: Pergamon.
- Lagerström, K., & Andersson, M. (2003). Creating and sharing knowledge within a transnational team - the development of a global business system. *Journal of World Business*, 38, 85-95.
- Levin, Z., & Cross, R. (2004). The Strengths of Weak Ties You Can Trust: The Mediating Role of Trust in Effective Knowledge Transfer. *Management Science*, 50(11), 1477-1490.
- Machlup, F. (1980). *Knowledge: Its creation, distribution, and economic significance. Vol. 1: Knowledge and knowledge production*. Princeton: NJ: Princeton.

- March, G. J. (1991). Exploration and Exploitation in Organizational Learning. *Organizational Science*, 2(1), 71-87.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Miesing, P., Kriger, M., & Slough, N. (2007). Towards a model of effective knowledge transfer within transnationals: The case of Chinese foreign invested enterprises. *The Journal of Technology Transfer*, 32(1), 109-122.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis: an expanded sourcebook*. Thousand Oaks, CA: Sage publications.
- Minabaeva, D., Pedersen, T., Björkman, I., Fey, C., & Park, H. (2003). MNC knowledge transfer, subsidiary absorptive capacity, and HRM. *Journal of International Business Studies*, 34, 586-599.
- Minabeava, B. D. (2007). Knowledge transfer in multinational corporations. *Management International Review*, 47(4), 567-593.
- Mårtensson, M. (2000). A Critical Review of Knowledge Management as a Management Tool. *Journal of Knowledge Management*, 204-216.
- Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review*, 23(2), 242-266.
- Newell, S., & Swan, J. (2000). Trust and inter-organizational networking. *Human Relations*, 5, 1287-1328.
- Newell, S., Robertson, H., Scarbrough, & Swan, J. (2009). *Managing knowledge work and innovation*. Basingstoke: Palgrave MacMillan.
- Nevis, E., DiBella, A., & Gould, J. (1995). Understanding organisations as learning systems. *Sloan Management Review*, Winter, 73-85.
- Nohira, N., & Ghoshal, S. (1997). *The differentiated network. Organizing Multinational Corporations for Value Creation*. San Fransisco: Jossey-Bass Inc. Publishers.
- Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organizational Science Vol 5 (1)*, 14-37.
- Nonaka, I., & Takeuchi. (1995). *The Knowledge creating company: How japeese companies create the dynamics of innovation*. New York: Oxford Univeristy Press.
- Olivier, C. (1990). Determinants of Inter-organizational Relationships: Integration and Future Directions. *The Academy of Management Review*, 15(2), 34-43.
- Osterloh, M., & Frey, S. (2000). Motivation, Knowledge Transfer, and Organisational Forms. *Organizational Science*, 11(5), 538-550.
- Persson, M. (2006). *Unpacking the flow: Knowledge transfer in MNCs*. Uppsala Universitetet: Doctoral thesis: nr 118/Företagsekonomiska institutionen.

- Pratt, M. (2009). For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research. *Academy of Management Journal*, 52(5):856-862.
- Prusak, L. (2010). Preface. In F. Leistner, *Mastering organizational knowledge flow: How to make knowledge sharing work* (p. XV). Hoboken, NJ: Wiley.
- Reagans, R., & McEvily, B. (2003). Network Structure and Knowledge Transfer: The Effects of Cohesion and Range . *Administrative Science Quarterly*, 48(2), 240-267.
- Rosen, B., Furst, S., & Blackburn, R. (2007). Overcoming Barriers to Knowledge Sharing in Virtual Teams. *Organisational Dynamics*, 36(6), 259-273.
- Ryan, R., & Deci, E. (2000). Intrinsic and Extrinsic Motivations; Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54-67.
- Schlegelmilch, B. B., & Chini, C. T. (2003). Knowledge transfer between marketing functions in multinational companies: a conceptual model. *International Business Review*, 12(2), 215-232.
- Shin, M., Holden, T., & Schmidt, A. R. (2001). From knowledge theory to management practice: towards an integrated approach. *Information Processing and Management* 37, 335-355.
- Silverman, D. (2006). *Interpreting qualitative data – methods for analysing talk, text and interaction*. 3 ed. . London: Sage.
- Spender, J. (2008). Organisational learning and knowledge management: Whence and whither? *Management Learning*, 159-176.
- Spender, J.-C. (1996). Organizational knowledge, learning and memory: three concepts in search of a theory. *Journal of Organizational Change Management*, 9(1), 63-78.
- Strati, A. (2007). Sensible Knowledge and Practice-based Learning. *Management Learning*, 38(1), 61-77.
- Styrhe, A. (2003). *Understanding knowledge management: Critical and postmodern perspectives*. Malmö: Liber ekonomi.
- Subramaniam, M., & Venkatraman, N. (2001). Determinants of transnational new product development capability: testing the influence of transferring and deploy tacit overseas knowledge. *Strategic Management Journal*, 22, 359-378.
- Sumelius, J., & Sarala, R. (2008). Knowledge Development in MNC Subsidiaries: The Influence of MNC Internal and External Knowledge and Control Mechanisms. *Thunderbird International Business Review*, 50(4), 245-258.
- Szulanski, G. (1996). Internal Stickiness: Impediments to the Transfer of Best Practice Within the Firm. *Strategic Management Journal*, 17, 27-43.
- Taylor, S., & Bogdan, R. (1998). *Introduction to qualitative research methods: the search for meanings*. 2nd Edition. New York: Wiley, cop.

- Tsai, W. (2011). Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance. *The Academy of Management Journal*, 44(5), 996-1004.
- Tsoukas, H., & Vladimirou, E. (2001). What is organizational knowledge? *Journal of management Studies*, 38(7), 973-993.
- Van Mannen, J. (1979). Reclaiming qualitative methods for organizational research: A preface. *Administrative Science Quarterly*, 24(4) 520-526 .
- Wang, S., & Noe, A. R. (2010). Knowledge Sharing: A review and directions for future research. *Human Resource Management*(10), 115-131.
- Volvo Group. (2013, 04 06). *About Us: Volvo Group*. Retrieved from [www.volvogroup.com](http://www.volvogroup.com)
- Yin, R. (1994). Discovering the Future of the Case Study. *Evaluation Practice*, 15 (3) 283-290.
- Yin, R. (2003). *Case study research: design and methods, 3 ed* . Thousand Oaks: Sage Publications .
- Zahara, A., & Gerard, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185-203.
- Zander, U., & Kogut, B. (1995). Knowledge and the Speed of the Transfer and Imitations of Organizational Capabilities: An empirical Test. *Organizational Science*, 6(2), 76-92.

## 9. Appendix

### Overview of respondents and interviews

Respondent (23)	Site	Interview method	Date	Duration (approx. 1050 min in total)
Manager A	Sweden	Face-to-Face meeting English	April 24, 2013	75 min Recorder used
Manager B	Sweden	Face-to-Face meeting English	April 25, 2013	65 min Recorder used
Manager C	France	Online telephone meeting English	May 2, 2013	45 min Recorder used
Manager D	France	Online telephone meeting English	May 2, 2013	35 min Recorder used
Manager E	Sweden	Face-to-Face meeting Swedish	May 3, 2013	50 min Recorder used
Manager F	Brazil	Online telephone meeting English	May 3, 2013	45 min Recorder used
Manager G	Sweden	Face-to-Face meeting Swedish	May 6, 2013	65 min Recorder used
Manager H	Sweden	Face-to-Face meeting Swedish	May 6, 2013	50 min Recorder used
Manager I	Sweden	Face-to-Face meeting Swedish	May 6, 2013	55 min Recorder used
Manager J	France	Online telephone meeting English	May 6, 2013	40 min Recorder used
Manager K	Sweden	Face-to-Face meeting Swedish	May 6, 2013	50 min Recorder used
Manager L	Sweden	Face-to-Face meeting English	May 7, 2013	35 min Recorder used
Manager M	Sweden	Face-to-Face meeting Swedish	May 7, 2013	40 min Recorder used
Manager N	Brazil	Online telephone meeting	May 7, 2013	55 min

		English		Recorder used
Manager O	Sweden	Face-to-Face meeting Swedish	May 8, 2013	30 min Recorder used
Manager P	Sweden	Face-to-Face meeting Swedish	May 8, 2013	45 min Recorder used
Manager Q	Sweden	Face-to-Face meeting Swedish	May 8, 2013	30 min Recorder used
Manager R	Brazil	Online telephone meeting English	May 8, 2013	60 min Recorder used
Manager S	Japan	Face-to-Face meeting English	May 13, 2013	35 min Recorder used
Manager T	Japan	Face-to-Face meeting English	May 13, 2013	30 min Recorder used
Manager U	Japan	Face-to-Face meeting English	May 13, 2013	35 min Recorder used
Manager V	Japan	Face-to-Face meeting English	May 13, 2013	30 min Recorder used
Manager X	Japan	Face-to-Face meeting English	May 13, 2013	50 min Recorder used

## **Interview guide**

### Respondent background

- Please provide a brief background on your career - previous and at VG.
- What is Volvo for you?
- What is your opinion on the Volvo Way, what does it mean to you?

### Knowledge Creation

- What is knowledge to you?
- In what ways is knowledge treated as a strategically important resource?

### Knowledge Storage

- What tools for managing knowledge is available in your site?
- What alternative methods could be applied?
- How and where do you store proven knowledge?
- How do you gain access to important knowledge created by your site/other sites? Good/bad?

### Knowledge distribution

- What is knowledge transfer to you?
- In what way do you feel that Volvo supports knowledge transfer between global sites?
- What is your experience of exchanging experience and information with Project Managers from other sites?
- In what way do channels for transferring knowledge function today?
- How would you prefer to transfer experiences and information with other Project Managers?

### Knowledge application

- How often do you use other co-workers knowledge in your daily work?
- When have you used knowledge received from other sites? Good/bad?
- What would enable you to use other sites proven knowledge? (best examples)
- What in your opinion would motivate fellow Project Managers to use other sites proven knowledge?
- Have you applied other sites' best examples in your site?

### Knowledge development

- How do you use other sites proven knowledge? In what way have it been useful?
- What would motivate you to further make use of proven knowledge?
- If you knew that another site had knowledge that would help solve a problem area in your site. What would enable you to evolve this to the context of your site? Does the organisation facilitate this today?
- Suggestions for future improvements?