UNIVERSITY OF GOTHENBURG
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Master Degree Project in International Business and Trade

Transnational Replication

A case study of Volvo Car Corporation

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EXECUTIVE SUMMARY

Replications of organizational practices and routines are used by many MNCs as an efficient strategy for growing economies of scale and improving brand recognition. When replicating on international levels, i.e. from one market to another, it is evident that there is also a need to adapt to local markets. Researchers have argued for the need to balance global integration with local responsiveness, in order for firms to be viewed as transnational. However, little research has been made on how the transnational solution applies to international replications. Therefore, the purpose of this research has been to study how international replications can be adapted in order to increase their local responsiveness and become more transnational. The research has shed light on this matter by intending to answer the following research question:

How can MNCs adapt international replications in order for them to become transnational?

In order to achieve the purpose of the research, a qualitative case study was made of the Swedish automotive firm Volvo Car Corporation, and their local Malaysian subsidiary, Volvo Car Malaysia. Qualitative interviews were carried out with members from both the central unit in Sweden as well as the Malaysian subsidiary. The conduction of the research took place while being present in the Malaysian sales office.

The theoretical framework of the research is mainly based around literature on replication strategies, as well as literature on transnational solutions. Replication strategies are based on a two-stage model, including phases of exploration and exploitation. The exploration stage includes developing the format for replication known as the Arrow core, which is gained through experiential learning achieved by a central unit that represent all the practices and activities developed in order to support the replication. Eventually, templates are created and used for replication. Since this strategic viewpoint is mainly developed around firms on national levels, this becomes challenged by theories on international levels, including the need to adapt and become locally responsive. Hence, theories are further discussed on transnational solutions, where global integrations are in need to be balanced with local responsiveness. In order to do so, MNCs need to view their subsidiaries as strategic partners, with differentiated roles and responsibilities and where each subsidiary is an individual contributor to knowledge. In order to

achieve this, efforts have to be put into knowledge and communication flows, including the sharing of experiential learnings, where changes also need to be made to individual's mind-sets and attitudes. Once this is done, subsidiaries are able to be viewed as strategic partners by taking on higher decision-making roles.

The results from the empirical data showed that, from a transnational viewpoint, Volvo lacks in their knowledge and communication flows when replicating internationally. Despite allowing for certain local adaptations to be made of their international replications, it is evident that the company does not fully take local responsiveness into consideration. The company has ruled out experiential learnings to be shared from subsidiaries back to headquarters in order to become locally responsive. Also, they have not invested fully in their internal communication. This has led to difficulties within the replications, where the approach taken by Volvo's central unit has not been able to be defined for international replications on their Malaysian market.

Therefore, the main findings in the case of Volvo shows that experiential learnings need to be shared back to the headquarters, as well as between subsidiaries. Such learnings need to be applied to the exploration phase of the replication strategy and in the development of the Arrow core in order for the international replication to become transnational. Moreover, internal communication proves to be important in order to create the right mind-sets of the local individuals during replications. This will increase the knowledge and understandings of individuals, which is essential in order for the international replication to properly balance integration with responsiveness. Hence, the research provides recommendations for Volvo to develop global learning systems where experiential learnings and knowledge from replications are shared from subsidiaries back to headquarters, and to improve their internal communication.

In conclusion, knowledge and communication are crucial for the adaptation of international replication, where adaptations are needed to be made in the exploration phase in order for international replications to become transnational. Also, replications need to be properly communicated internally. The research also gives managerial implications for future research.

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1 INTRODUCTION

In a global world, the importance of gaining economies of scale is viewed as crucial for multinational corporations and their success (March, 1991). One method for gaining economies of scale is through the replication of organizational practices and routines. This means to re-use practices and routines from one organizational unit to another, similar to the original practices (e.g. Friesl & Larty, 2013; Jensen & Szulanski, 2004; Winter & Szulanski, 2001). Its focus on the process of conducting specific practices (e.g. Baden-Fuller & Winter, 2005; Nelson & Winter, 1982; Friesl & Larty, 2013) is what differentiates it from the normal standardizations of solutions (Buzzell, 1968).

Re-using, or replicating, organizational practices in different markets is considered very important for MNCs to leverage on knowledge in order to gain competitive advantage (Jensen & Szulanski, 2004). Replications of fixed formats and practices are thus viewed as efficient in order to gain economies of scale and to improve brand recognition in markets, and have therefore been viewed as a strategy for growth (Winter & Szulanski, 2001). This also makes replicating important for MNCs when aiming to grow on international markets. Jonsson and Foss (2011) discuss this in their study of IKEA, where replications are also used as a strategy when internationalizing. However, replicating on international levels has shown to be more complex and difficult. Jonsson and Foss (2011) conclude that such replications are prone to local adaptation in order to become more flexible in their replications, and that there exists a need for a combination between replication and adaptation. This opens up the need for further understanding of how such adaptation can be made.

In order to successfully benefit from strategies on international levels, researchers do argue that global strategies need to be traded off against benefits from local responsiveness (e.g. Bartlett & Ghoshal, 1989; Nohria & Ghoshal, 1997). Also, local actors will accept assets more easily if they are adapted to work within existing local market frameworks (Jensen & Szulanski, 2004). Bartlett and Ghoshal (1989) develop the transnational approach, in which MNCs both manage to build global operations networks while still adapting in order to respond to local market preferences and thus, balance global integration with local responsiveness. Important aspects of

global strategies therefore include industries and countries taking on local responsiveness in terms of product offerings, services etc. (Bartlett & Ghoshal, 1989; Pralahad & Doz, 1987).

However, despite acknowledgements on the importance of replications (Winter & Szulanski, 2001), and the need for local responsiveness (Bartlett & Ghoshal, 1989), little research has been made on how firms can successfully adapt replications on an international level in order for them to become more locally responsive, and how the transnational integration-responsiveness approach can be applied to international replications, i.e. replications that are made from one market to another. It is evident that the literature on replication used as a strategy (Winter & Szulanski, 2001) does not include discussions regarding replication as a strategy in relation to adaptation and local responsiveness. Here, replication has often been viewed separately from these aspects, where adaptation and responsiveness are viewed as somewhat non-existent and the main idea is that no adaptations should be made (Winter & Szulanski, 2001). Moreover, the replication as strategy literature mainly focuses on firms on national levels (exceptions to a certain extent are exclusive studies by Szulanski and Jensen (2006) and Jensen and Szulanski (2007) on Mail Boxes Etc. and Rank Xerox respectively). Therefore, it is clear that there is a need for further understanding of replications as strategy on an international level. However, this area, and in particular how such adaptations can be made, has yet to be theoretically explored to any larger extent.

According to Jonsson and Foss (2011), there is a lack of research that explicitly addresses international replicators in terms of how they build a format for replication and adapt it to local environments. International replications are known to have taken place in practice. For instance, large firms such as McDonalds (Watson, 1997), IKEA (Jonsson & Foss, 2011) and Starbucks (Schultz & Yang, 1997) are examples of firms that replicate practices on an international level. Yet, despite the existence of this empirical phenomena, international replications have not been discussed in relation to the transnational approach to any further extent. This is important to take into account, since it is necessary for the international management literature to study *"[…] international replicators in a systematic way, including detailing the mechanisms by which such replicators balance the need for global integration with local responsiveness"* (Jonsson & Foss, 2011). Thus, this creates a gap in the study of replication, where there exists a need to develop an

understanding of how international replications can adapt in order to become more transnational, and therefore opens up opportunities for new research within this field.

1.1 RESEARCH QUESTION

As the problem discussion shows that there is a research gap in the literature on replication in relation to local responsiveness and the transnational solution, the intention of this study is therefore to answer the following question:

How can MNCs adapt international replications in order for them to become transnational?

1.2 PURPOSE OF THE THESIS

Based on the research question, the aim of this thesis is to contribute to the existing literature on replication, by adding literature and argumentations on local responsiveness and the transnational solution. This is an important contribution to the replication literature, since it provides with an increased understanding of the need for local responsiveness, and how this plays an important role in international replication. Hence, the purpose if this paper is to study how international replications can be adapted in order to increase their local responsiveness and become more transnational. This will be explored through a case study of Volvo Car Corporation, where a situational analysis will be carried out.

1.3 CASE STUDY – VOLVO CAR CORPORATION

In order to achieve the aim and purpose, a case study of the Swedish automotive company, Volvo Car Corporation (VCC), will be conducted. As a global company and manufacturer of cars, with several subsidiaries established in markets around the world, Volvo Car Corporation is a very suitable case company for this thesis. For Volvo, much of its strategies is concentrated on safety. This is also incorporated in their year 2020 vision, where by 2020 no one should be killed or seriously injured in a new Volvo car. The company considers it to be highly important to maintain their vision globally, where it has the potential of becoming implementable in several of the company's bigger markets, as well as the home market. In relation to this, Volvo has over time replicated various projects in their different markets. However, the company has been finding it more difficult for such projects to become successful in their smaller, more distant

markets. This is mainly due to local market differences in relation to the replications. One of these markets is Malaysia, where the Volvo Car Malaysia (VCM) subsidiary is present. The company is thus seeking to increase their understanding on how to proceed in order to improve the success of replications of their projects in Malaysia. Thus, this thesis applies well to Volvo and their Malaysian subsidiary where, in order to achieve the purpose, a situational analysis will be carried out of the company. By analysing previous replications of projects made from VCC to VCM, this will map out how it is currently done versus where they would possibly need to improve. This will hopefully also create opportunities for Volvo to benchmark for future replications.

Also, it is important to highlight that out of the few studies that have been made on international replications (e.g. Jonsson & Foss, 2011; Szulanski & Jensen, 2006), as well as the firms that have received some attention in relation to international replication (Watson, 1997; Schultz & Yang, 1997), focus has mainly been on franchises or retailing firms. However, studies have neither been made on replication in relation to national sales offices, such as VCM, or within the automotive industry. Therefore, this creates an interesting opportunity to use Volvo as a case study.

1.4 THESIS LAYOUT

The layout of the thesis will begin with a literature review, including theories and discussions on replication, as well as on local responsiveness and the transnational solution. This will be followed by a methods chapter, including arguments for the choice of research methods. Subsequently, a presentation of the empirical data gathered from the research will be given, followed by an analysis of the empirical data in relation to the theoretical framework. A discussion will then be made regarding the findings, followed by a conclusion and implications for future research.

Hence, the layout will be presented as follows:

2 LITERATURE REVIEW

This section will present and explore theories and relevant work that has been carried out within the research field. This section will then serve as a framework for the data collection and the analysis of the empirical results. The literature review will present theories surrounding the topic of replication, and replication strategies. This will be followed by theories within the field of local responsiveness and the transnational solution, in order to gain proper understanding and relevance in connection to the research purpose.

2.1 REPLICATION

2.1.1 Definitions

According to March (1991), companies can gain large success through economies of scale or exploitation. One of the ways of achieving this is through replication (Baden-Fuller & Winter, 2005; Winter & Szulanski, 2001). Replication is defined as a strategic, value creating activity made by organizations (Friesl & Larty, 2013) that is related to the transfer of knowledge assets in the form of organizational practices and routines from the replicating firm to units that re-use features from the replicator (Baden-Fuller & Winter, 2005; Jensen & Szulanski, 2004; Nelson & Winter, 1982). In other words, this means to re-use practices of an organizational unit of a given type in a new context and location, which are similar to the original practices in significant respects (Nelson & Winter, 1982; Jensen & Szulanski, 2004; Winter & Szulanski, 2002). Such value can be created through the discovery, development and maintenance of a practice or business model (Winter & Szulanski, 2001; Baden-Fuller & Winter, 2005), which includes a connected set of processes and a functioning set of practices that constitute a working example (Jensen & Szulanski, 2004). Thus, replication both involves a process and an outcome (Baden-Fuller & Winter, 2005).

An organizational practice is defined in Kostova and Roth (2002, p.216) as "*an organization's routine use of knowledge for conducting a particular function that has evolved over time under the influence of the history, people, interests and actions*" of the organization, which in turn becomes institutionalized in the organization. Furthermore, practices include rules of how certain organizational functions should be conducted, and reflect the shared knowledge and competence of the organization, where practices become so deeply ingrained that they are automatically assumed to be the appropriate way of doing certain tasks (Kostova & Roth, 2002).

Kostova (1999) explains organizational practices from a strategic viewpoint, i.e. practices that are of strategic importance for the organization, which reflect the firm's core competencies and differentiates the organization from competitors. These strategic practices are normally more complex, where focus is on the strengths of people in order to become more competitive and difficult to imitate. This therefore builds further on practices of technology and product innovation since, apart from being knowledge based, practices also become meaning and value based (Kostova, 1999). Success from the transfer of these practices is therefore determined by the transferability of both knowledge, as well as meaning and value.

2.1.2 Advantages of replication

Firms can gain several advantages from replicating practices. These practices are usually being reproduced by organizations, based on their previous success in certain markets or settings. In turn, this gives a competitive advantage to firms who have previously experienced success through such practices, where these firms have unique access to working examples of previous practices that can be used as a reference, which therefore allows for the firms to take advantage of the success factors when taking on new replications (Nelson & Winter, 1982; Winter, 1995). Consequently, this makes the replication more superior in comparison to imitating attempts from competitors who do not have such access (Nelson & Winter, 1982), since it allows for companies to implement their practice before competitors have time to imitate it or innovate on their own (Baden-Fuller & Winter, 2005). Moreover, knowledge assets that are difficult to replicate are crucial sources of competitive advantage, since an effective sharing of organizational practices gives firms exploitation opportunities that will give essential competitive implications (Jensen & Szulanski, 2004a). Also, it results in economic benefits since firms do not need to engage in completely new reinventions of those assets (Nelson & Winter, 1982). Replication also involves recreating productive knowledge from the source site and thus, may facilitate knowledge transfer. Jonsson and Foss (2011) argue that replication is applicable within all MNCs in all industries, since practices and routines will always need to overlap across all subsidiaries. It is therefore achieved by knowledge transfer. Thus, replication is viewed as an indicator for global integration (Jonsson & Foss, 2011; Bartlett & Ghoshal, 1989). The research on replication can be organized around both forward and reverse knowledge flows. Forward knowledge flows refer to knowledge transfer from a replicator to a receiving unit with the aim of enabling the receiving unit to take on certain routines and practices (Friesl & Larty, 2013). Moreover, several researchers have argued

that organizational knowledge is tacit and ambiguous (e.g. Nelson & Winter, 1982; Williams, 2007). Hence, it is common for people within the firm not to understand the underlying factors of firm performance or the interaction between individual activities. Nevertheless, replication is claimed to enable these activities to be transferred without the need for understanding their causes, consequences and interdependence (Williams, 2007). Thus, researchers have proposed that firms replicate knowledge to transfer it in the face of ambiguity (Winter & Szulanski, 2002).

2.1.3 Challenges of replication

According to Winter and Szulanski (2001), replication creates value by discovering and refining a business model or assets, by choosing the right components to replicate that model or those assets in appropriate geographical locations, by developing capabilities in order to routinize knowledge transfer, and by maintaining the model in operation once it has been replicated. This type of model or asset consists of a complex set of interdependent routines that need to be discovered, adjusted and fine-tuned by *"doing"* (Winter & Szulanski, 2001). In order to replicate such an asset in a value creating manner, this requires additional recreation of complex, imperfect and tacit productive processes in specific locations. According to Baden-Fuller and Winter (2005), replication can be considered successful once it achieves positive financial results.

Thus, replicating a practice is time- and effort consuming. This is very challenging, since delays in replications can be dangerous for firms both in terms of costs and the fact that it gives opportunities for competitors to imitate (Winter & Szulanski, 2001). The challenge of a firm that wants to leverage knowledge assets is to replicate knowledge that is embedded in organizational routines before they can be imitated by competitors (Rivkin, 2000). Therefore, it is important to both have a proper business model to replicate, and to be very efficient when replicating (Winter & Szulanski, 2001). Nevertheless, others state that it is never possible to fully copy or recreate anything to the full extent of what it was before (Baden-Fuller & Winter, 2005). For instance, Baden-Fuller and Winter (2005) argue that replications of practices and routines cannot occur in a perfectly strict sense, due to changes in labour within organizations as well as differences in the environments in which organizations are surrounded. Therefore, even if a practice or routine is replicated accurately, they will respond differently to different environments (Baden-Fuller & Winter, 2005). This might result in additional challenges for replications made by organizational units that depend on local preferences, such as restaurants, compared to units that depend on

standardizations in global markets where operational interactions with local environments are fully controlled, such as fabrication plants. Therefore, success from replications may vary in different environments (Baden-Fuller & Winter, 2005).

2.2 THE PROCESS OF REPLICATION

2.2.1 Exploration and exploitation

As mentioned earlier, MNCs create value through discovering and refining a business model or practice, where the replication of such a business model or practice is usually a very complex and time consuming process. There has often been a focus on replication as an opportunity to exploit advantages that grow from having specific resources that can be replicated (Cappetta, 2007; Brock & Yaniv, 2007). This view has been developed further by Winter and Szulanski (2001), who state that replication involves more than the exploitation of a simple business model or formula. Instead, replication as a strategic process begins by first discovering the business model that can be replicated, before exploiting it. Thus, replication normally involves a two-stage process, starting with an exploration process for possible formats that are then subject to an exact exploitation (Brock & Yaniv, 2007; Jonsson & Foss, 2011; Winter & Szulanski, 2001). Exploration accounts as an important first step in replication. Only after the exploration of the business model can exploitation begin (Brock & Yaniv, 2007). During exploration, the business model or practice is created and refined, whereas during exploitation, the model or practice is stabilized and leveraged through large-scale replication. These two phases are very important, as well as the transition from exploration to exploitation where it is necessary to create and refine the capabilities that support the following replication activities (Winter & Szulanski, 2001).

March (1991) discusses that it is very important to maintain a balance between exploration and exploitation in order to reach long-term organizational survival and prosperity. This is because they are very likely to experience difficulties on their own. Adaptive organizations that engage in exploration, whilst excluding exploitation, are likely to suffer search and experimentation costs without gaining many of their possible benefits. On the other hand, organizations that engage in exploitation, without taking exploration into consideration, are likely to end up being trapped in a condition below the optimal standard. Nevertheless, Winter and Szulanski (2001) add to this by stating that profit goals, in present value terms, may sometimes conflict with long-term survival

goals. Therefore, this makes it particularly essential to also study exploration and exploitation from a life-cycle perspective.

Thus, the opportunity for a replication strategy begins with the discovery of a business formula that has shown successful characteristics (Cappetta, 2007). In order to further understand the argumentations on the process of exploration and exploitation as part of a successful replication strategy, it is first important to discuss the possible formats for replication that are found in the exploration phase. Winter and Szulanski (2001) refer to this as the Arrow core.

2.2.2 Arrow Core

A core aspect of the idea of the Arrow core is the full and correct development of essential replicable features of a business model and its ideal target applications (Jonsson & Foss, 2011). The Arrow core includes all the full information of replicable features that accounts for the value-creating potential of the business model. It specifies which attributes are available for replication and worth replicating, how these attributes are created, and the characteristics of the environments that are suitable for replication (Brock & Yaniv, 2007; Winter & Szulanski, 2001). According to Winter and Szulanski (2001), this information will in turn answer what, how and where replicators should be trying to replicate. This type of information is viewed as an economic good that is *"nonrivalrous"* in its use, and thus becomes very valuable. Moreover, the economic benefits that result from a strategic replication adds to its Arrow core (Winter & Szulanski, 2001).

Nevertheless, it is argued that it is never possible to determine the exact contents of the Arrow core (Brock & Yaniv, 2007; Winter & Szulanski, 2001), due to the lack of knowledge about the various features of the Arrow Core (Jonsson & Foss, 2011). Here, an important goal is to only replicate those attributes that can add value and lead to increased profitability. As stated earlier, only profitable replications can be considered successful and thus, it is necessary to separate profitable attributes from those that will not lead to added value (Cappetta, 2007; Winter & Szulanski, 2001). Therefore, a profit-oriented replication strategy at first includes hypotheses on the Arrow core, where speculations are made on what is profitable to replicate.

Full knowledge about the Arrow core needs to be gained from experiential learning (Winter & Szulanski, 2001). It is common that firms at some point develop and adopt different behaviours

constituted by experiential learnings and activities. Zollo and Winter (2002) state that learning includes both experiential processes of learning gained by *"doing"*, as well as through cognitive processes. These learnings are in turn responsible for the type of organizational routines and activities that firms take on, which can be related to the operational functions of the firm and the modification of operating routines. Learning consists of different mechanisms, which are involved in the development of such routines. These mechanisms are all related to the accumulation, articulation and codification of knowledge and experience.

Such learning is stated by Winter and Szulanski (2001) to be achieved through the creation of working examples, as well as the creation of a central unit that is behind all the practices and routinized activities that are continued, in order to develop the revenue-generating capabilities necessary to support replication. This is useful in the search and understanding of what business models and attributes are profitable to replicate and therefore involves exploration (Winter & Szulanski, 2001). In other words, organizational learning can be viewed as skill-building based on the repeated execution of similar tasks. Furthermore, the experiential learning is then reflected in the outcome of the routine (Zollo & Winter, 2002), which is then reflected in the Arrow core (Winter & Szulanski, 2001).

The aspect of learning thus argues that it is not sufficient to rely on exploitation, especially in the initial stages of a replication, since there is a need for exploration for the replication of profitable business models and attributes. Hence, the learning aspect of a replication strategy indicates the need for both exploration and exploitation when replicating a practice (Winter & Szulanski, 2001).

As a result, replication as a strategy involves developing plans that at best reflect the hypotheses of the Arrow core (Jonsson & Foss, 2011). The intention of exploration activities is thus to uncover the Arrow core, where not developing such hypotheses will result in an inefficient exploration. These hypotheses are in turn developed and tested during continuous steps of replication (Winter & Szulanski, 2001). The elements of the Arrow core are thus explored gradually in a learning process that in each step yields a temporary template, i.e. a working example of how, and in what sequence, to get a certain work done (Nelson & Winter, 1982; Jensen & Szulanski, 2004; Jensen & Szulanski, 2007), which for each time is closer to uncovering the Arrow core (Brock & Yaniv, 2007). In other words, the early stages of replication

involve the need for experimenting with different templates in order to discover the Arrow core (Winter & Szulanski, 2001). Once this has been achieved, Winter and Szulanski (2001) argue that it is necessary to freeze the template when it reaches a satisfactory version of the Arrow core.

2.2.3 Templates

The use of templates has been widely discussed in the literature on replication and knowledge transfer, where Jensen and Szulanski (2007) argue to have found empirical evidence that suggests that template use is correlated with the effectiveness of knowledge transfer efforts. Furthermore, templates have been defined as having the role of referents during a transfer process, where they are used to resolve issues that take place during a replication (Jensen & Szulanski, 2007; Nelson & Winter, 1982; Winter & Szulanski, 2001). As replication becomes more difficult and complex, the importance of templates is thus argued to increase.

An important principle in viewing knowledge transfer as the replication of a practice is claimed to be the importance of a template, where a template is viewed as essential in effective replication (Jensen & Szulanski, 2004). This is because a template is said to automatically result in an easier and more effective re-use of knowledge, where a suitable use of templates also facilitates knowledge transfer, whereas ignoring a template results in higher difficulties of such transfer (Winter & Szulanski, 2001). Hence, templates are argued to also avoid what Szulanski (1996) refers to as *"stickiness"*, i.e. difficulties in knowledge transfer.

A template has also been seen as something that is ought to be copied, such as an organizational practice that has been proving to be successful, in order to facilitate the initiation of a transfer. It can usually be difficult for organizations to convince a recipient unit to implement a new practice. In such a case, templates are argued to demonstrate evidence of successful results through the use of a practice. Without such a template, recipient units will not be able to rely on any potential success or use anything as a reference when replicating. This lack of evidence is argued to result in reluctance to adopting a replication (Jensen & Szulanski, 2007). Thus, templates are stated to result in overcoming resistance, a higher adoption and better performance at the recipient unit, compared to when a template is not used.

Replications are therefore considered to be most successful when the true Arrow core is implemented through a template. Furthermore, the guiding of such a template is viewed as

necessary. When replicating, Winter and Szulanski (2001) also indicate that it is important not to move away from the literal use of a template where, if doing so, the value of the template will decrease with each step away from it. Since the template represents the Arrow core, *"[...] the replicator may approximate the ideal of a precise implementation of the Arrow core by attempting to exactly duplicate every feature of the template, every single detail"* (Winter & Szulanski, 2001, p.736).

Once the template has reached a satisfactory level, researchers have argued that allowing the template to be subject to flexibility and adaptation will negatively affect the template, especially if the template is very complex (Jensen & Szulanski, 2004; Winter & Szulanski, 2001; Szulanski & Jensen, 2006). Due to differences in *"environmental conditions"*, allowing for the adaptation of an established template may according to Winter and Szulanski (2001) result in new, costly problems that cannot be solved through the template. In turn, this is said to slow down profit growth and result in the problem of having to trade off the success of a precise template against adaptation (March, 1991; Winter & Szulanski, 2001). Also, according to Winter and Szulanski (2001), it is evident that a template that performs satisfactorily will be more successful when taking on strict precision.

2.2.4 Replication as opposed to adaptation

This shows that the main theoretical approaches to replication have put emphasis on the fact that adaptation results in costly mistakes and therefore, replication reduces or rules out adaptation (Williams, 2007). Hence, replication and adaptation are usually understood as opposing approaches. Others criticize the need for local adaptation by stating that significant adaptation may lead to decreasing performance at subsidiaries, and that it therefore should be preferred to stick closely to the original template (Szulanski & Jensen, 2006).

However, not taking adaptation into consideration when replicating may cause difficulties when replications are made on international levels, i.e. from one market to another. Replicating internationally cannot simply be a task of copying a template from the home market and implementing it in other local markets (Jonsson & Foss, 2011), which is also why replications differ from normal standardizations. Normal standardizations are merely about using identical solutions in different markets (Buzzell, 1968). Since it is the organizational practices rather than the solutions that become subjects to replication (e.g. Baden-Fuller & Winter, 2005; Winter &

Szulanski, 2001; Jensen & Szulanski, 2004; Friesl & Larty, 2013), this approach is not likely to be sufficient when replicating internationally. One of the reasons for this is the fact that MNC subsidiaries are part of what is referred to as an embedded network of specific business relationships, where the headquarters' desire to control and integrate subsidiaries and their behaviour into the global strategy is challenged by influences and contingencies from the local external environment (Andersson & Forsgren, 1996). Hence, an exact replication from headquarters may not fit the characteristics of the local environment, since replications across borders are argued to be in need of adaptation (Jonsson & Foss, 2011).

Previous research is well-known for suggesting that benefits gained from global strategies are in need for a trade-off from benefits of local responsiveness (Bartlett & Ghoshal, 1989; Prahalad & Doz, 1987). However, as mentioned earlier, the model of an *"ideal template"* does not take local responsiveness into consideration. Thus, the Arrow core, as described in the replication literature, might not be possible to define for international environments where local responsiveness is needed (Jonsson & Foss, 2011). Therefore, replication needs to be challenged by the need for aspects of responsiveness when discussed on an international level. The next section will therefore discuss literature on local adaptation, and the relationship between global integration and local responsiveness.

2.3 LOCAL RESPONSIVENESS AND ADAPTATION

Due to an increased globalization of markets, the rapid product and technology development and global competition, it is well-known that multinational companies need to develop a global strategy, in order to gain economies of scale and scope. This is often done through the integration and coordination of global operations and through high standardization of products and marketing. However, this may often result in a collision with local demands and perhaps even legally mandated expectations. As a result, special needs, roles and requirements from subsidiaries may be overlooked, which is argued to lower the overall performance of the firm (Paik & Sohn, 2004).

As a result, a large part of the international business literature has recognized that global companies need to balance global strategies with local environments and thus, be both globally integrated and locally responsive (Bartlett & Ghoshal, 1988; Bartlett & Ghoshal, 1989; Prahalad

& Doz, 1987). Global integration involves coordinating activities internationally in order to build efficient operations networks and to take full advantage of similarities internationally. Local responsiveness refers to the extent to which firms respond to local customer and market differences and preferences (Luo, 2001). It is therefore an important part of subsidiary roles. Although strategies must be accommodated within a structure that will provide full contribution to corporate performance, these strategies must be adapted to the extent that they will successfully meet the cultures, markets and business practices that are differentiated in local environments (Prahalad & Doz, 1987; Jarillo & Martinez, 1990). Companies that allow for the flexibility to adapt to local environments, while at the same time maintain a system of global integration are able to benefit from both location-specific and competitive advantages (Bartlett & Ghoshal, 1989; Ghoshal, 1987).

This kind of responsiveness can be adapted to local markets in several ways, both in a broader and more limited sense. For instance, firms can choose to adapt products to local demands, or only involve adaptation of marketing, and other similar activities, in order for products to appeal to local markets (Bartlett & Ghoshal, 1989). The challenge for global companies is therefore to form a system that will handle the conflicting needs of globalization and localization. According to Bartlett and Ghoshal (1989), this includes more than just centralizing or decentralizing firms, decision making or practices. Instead, it is important to create a system that will be centralized enough for global integration, and decentralized enough for local responsiveness (Bartlett & Ghoshal, 1989).

2.3.1 Pressures of integration and responsiveness

According to Prahalad and Doz (1987), the relationship between integration and responsiveness indicates and captures the pressures that firms face. These include pressures that make global integration crucial, as well as pressures for firms to become sensitive to the local demands, in order to achieve local responsiveness. Pressures for global integration include the necessity for worldwide business resource placements for strategic goals, where strategic decisions are made with the intention of integrating activities internationally. The pressures for local responsiveness are industry forces that necessitate local, adapted strategic decisions. These are argued to thrive from the need to respond to large extents to each local market. For instance, differences in customer needs result in firms, with the goal of satisfying the diverse set of their customer

demands within different regions, having to take on a locally responsive strategy. Furthermore, market differences in pricing, product positioning, promotion campaigns and advertising, as well as the need for significant adaptation of products, services etc. in order to be locally competitive, requires the need for local responsiveness (Prahalad & Doz, 1987; Roth & Morrison, 1990). In turn, these types of pressures affect the structure of different industries, the competitive positioning within industries, and the configuration of an organization (Roth & Morrison, 1990).

These argumentations confirm the need for firms to adapt in order to balance global integration with local responsiveness. Bartlett and Ghoshal (1989) build on this, and mention different strategic approaches that deal with the differences in global strategies and local responsiveness in different ways. These different approaches that firms develop depend on its organization strategy (Bartlett & Ghoshal, 1989). When substantial local differences are present, firms often take on a strategy that is based on achieving responsiveness to the demands and needs of local markets. Thus, a multi-domestic approach is taken, where global area division structures including managers with large autonomy to adapt strategies are existent. Furthermore, when local differences are relatively small, strategies usually aim to achieve benefits from global integration and economies of scale through a global approach. Here, through global divisions, managers at headquarters make decisions for the global market, whereas local autonomy is low and local managers only focus on local aspects, and input from local subsidiaries is often discouraged. Third, companies that aim towards developing and transferring knowledge across borders take on an international approach (Bartlett & Ghoshal, 1989; Paik & Sohn, 2004).

However, due to the increasing pressures in competitive global markets, global firms that manage to not having to sacrifice neither global integration nor local responsiveness gain crucial advantages (Paik & Sohn, 2004). In order to be able to take on the pressures from both global integration and local responsiveness, Bartlett and Ghoshal (1989) claim that MNCs should neither be centralized nor decentralized. Thus, they develop the transnational solution, where organizations with a transnational structure will most efficiently combine global integration with local responsiveness.

2.3.2 Transnational Solution
In order to be able to balance a global strategy with local responsiveness and achieve a transnational solution, Bartlett and Ghoshal (1989) argue for the need to understand

environmental complexities, strategic demands and organizational capabilities. Global companies simultaneously need to develop global efficiency, local responsiveness and efficient knowledge transfer. As a result, companies can gain economies of scale, adapt to the demands of the local market, and develop and transfer knowledge and learnings across borders. This shows the need to go one step further than the one-dimensional approaches mentioned earlier, by indicating that it is not enough to rely on only a global, multi-domestic or international approach since global dynamic environments require that global strategies are combined with local responsiveness and cross-border knowledge transfer. The companies studied by Bartlett and Ghoshal (1989) stated to have experienced difficulties by only focusing on a one-dimensional strategy. Hence, it has been proven that a combination of all three approaches is necessary. As a result, the transnational solution emerged.

The balance of the transnational solution has to be viewed on the basis of specific tasks rather than on the basis of a specific industry, where there are certain characteristics needed in order to achieve a transnational solution. Here, rather than headquarters playing a dominant role, local subsidiaries need to be viewed as strategic partners. This means that, depending on the level of capabilities, tasks, resources and strategic importance, local subsidiaries should have differentiated roles and responsibilities. They should be viewed as autonomous, individual contributors to knowledge, where knowledge and learnings that are developed are shared and communicated properly both from and to headquarters and between subsidiaries. This includes experiential learnings from different markets (Bartlett & Ghoshal, 1989). Such learnings from different markets result in a different integration of knowledge and firm-specific experiences that would become relevant to all markets (Eriksson, et al., 1997; Casillas & Moreno-Menéndez, 2014). MNCs should therefore work as integrated and interdependent networks, where subsidiaries have strategic roles and responsibilities for a particular product or process. In order for this to be done appropriately, there is first a need for changes and development of individuals' mind-sets and attitudes within the firm. In turn, this is related to improving knowledge and communication flows and how the strategies are communicated, both from and to headquarters and between subsidiaries, as well as changes in interpersonal relationships. Changes can then be made in the decision-making process, in order for subsidiaries to be able to take on higher strategic roles (Bartlett & Ghoshal, 1989). This can be related to statements from Williams (2007). He argues that when subsidiaries understand knowledge, this will result in a higher

possibility for subsidiaries to take on local adaptation. As a result, knowledge transfer will increase, which will lead to greater performance on the local market. Moreover, Szulanski and Jensen (2006) state that adapting significantly will be counterproductive when subsidiaries have insufficient understanding of practices.

As a result, subsidiaries will become more than just an implementer of a global, central strategy, or even a simple adapter of such strategies. Furthermore, when a firm's decision making processes and organizational capabilities are concentrated at the centre of the organization, it often becomes difficult to be able to respond to local demands (Bartlett & Ghoshal, 1989). For instance, in distant markets, centres will not easily recognize the opportunities and threats of those markets and thus, the ability to react in an efficient and timely manner to those opportunities and threats become hindered by the reliance on complex and intensive international communication. Therefore, by giving subsidiaries the roles of strategic partners, the restricted views from management that activities should be centralized are argued to diminish (Bartlett, 1986).

In other words, MNCs should not to try to manage all their subsidiaries in different international markets in the same way, but rather create an interdependence with subsidiaries with different capabilities. This is important because when balancing global integration with local responsiveness, MNCs need to be aware of how subsidiaries view possibilities in their local environments, since they are also in a better position to evaluate local challenges (Birkinshaw, 1997). Furthermore, by involving subsidiaries as strategic partners in different strategies, this solution will result in the firm being able to keep up with factors such as market demands and developments in distant markets (Bartlett, 1986). Also, it will support initiatives taken on local markets and the search for new business opportunities, in a manner consistent with the strategic goals (Birkinshaw, 1996). In turn, this may lead to improved relations with local customers, suppliers, governmental authorities etc., which in turn leads to more competitive advantages. This will in turn influence the adaptation (Ghoshal & Nohria, 1989), and as a result, MNCs can both achieve efficiency related to global competitiveness, as well as flexibility related to their local responsiveness (Bartlett & Ghoshal, 1989).

2.4 TRANSNATIONAL REPLICATION FRAMEWORK

The literature review indicates that theories on replication have mainly left out aspects of adaptation and local responsiveness, since it has been viewed as damaging by decreasing the performance of subsidiaries and becoming too costly and complex to the results of replication. In other words, adaptation has been understood as an opposing approach to replication (Williams, 2007). Instead, it is preferred to strictly follow templates, through a *"copy exactly"* approach (Winter & Szulanski, 2001), and to stick as closely as possible to these templates (Szulanski & Jensen, 2006).

Nevertheless, this viewpoint can become problematic when studying replications on an international level. Since subsidiaries are faced with challenges from the local external environment, theories on responsiveness show that replications across borders are likely to be in need of local responsiveness. For instance, the study made by Jonsson and Foss (2011) on IKEA and their internationalization process showed that the firm at times struggled in foreign markets, due to the fact that their focus on precise replications of, inter alia, their product concepts did not match the preferences and needs of local markets, and is therefore an example of dilemmas that can occur when international replication is not viewed in relation to adaptation and local responsiveness.

Therefore, replication needs to be viewed in relation to literature involving theories related to the need for a balance between global integration and local responsiveness, where international replications need to be adapted in order to meet the differences and characteristics of local markets. This responsiveness therefore needs to be applied to international replication, and involve the templates created for replication. This type of balance with the local environment is stated to be crucial both for the local subsidiary as well as for the MNC's future success (Sorge, 1991).

Replication can be organized through knowledge flows, as stated earlier, where knowledge flows have the aim of enabling subsidiaries to take on certain practices (Friesl & Larty, 2013). In order for these practices to be successfully replicated to local markets, this type of knowledge flows can therefore be linked to the strategic partnership between headquarters and subsidiaries, as argued by Bartlett and Ghoshal (1989). Here, it can be argued that subsidiaries need to receive proper knowledge and understanding about the replication and template containing the practice

that is to be replicated, in order for subsidiaries to become educated and possibly gain the right mind-sets and attitudes to be able to deliver the global messages of the practice, while still managing to balance the practice with local responsiveness. This includes communication flows and sharing of organizational learnings, where subsidiary knowledge and learning is captured and shared back to headquarters, in order to be applied on a broader perspective between subsidiaries and headquarters. This balance can therefore also be assumed to reduce the risks of adjusting the template, as stated by Winter and Szulanski (2001). Also, allowing for subsidiaries to gain such knowledge is likely to reduce difficulties of understanding the replicated practice and to adopt it (Szulanski, 1996). As a result, neither is the template likely to be *"ignored"* (Winter & Szulanski, 2001), nor will subsidiaries have insufficient knowledge to adapt the replication successfully (Bartlett & Ghoshal, 1989).

As a result, by gaining proper understanding and knowledge, replications can become transnational where subsidiaries can more easily and efficiently take the role of strategic partners with higher responsibilities and thus, become more than just a simple adapter of a replication. By creating an interdependence between subsidiaries, local subsidiaries can gain enough responsibility to be able to adapt the replication according to the needs and preferences of their local market (Birkinshaw, 1997). This will also support local initiatives and business opportunities taken by subsidiaries that are in line with the strategic goals (Birkinshaw, 1996). This approach would also be in accordance with statements made by researchers, where a high level of knowledge transfer will more likely result in successful adaptation (Williams, 2007; Szulanski & Jensen, 2006).

3 METHODS

In this section, a description will be given of the type of research conducted, and how data was collected and applied in order to reach the purpose of this research and to answer the research question. Argumentations will be given for the suitability of the chosen methods, followed by limitations that the research has encountered.

3.1 QUALITATIVE RESEARCH – CASE STUDY

As stated in previous sections of the research, this study intends to shed light on the question of how companies can adapt international replications to local markets in order to become transnational. The approach to this study has been through a qualitative case study. The case study focuses on Volvo Car Corporation, and their Malaysian subsidiary. The emphasis of a case study is to develop research evidence systematically and will allow for a deeper understanding of complex business issues in an accessible, personal and simple format (Eriksson & Kovalainen, 2008). Furthermore, it creates the possibility to research organizational processes, and to gain explanatory knowledge of organizational behaviours (Cassell & Symon, 2004). Thus, this chosen organization fits in the criteria for the research question and purpose, and gives a better appeal to this study.

This case study is also useful for international business research. According to Doz (2011), qualitative research helps to overcome the need to *"borrow"* theories and quantitative experimentations. The contributions of this research to new theory building is therefore important for international business studies, since international business research is argued to be in need of theory development. Also, it allows qualitative research to be used for theory testing, communication and illustrations of key elements in theories (Doz, 2011).

As mentioned, the purpose is to study how to adapt replications internationally, in order to fill gaps of existing theory on replication. The case study will be based on theoretical aspects that will then be tested and extended. Thus, this becomes an extensive case study (Hillebrand, et al., 2001). It can be expected within extensive case studies that the chosen case will be similar enough in order to build on, compare or verify, new or existing theory. An extensive case study is therefore more suitable for the research, since the main interest lies in elaborating on the phenomenon of replication, where the empirical knowledge gained from the case of Volvo is

assumed to add new viewpoints to the existing literature, as well as to the company itself (Eriksson & Kovalainen, 2008).

The intention of carrying out a qualitative case research was to enable for a situation analysis to be made. As it is stated in the purpose section, the situation analysis will study the current situation of VCC in terms of international replications of projects to the Malaysian market, in order to map out how the company has worked until date, and where they would need to improve. Doing a case study is therefore useful for the analysis of a business situation, where the result of the study can be used for recommendations on how the studied firm should, or should not, perform within its business context (Eriksson & Kovalainen, 2008). The analysis will therefore consist of an internal review of the company.

Since the purpose of the case study is to look into ways for Volvo to improve international replications through local responsiveness in their Malaysian market, the primary data was collected through semi-structured interviews.

3.2 PRIMARY DATA COLLECTION – SEMI-STRUCTURED INTERVIEWS

In order to connect theory and empirical data efficiently, and understand specific features of the studied case to be able to draw out an analysis and conclusion of the studied area, the conduction of qualitative, semi-structured interviews is a suitable approach of methods (Cassell & Symon, 2004).

The primary data collected for this research consisted of semi-structured interviews, with open-ended questions. This is viewed as the most efficient and convenient way to collect qualitative data (Kvale & Brinkmann, 2009), since this type of interviews allows the respondent to provide responses in a manner that is more natural to them and in their own terms (Qu & Dumay, 2011). Thus, this approach is useful for this case study, since it enables the understanding of how managers make sense of, and create meanings about, their organization and its environment (Schwartzman, 1993). Also, since the research question consists of a *"how"* question, semi-structured interviews are more appropriate (Eriksson & Kovalainen, 2008). Furthermore, the use of open-ended questions was a useful way to explore further into the studied subject as it also allowed for the opportunity for follow-up questions to emerge based on the outcome of the discussion (DiCicco-Bloom & Crabtree, 2006).

3.2.1 Interview approach

In regards to the interview method, interviews were set up and carried out with the appropriate key members both from VCC and VCM, in order to be able to grasp and get insights on the current position of Volvo in terms of the related topic. By interviewing relevant members from both VCC and VCM, it was possible to analyse the current situation, as well as areas in need for improvement. The participants for the interviews were key stakeholders that were strategically chosen in relation to their relevance. Their positions varied from managers to directors, including managing directors. These participants are based in different locations. Key members from VCC are based in Gothenburg, Sweden, which is the hometown of Volvo and their main headquarters. Key members from VCM are based in Kuala Lumpur, Malaysia. The choice of these locations was based on the purpose of the case study, which is related to replications from the home market to the Malaysian market. Since the two markets are very distant, it was important to study both markets, were key representatives are present both in Sweden and Malaysia.

Prior to the interviews, a pre-prepared outline of topics and questions was developed, involving mainly open-ended questions with opportunities for follow-up questions (see Appendix 1 and 2). The use of open-ended questions was useful since it gave the participants the opportunity to gain more control over the conversation, which is important since it also produces more detailed responses. Thus, the researcher was able to dig deeper and understand the situation in a more in-depth manner as the respondents were able to reveal more information. The questions were developed specifically in relation to the research question and purpose. Although keeping within the relevant subject, it was important to allow for the variation and changing orders of questions within the interviews, as well as making sure that the participants were able to give their own interpretations and responses, which is important in order for the tone of the interview to remain relatively conversational and informal (Eriksson & Kovalainen, 2008).

Based on the scope of the research, it was important to interview three people from the VCC headquarter and five people from VCM. From VCC, all three participants held director positions, whereas three participants from VCM held director positions and two held manager positions (see Appendix 3). Their names and positions will not be revealed throughout the research, which will be explained during the ethical part of the methods. Nevertheless, in order to facilitate the

understanding of the presented empirical data, including statements made from the participants, they will be referred to as Director 1, Director 2 and so forth (see Appendix 3).

The interviews were well prepared beforehand. Meetings with the relevant people for the interviews were scheduled in advance. Moreover, interview questions were provided to the participants several days prior to the interview. This allowed for the participants to prepare and gain an understanding of what the respective interviews would look like and what would be asked. It is necessary to state that the term 'replication' was never used in the interview questions, mainly in order to not cause any confusion of its definition. Also, sending the questions before the interviews also gave a good idea whether the chosen participants were the right people for the interviews (Marshall & Rossman, 2006).

The interviews were conducted in two different ways. Due to company requirements, the conduction of the research was carried out in the Malaysian office. Therefore, interviews with Malaysian stakeholders were made face-to-face, whereas interviews with Swedish stakeholders were made through telephone sessions (see Appendix 3). Prior to the beginning of both interviews, the process of the interview was well explained, were the request for the use of a voice recorder was made. This is important in order to ease the interview and making sure the participants are aware of the layout and what is to come. The time spent on each interview averaged between 30 minutes to one hour, which is the common interviewing time in semi-structured interviews (DiCicco-Bloom & Crabtree, 2006).

3.2.1.1 Face-to-face interviews

The face-to-face interviews with the Malaysian respondents took place individually in their office, in their respective rooms and were conducted during office hours. This was a useful method, since it made the participants feel comfortable and familiar with the setting, which allowed for more natural responses and more valuable information being given. According to Longhurst (2003), both the chosen time and the interview environment is very important and plays a big part in the quality of the responses. Furthermore, in addition to the used voice recorder, notes were also being taken simultaneously. However, not more than a few bullet points were written down in order to not create an uncomfortable situation for the participant. According to Mehrabian (2006), facing the respondent and maintaining eye contact creates a more positive attitude from the respondent.

Interviewing in person yields descriptions of phenomena through the interviewer's ability to build trust with the respondent, which reduces aspects of impression management and enables more personal experiences (Polkinghorne, 1994). Furthermore, the use of face-to-face interviews also gave the researcher the opportunity to study other aspects, such as facial expressions and body language of the participants, which added to the interpretation of the responses. Having the access and ability to study such nonverbal communications results in the enrichment of the spoken words (Carr & Worth, 2001).

3.2.1.2 Telephone interviews

The presence in the Malaysian office resulted in the interviews with the Swedish headquarter being conducted through individual telephone meetings. Although it has been argued that telephone interviews result in a worsened social desirability bias in comparison with face-to-face interviews (Tourangeau & Yan, 2007) and less disclosing of experiences (Shuy, 2003), research has still shown very positive outcomes from telephone interviews. For instance, more notes were being written down during the telephone interviews, which is in accordance with statements from Musselwhite et al. (2007). They show that this type of data collection may be favourable, since it allows for the researcher to take notes without making the participants feel uncomfortable and reduces response bias in the absence of facial expressions. Moreover, the quality of data is said to be very similar to the data gathered from face-to-face interviews, where the data can also be collected much faster (Knox & Burkard, 2009).

These interviews took place between the Swedish and Malaysian offices through Volvo's internal teleconference system. Due to time differences, the interview was scheduled to fit both parties. The teleconference system allowed for the respondent to speak through a high quality speaker system which therefore facilitated the conversation, whereas the used voice recorder managed to capture the sound properly. Thus, the quality of data did not get negatively affected in comparison to face-to-face interviews.

3.2.2 Ethics

Some ethical aspects had to be taken into consideration during the data collection. These ethical aspects were mainly related to the participants of the interviews, where the main factor contained aspects of confidentiality and privacy. The names and positions of the interview participants will therefore remain anonymous throughout the research. When respondents are members of a firm

that talk about work related issues, it can sometimes be important for an agreement between both parties to not disclose such information (Qu & Dumay, 2011). This should according to Eriksson and Kovalainen (2008) be the first priority and is important to be respected in research. Also, when disclosing information about a company, their strategies etc. the companies will often demand for a lot of the given information to remain confidential (Eriksson & Kovalainen, 2008; Qu & Dumay, 2011). Thus, discussions were made on excluding confidential information, as well as presenting the written report to Volvo. These discussions resulted in possible threats to confidentiality and anonymity of data being able to be anticipated beforehand.

Furthermore, as stated earlier, prior to the interviews the participants received information on the intention and purpose of the study, the layout and the questions that were to be asked. Disclosing such information beforehand is necessary in order to clarify the objectives of the research to the participants and to build trust, as well as avoiding the respondents experiencing any unexpected surprises (Qu & Dumay, 2011).

3.2.3 Analysis of data

Once primary data was collected from one interview, the recorded data from the voice recorder was then transcribed into text. This transcription of data was made as soon as possible after each interview, either the same day or the day after. Transcribing interviews as soon as possible will avoid for any relevant information from being biased or left out due to the researcher failing to recall words or expressions that were of importance (Easton, et al., 2000). The recordings were first transcribed into text based on what was being said by the respondents, with the intention of copying what was being said as detailed as possible. This also included being able to decide on what data was actually important or irrelevant, and what should be included and excluded respectively. Once this text was written, the transcription was then coded systematically into themes mainly derived from the interviews, and translated into a proper empirical text. The purpose of such coding serves to help in organizing the collected data and present the results in a more organized manner (Eriksson & Kovalainen, 2008). Due to the mentioned confidentiality issues, this text was then sent back to the stakeholders for revision. Finally, the empirical data was analysed in relation to the themes from the theory, in order to create a better understanding of the results of the data with regards to the theory. Furthermore, when analysing data, a transcribed text makes it easier to develop topics and themes from the content that will be subject

to analysis, although it also requires the researcher to possess good analytical skills in order to be of high quality (Eriksson & Kovalainen, 2008; Pope, et al., 2000).

3.3 CRITERIA FOR EVALUATION – VALIDITY AND RELIABILITY

A challenge within the conduction of a research is the ability to critically evaluate its findings. This can be done by measuring the validity and reliability of the study (Higgins & Straub, 2006; Murphy & Dingwall, 2003). These are important terms to discuss, since they help to evaluate the credibility of the research (Hernon & Schwartz, 2009). However, measuring validity and reliability in qualitative research differs from those of quantitative research, and they therefore need to follow a different array of procedures in order to be transparent in the demonstration of validity and reliability (Roberts & Priest, 2006).

According to researchers, qualitative research can achieve a high level of validity by focusing on issues of credibility, transferability, dependability, construct validity and conformability (Yin, 2009; Miles & Huberman, 1994). Credibility involves internal validity whereas transferability involves external validity. These approaches determine whether validity has been achieved. According to Christie et al. (2000), a literature review including various sources, the establishment of a chain of evidence through, inter alia, a systematic interviewing process, and allowing for external revision of the research are steps that through which a case study should be developed. Therefore, the structure of the research was carried out with the intention of achieving such validity.

External validity refers to the extent to which study findings are generalizable to a population, whereas internal validity refers to whether the used instruments for data collection accurately measures what it is supposed to measure. This study is considered to have reached a high degree of external validity. One of the reasons for this is due to the fact that the collected data has managed to be linked to and measure the discussed theories and its attributes in order to answer the research question and achieve the purpose. This thus makes it applicable on a broader level and increases the generalization of the research (Hernon & Schwartz, 2009).

Furthermore, high internal validity also indicates that the studied topic actually produces the observed outcome. This means that internal validity eliminates variables that could suggest alternative explanations (Hernon & Schwartz, 2009). The used instruments have been very useful

in capturing the empirical content from the interviews. As declared earlier in the methods, the data collection followed a structured interview process through which recording, transcribing and transforming the data was conducted.

Credibility within case studies also means that the ability to examine whether the research was carried out in the same manner as it was described by the researcher is provided (Christie, et al., 2000). As mentioned, a collection of data was developed in this research through interview recordings, notes and transcriptions. External revisions were made by the Volvo stakeholders for validity and confidentiality purposes, and thus increase the internal validity.

Dependability refers to the reliability of the research, and the extent to which the research would yield the same results if the same study was on repeated attempts (Christie, et al., 2000; Higgins & Straub, 2006) Although reliability is considered partly necessary for validity (Higgins & Straub, 2006), it is difficult to determine the degree of reliability for this research. This is due to the fact that the results of the research may also depend on the nature of the business, industry and environment studied, as the results may vary between industries.

3.4 LIMITATIONS

There were some limitations to this research. The limitations were mainly related to the data collected from the interviews. As stated earlier, this study involved some confidentiality issues. Therefore, sensitive information has not been able to be presented in this research. Also, due to the confidentiality subjects, no in-depth descriptions will be given of Volvo's projects that are related to the replications during this research. Focus within the empirical data will therefore mainly be on how the company has worked in relation to the replication itself of the projects. Nevertheless, the given information has been sufficient in order to create a valuable analysis.

Moreover, since the Malaysian market is very distant from the Swedish one, cultural differences are bound to have an effect on knowledge transfers (Ambos & Ambos, 2009). Nevertheless, the study has also left out aspects related to cultural differences, since it is not within the centre of this research.

4   VOLVO CAR CORPORATION – COMPANY DESCRIPTION

Officially founded in 1927 in Gothenburg Sweden, it did not take long for Volvo to realize that its core competitive advantage, and what would eventually become the symbolization of the company, was safety. A famous quote, which summarizes what the company stands for, was made by the founders of the automotive firm, Assar Gabrielsson and Gustav Larson:

"Cars are driven by people. The guiding principle behind everything we make at Volvo, therefore, is and must remain, safety."

The company today has regional market companies and national sales companies in approximately 100 countries, where the top markets in terms of market share include Sweden, the US, China, Germany and the UK. Volvo has over its years been one of the most innovative car companies in developing safety innovations and traffic safety initiatives. Numerous innovations were first created by Volvo, including the three-point safety belt, which the firm decided not to patent in order for competitors to also be able to provide safe cars to their drivers. This specifies the importance of safety within Volvo. Other innovations that the company has invested a lot in and developed over the years has been innovations related to child safety, active and passive car safety features etc. Also, as declared in the case description, Volvo has over the years worked with international replications in relation to various projects.

The conduction of this research has, as stated earlier, taken place while being present in Volvo's Malaysian sales office. Therefore, important and valuable access has been given to both VCC and VCM, which has been very useful for the quality of this research.

5   EMPIRICAL DATA

In this section, the empirical data collected through the mentioned interview methods will be presented. The empirical data will be presented and organized according the occurring themes that were discovered during the transcription process of the interviews. In order to better understand the different markets defined in this section, VCC will also be referred to as 'Sweden' and 'the centre', whereas VCM will also be referred to as 'Malaysia'.

5.1 THE PROCESS OF CREATING A PROJECT

When working with the foreign markets, VCC has different teams that are responsible for different regions. Here, there are teams that are responsible for the Malaysian market together with the other Asian markets. This same structure of departments is used for Europe and other regions as well, where different teams from the centre follow similar structures in each region.

In previous years, global projects that were created and developed by the central team in Sweden would often follow a full-on central plan. However, it was after a while realized that this would not be sustainable, since it would often not work in any other market and would result in a waste of resources and money to develop projects that would not work. Therefore, it has in the past time often been common to try to involve a few of the top central markets, such as Sweden, the UK and the US, in an early stage of a project development. Hence, specific central markets are sometimes used as a *"reference group",* where VCC checks whether the intended project will work in those markets and if it is relevant.

5.2 TEMPLATES AND GUIDELINES

When a project is about to be replicated from Volvo Car Corporation to their subsidiaries, the firm normally goes by the use of templates. All materials and guidelines related to such projects are provided and instructions are given together with the templates. This includes all the criteria that subsidiaries need to meet when implementing a project, and is rolled out and made available for all the markets. Moreover, toolkits are also provided, where relevant files, logos, sizes etc. can be found.

The templates and relevant materials for projects are all provided through an intranet system that can be accessed throughout the firm. Furthermore, prior to applying projects, briefings are given through email and via teleconference. According to VCM Director 1:

"They [VCC] will give you the guidelines and they give you the templates. Then, they tell you what the project is, how it needs to look and feel."

Furthermore, VCM Director 2 stated that:

"When they [VCC] send you the templates there are instructions that you are supposed to follow. For instance, what we need to do, the tonalities and so on."

5.2.1 Adaptation of templates

These templates are described to be *"from a global perspective"*, and are used in the same way for all markets. It has also been common that VCM is expected to keep to the majority of the template and use the materials that are within the project. *"This is important in order to look as consistent as possible in any part of the world"* (VCC Director 1). The templates are therefore also viewed and used as a reference point for how VCM should proceed in the case of experiencing complications. Once the project has been *"rolled out"* to VCM, it is then expected by the subsidiary to review the project, and decide whether it can be used or if it will not work. As argued by VCC Director 2:

"Usually, it is not wished or wanted that local markets entirely change the project by, for instance, taking the material and do something different in there."

Nevertheless, *"general adaptations"* (VCC Director 2) are accepted by the centre. Hence, certain elements of the materials and templates used in the project do become subject to local adaptation. There is not a proper structure on how flexible VCM should be, although they are expected to follow the project according to the templates as closely as possible. *"We are supposed to follow"* (VCM Manager 1). Nevertheless, once the template has been sent, and all the materials have been provided then it is left to VCM to implement it. This therefore allows for VCM to take on certain local adaptation.

VCC Director 3 mentioned that the role of VCM is to see whether the project would *"trigger"* the Malaysian market, and if it would work there or not:

"If it does not work then it can become difficult, because in a small market like Malaysia they do not have large budgets, and it therefore becomes different because they need to take and use the material provided by the centre and work on that."

The aim is therefore for VCM and other similar subsidiaries to try to not take on more than general adaptation when implementing the project. For instance, not everything is being followed due to the fact that certain factors can be irrelevant for the Malaysian market. In such a case, VCM does not follow those factors. This could for instance be legislations or features within a project that are applicable to winter conditions, which would therefore not be used or applied to Malaysia's tropical climate. As quoted by VCM Manager 1:

"At the end of the day, some things just do not designate with us. So we look at all the material, if it is workable then it is workable."

This does give VCM some general responsibilities. As mentioned, the implementation itself is all made by VCM. Therefore, it is possible for the subsidiary to do certain changes in order to be more suitable to the local market, without having to get approvals from VCC. According to VCM Director 3:

"Certain things are done at our own discretion. For instance, there is not a specific instruction that says that we cannot change the copy of a certain headline."

Hence, keeping to the template is important, while certain adaptations are still made. Nevertheless, when referring to high levels of adaptation, VCC Director 3 stated that too much adaptation *"[…] becomes costly and difficult"*. The basic idea behind the central strategy is therefore for subsidiaries to keep it consistent with the templates and materials provided, in order to also save costs and *"be more efficient"* (VCC Director 3).

5.3 DECISION MAKING AND ROLES

In comparison to Volvo's larger markets, smaller markets such as Malaysia, India etc. are not really focused on to any larger extent by VCC. It is rather more common for VCC's central management to focus on the top 15-20 markets. Within these markets, the majority are central, European markets, together with the US and China. VCM and similar markets do not receive the same level of attention. Also, they do not have the same levels of resources and budgets as the

larger markets. As a result, VCM does not attain any larger roles. Instead, they become more dependent on following the orders that come from Sweden. Therefore, despite the general adaptations, the local subsidiary has experienced difficulties when expected to follow the templates. It was made clear by the VCM participants that the subsidiary does not get a share of voice in the marketplace and in the projects: *"We do not get a lot of authority. They [VCC] often want to control"* (VCM Director 1). The subsidiary is not allowed to take many bigger decisions. Hence, the expectations have been for VCM to take on a project and put it into use accordingly.

Thus, other than the adaptations made, the subsidiary does not take any higher roles and responsibilities in relation to the implementation. *"We do not always get enough room to manoeuvre"* (VCM Director 1). This has led to certain problems for the subsidiary where the templates, together with some of the assets and materials within the project, have not always been successful in the Malaysian market. According to VCM Director 2:

"It just does not become relevant to Malaysia. The tonality of how VCC reproduces these projects does not always sit well with us."

One of the challenges is related to the differences in customer preferences, where the *"Scandinavian approach"* that VCC uses in the templates that subsidiaries are expected to follow do not fit with the Malaysian environment. According to VCM, the templates do become challenging since the assets included do not always apply to Malaysia. As argued by VCM Manager 2:

"They [VCC] mainly take what is relevant for Sweden or Scandinavia and expect the rest of the markets to take from that and adapt from that. The lack of diversity of the assets used becomes a big challenge for us."

VCM Director 3 was quoted by stating that:

"Something that may work in Sweden or in the US may not work in Asia, and one of the shortcomings is that they [VCC] do not understand that, they think that since it works in Europe it should work in Asia."

5.3.1 Initiatives

Attempts have over time been made by VCM to take on initiatives in order to balance projects to the Malaysian market and adapt significant aspects more efficiently to the local preferences. Although the subsidiary has intended to improve the assets within the templates in order for it to fit with their local environment, such changes have normally not been approved by VCC. This was therefore argued to having created difficulties in the local market response. VCM Director 2 argued that one of the reasons that other global brands have been doing really well in Malaysia is because their subsidiaries are well adapted and take local initiatives in order to respond well to the preferences and demands of the local market. Therefore, the experienced difficulties become more challenging to face since the *"tonality and personality"* behind the project does not always fit with the local demand.

Since Malaysia is a distant market from Sweden, potential problems that have risen from projects are not directly recognized by VCC. Therefore, whenever problems occur, VCM needs to inform VCC about the issues. However, since members of VCC are very far from the Malaysian market, their lack of knowledge about Malaysia has sometimes become problematic. According to VCM Director 3:

"The problems we experience are not always understood by VCC. Therefore, despite explaining that this is a different marketplace, the solutions we try to come up with are not accepted, but we are rather expected to focus on what we have and what is available."

As a result, implemented projects have not always responded well. Hence, the *"Scandinavian approach"*, where the company provides templates of *"Swedish standards"*, have often not been successful in the Malaysian market. As argued by VCM Manager 2:

"Their [VCC's] attempt to keep everything worldwide very Swedish has not worked here. It does become challenging for us to make it work in our market. It is needed for them to be able to adapt more, and to let markets adapt."

5.4 KNOWLEDGE AND COMMUNICATION FLOWS

Over the years, Volvo has experienced numerous changes in their global strategy. These changes have in turn affected global projects that have been implemented in Malaysia and other markets. Therefore, the success of global projects in the Malaysian market was argued by some

participants to be affected by these strategic changes, since it has become difficult for such a market to fully understand the projects. According to VCC Director 1:

"The different guidelines we provide have not always been understood by Malaysia and other markets, since it sometimes becomes difficult for them to know whether they are doing things according to the strategy."

It has sometimes been difficult for VCM to take on the templates and all the material and use it successfully in their local market, since it is not always very clear to the subsidiary. This was echoed by VCM Manager 1 as well:

"Sometimes it is hard for us to understand what is required, so we are at times forced to go back to Sweden and ask them a lot of questions on the templates."

Moreover, VCM Director 2 argued that:

"[…] it sometimes does not become meticulous. Sweden makes changes all the time, they are not consistent. So it becomes difficult for us when they just expect us to follow by providing the assets and leaving it at that."

Currently, VCM does not have the same direct contact to VCC as other central markets do. According to VCC Director 2:

"This is mainly due to the lack of resources and budgets, where it becomes difficult for these markets to establish a proper contact with Sweden."

Moreover, it was stated that the company has not made any larger investments in their communication with VCM and other subsidiaries in order to make sure that their people follow when changes are made in the global strategies. As stated by VCC Director 1:

"Other brands, such as Audi and Mercedes have been really good at this, and have invested large amounts of money into communicating within the company, in order to keep it consistent."

The same VCC participant admitted that:

"[…] we have been quite inconsistent in our communication. We have gone from left to right, back and forth, but we have not had a clear direction where, over time, people can really identify which way we are going. This has at times become challenging, since it creates the risk of VCM

and other smaller markets creating their own agendas and their own way of doing things, without keeping projects within the central strategy and using the material provided."

5.4.1 Meetings and following up

Within the organization, meetings are being held on a monthly basis between the subsidiaries and the respective regional stakeholders at VCC. In the first meeting, the central unit presents a full update on what is to come next: *"In this session, there is not much of a dialogue, but rather a presentation from us"* (VCC Director 2).

Moreover, another meeting is held where Malaysia, together with the other Asian markets, are on call and give a brief update on what they have done: *"In these meetings, everyone just shares what they are up to, so that we are all up to date in that sense"* (VCM Manager 1). Furthermore, VCM Director 1 stated the following:

"We talk to the person who is in charge for our markets, and we just update him and his team on what we are doing for our market, although this does not require any proper presentation or anything from our end."

However, other than the monthly updates, there is no specific method where VCC follows up with the respective market in relation to a project, both during and after its implementation. The monthly meetings are merely viewed as an update session with information, where some Malaysian participants agree that nothing constructive comes from the meetings. Therefore, once the project has been implemented, each subsidiary is expected to have followed the template: *"It is left to each country to do what we are asked to do and follow it correctly"* (VCM Manager 1).

According to VCC Director 2, the success of a project is most often related to the amount of cars sold:

"At the end of the day, a project is a success if it manages to support the sales of cars. So what we measure and look into is really the sales over time related to the project. That is how we currently do it."

Other than this, there is no analytic way of measuring the success or failure of a project that VCC implements into Malaysia, or any other market: *"As long as the sales are good, then we do not*

bother" (VCC Director 2). Should there be any issues related to the project, then it is up to Malaysia to inform VCC on this: *"Otherwise, we do not really follow up"* (VCC Director 2).

5.4.2 Learning

The main focus is therefore put on the communication from the Swedish headquarters to VCM where, once the templates have been provided and the project has been applied, the subsidiary is not required to report back to the headquarters on new knowledge and learnings gained from the implementation of the project: *"Once VCC have done their part then it is left at that, there is nothing that goes back"* (VCM Director 3). In other words, subsidiaries do not share their knowledge and learnings back to headquarters or with other subsidiaries.

A VCM participant with experience from the Asian region stated that the Asian countries are in fact quite similar. Success factors from projects that have experienced positive results in, for instance, Taiwan therefore have high probabilities of achieving similar success in Malaysia. However, there is no sharing of best practices or success stories from each country that the different subsidiaries can learn from when wanting to adapt the projects to their market. As argued by VCM Director 2:

"There is no one 'champion' that has done something that can be followed – for example, if the US, or even Thailand, did something really successful, how they did it and so on."

Thus, there is no process or system where, for instance, one member or a team of members follows up on critical learnings and success factors in each market, in order to share it back to Sweden and other markets. As a result, neither the central unit nor the subsidiary have been able to gain any further knowledge and learnings from how other markets have done it and what they have learned.

5.5 SUMMARY

In sum, global projects that have been replicated from the Swedish headquarter to the Malaysian subsidiary have followed similar patterns to the central markets. This has both been viewed as useful and important for VCC in order to be consistent with the global strategy, but also as very challenging for the Malaysian market. It is evident that templates are created and used, where materials and other assets are shared through an intranet system and prior briefings. The templates do follow a central approach, since its development at most involves a few central

markets. Nevertheless, certain adaptations are allowed to be made. Furthermore, VCM does not take on bigger roles and initiatives, and does not receive as much attention as other, bigger markets. Also, little room is made for *"manoeuvring"* the projects and templates, where not many initiatives are allowed to be taken by Malaysia. From the central unit no real follow ups are made, and the company has been lacking in communicating their global strategy throughout the firm. Moreover, no sharing of learnings and knowledge contributions are gained between Malaysia, headquarters in Sweden and other subsidiaries.

These factors have led to certain difficulties for VCM, where the main challenge faced in the local Malaysian market is that the projects and their *"Scandinavian approach"* do not always respond well to the local demands and preferences of the market. Other challenges have been that local subsidiaries do not understand the projects or the global message behind it. The next chapter will give an analysis in relation to the theoretical framework to why this is the case and where it becomes problematic for the firm.

6 ANALYSIS

This section analyses the empirical data collected, and its results in relation to the theoretical framework presented earlier. Although the coding of the empirical data is somewhat intertwined, the structure of the analysis section will mainly focus on how Volvo currently works, and where they are lacking in relation to the scope of the research.

6.1 TEMPLATE USE

The presented empirical data indicates several patterns where Volvo Car Corporation is currently replicating projects according to theoretical aspects and argumentations. It is apparent from the interviews that working with templates when replicating projects is a common approach within the company. The goal of the templates is to use them according to what researchers refer to as a *"tool"* for effective replication, and in order to make sure that the subsidiaries replicate the projects in an easier way (Winter & Szulanski, 2001; Jensen & Szulanski, 2004).

The viewpoint from VCC further shows that a more *"traditional"* approach is preferably taken when using templates, where VCC ideally wants the templates to, to some extent, follow the *"copy exactly"* approach of Winter and Szulanski (2001). However, it was evident that the centre still accepts some general adaptations to be made by VCM and other subsidiaries. In other words, their Arrow core does follow a central form in accordance with Winter and Szulanski (2001), and is applied through templates, yet still allows for the templates to be somewhat adapted. Therefore, even though the templates represent the Arrow core, the implementation of the templates is not always fully precise.

Furthermore, the firm also follows the central approach of Winter and Szulanski (2001) in their knowledge about the Arrow core since it is reached through the creation of templates, where practices are created and developed by VCC and often together with a few other central markets.

Nevertheless, when analysing the empirical data from a transnational perspective, it is clear that Volvo is still experiencing difficulties in certain areas in relation to international replications, and that there is a need for a better trade off in order to become more transnational (Bartlett & Ghoshal, 1989; Pralahad & Doz, 1987). The data thus allows for the further analysis of this in the next section.

6.2 TRANSNATIONAL REPLICATION

The data shows that, from a transnational standpoint, there are certain gaps in how Volvo replicates projects on an international level to the Malaysian market. As mentioned in the theoretical framework, replications are organized through knowledge and communication flows (Friesl & Larty, 2013). As the remaining analysis will show, the areas in which the company are experiencing difficulties in relation to the purpose of the study are mainly connected to knowledge and communication.

6.2.1 Sharing of experiential knowledge

The main finding based on the purpose of this study is that the communication and knowledge flows until date between the central unit and Malaysia has ruled out activities related to the sharing of experiential knowledge and learnings, both from VCM back to VCC and between VCM and other subsidiaries. As mentioned through the interviews, no proper follow up is made from the central unit, with no analytic method of measuring the success of replications. More importantly, VCM and other subsidiaries do not report back on learnings gained from replications. No knowledge or learnings are captured and shared where, for instance, VCM can eventually benchmark on success factors from other markets on a project that is bound to be replicated to the Malaysian market.

In the case of the Swedish headquarters, it is evident that their explorative efforts within the replications are mainly concentrated in and comes from the central unit, where no attempts are made to learn from VCM or other subsidiaries, or transfer experiential knowledge from one subsidiary to others. Thus, VCC does not gain and apply international learnings to the exploration phase of their replication and their Arrow core. This results in their exploration phase becoming very similar to the mentioned arguments of Winter and Szulanski (2001).

By understanding this approach through a transnational perspective (Bartlett & Ghoshal, 1989), this can be connected to the difficulties that VCC is experiencing in terms of their international replications. The exploration stage of the replications is merely shown to be very centralized where the replicable features within the Arrow core are only connected to the central unit (Winter & Szulanski, 2001). The empirical data therefore indicates that this stage of the replication becomes problematic from a transnational perspective, and has been the main factor behind the challenges experienced by VCM. The lack of experiential learnings shows that VCC,

through their *"Scandinavian approach"*, does not take into consideration the need for having local responsiveness (Bartlett & Ghoshal, 1989). VCC has thus not been able to define their Arrow core for replications made on the Malaysian market, where it is clear from the interviews that the approach has not responded well in Malaysia.

Also, this results in VCM and other subsidiaries not being able to become what is referred to in theory as individual contributors to knowledge (Bartlett & Ghoshal, 1989). This causes a detrimental effect on the firm, since critical information that can be used from different markets does not get shared throughout the organization. Such information is according to Bartlett and Ghoshal (1989) very valuable in order for VCM to eventually gain improved knowledge, and use this knowledge to better understand how to adapt the replicated projects more successfully on international levels. Not sharing learnings also means that VCM and other subsidiaries are not subject to interpersonal relationships (Bartlett & Ghoshal, 1989).

6.2.2 Internal communication – Changing mind-sets

Another important finding in relation to the transnational approach is linked to the gap in the internal communication within the firm, in which the international replications in turn get affected by the numerous changes to the global strategy of Volvo. Participants from both Sweden and Malaysia agreed that these changes create difficulties in understanding the global strategy behind the replicated projects. In addition, the subsidiary has not always been able to understand what is being replicated, including the templates and the provided materials.

This, and the fact that VCC does not follow up after replications, shows that VCC has relied too much on the templates to have the role of referents and to facilitate knowledge transfer, which is in line with Winter and Szulanski's (2001) centralized approach, where templates are also argued to resolve any possible issues. However, from a transnational viewpoint, relying on templates that have excluded local responsiveness becomes problematic, which is evident in the difficulties that VCM has experienced. The internal communication gap has led to VCM not always fully understanding the replications and the global message behind them. Therefore, it becomes difficult to communicate the strategies consistently in order for VCM members to gain the right mind-sets and attitudes, which according to Bartlett and Ghoshal (1989) is the reason for why the global strategies behind the replications have been poorly communicated.

6.2.3 Strategic partnership

Following the analysis from the themes of experiential learnings and internal communication, the needs to share learnings and communicate internally go hand in hand with gaining higher strategic partnership at the subsidiary level (Bartlett & Ghoshal, 1989). It is evident from the interviews that VCM has not been able to take on such strategic roles and responsibilities as a result of the lack of internal communication and experiential learnings being shared back to the headquarters. The difficulties of international replications can therefore for Volvo be organized through the connection of knowledge and communication flows to the strategic partnership of VCM. The lack of experiential learnings and internal communication, where VCM does not become an individual contributor to knowledge, has resulted in VCM eventually not being able to gain the role of a strategic partner and increase their local responsiveness in order for the replication to become more transnational (Bartlett & Ghoshal, 1989; Williams 2007; Szulanski & Jensen, 2006; Birkinshaw, 1996, 1997).

Since the Arrow core and templates are created and developed at the centre, this can be linked to VCM not getting enough responsibility to take on higher partnerships, which in turn has affected the difficulties of keeping up with local demands of the Malaysian market (Bartlett, 1986; Birkinshaw, 1997). The somewhat dominant role of VCC is in line with the central approach of replication (Winter & Szulanski, 2001), where the information of replicable features within the Arrow core, including its attributes and environmental characteristics, are all only linked to the knowledge and experiences of the central units. As a result, VCM does not play part in the development of the replications, and does not add to the Arrow core and templates.

Therefore, when analysing this approach through a transnational viewpoint, the lack of knowledge and learnings going back to VCC becomes problematic for VCM, and does not allow them to neither gain higher autonomy nor the role of an individual knowledge contributor. Also, the absence of proper internal communication detriments the level of understandings at the subsidiary unit, which makes it difficult to become locally responsive (Szulanski & Jensen, 2006). As a result, VCM has not been able to be viewed as a strategic partner (Bartlett & Ghoshal, 1989).

This has also affected the level of interdependence between VCC and VCM, as well as other similar subsidiaries. According to the transnational theory (Bartlett & Ghoshal, 1989), the

absence of experiential learnings and internal communication is what hinders this interdependence and the decision-making process in order for VCM to be viewed as strategic partners.

7   DISCUSSION

The presented analysis allows for discussions of the findings to be made, where contributions to the theory on replication are developed and discussed in this section. Also, suggestions are given on how Volvo should improve their replications in relations to the findings.

7.1   TRANSNATIONAL ARROW CORE

The two-stage replication strategy of Winter and Szulanski (2001) has been predicted to be an essential approach to achieving successful replications, and has been evident in Volvo's replications. However, as the analysis shows, this approach has not been sufficient in order for the replications to respond to local markets and becomes problematic, which is evident in the poor response of the *"Scandinavian approach"* that Volvo has experienced in their Malaysian market. A reason for this is indicated to be related to the fact that VCC does not view the importance of local responsiveness, which could be a result of wanting to maintain higher control of the replications. Nevertheless, due to the nature of the industry in which Volvo is present, the focus on becoming locally responsive across all their markets is essential, and thus requires to move further from the current replication-as-strategy theories (Winter & Szulanski, 2001). This comes down to how well they adapt their replications in order to fit with the local environments. Therefore, the analysis shows that there is a need to develop an understanding of how transnational solutions (Bartlett & Ghoshal, 1989) need to be applied to the theories on replication.

Based on the traditional theoretical framework on replication strategies (Winter & Szulanski, 2001), experiential learnings are normally gained during the exploration stage of a replication. These discussions argue that such learnings are only gained and developed at the centre, where it is apparent that the replication strategy of Volvo Car Corporation is in line with this approach. However, such experiential learnings are shown to not be applicable for replications that take place on international levels. The analysis shows that the fact that replications do not include VCC gaining learnings from other markets can be linked to the difficulties that VCM has experienced, where a centralized Arrow core hinders the subsidiary from being able to become locally responsive (Bartlett & Ghoshal, 1989). Therefore, from a transnational perspective, it is evident that this needs to be developed further, where experiential learnings must be gained from

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across borders and added to the exploration phase of Winter and Szulanski's (2001) theory, in order for the Arrow core to be able to be defined and applied on international markets. In this way, the exploration stage of a replication can be adapted in order to develop what can be suggested to be a transnational Arrow core, where the creation of a central unit includes the exploration for valuable attributes from all markets. As a result, the transnational Arrow core will in turn result in the templates becoming more locally responsive rather than "frozen" which, in the case of Volvo, is likely to lead to the VCM subsidiary responding better to the experienced local challenges.

The main results of this research therefore contribute to current knowledge about the Arrow core, by showing how a transnational solution needs to be applied to the exploration stage of replication theories. Contributions have thus been made by developing a transnational Arrow core. This also develops what is currently known about the transnational solution, by showing how the theory needs to be applied in relation to replication theories and the Arrow core.

In order for Volvo to adapt and for their replications to become transnational, a proposition is for the firm to develop a global learning system within their existing intranet that is available for all markets. Here, it should be mandatory for all markets to share their main learnings from each replication that take place in their respective markets. This would be an important step for Volvo, since the main difficulties for VCM has been related to the replication not responding to the local market differences. As a result, this system will lead to the development of a transnational Arrow core and, in turn, a transnational replication.

7.2 INTERNAL COMMUNICATION SYSTEM

Another important discovery in why VCC has experienced challenges until date when replicating internationally is related to the fact that no larger efforts have been put into internal communications. Although this is perhaps not as directly applicable as experiential learning to the replication process itself, it does play a part in how the replications are communicated to VCM and other subsidiaries, and on the level of understanding at subsidiary levels (Bartlett & Ghoshal, 1989). The theoretical framework showed that in order for the replications to eventually become transnational, it is important to have thorough communication flows in which the strategies behind the replications are properly communicated to subsidiaries, rather than

mainly relying on templates to have the role of referents and facilitate the knowledge transfer, as in the case of VCC (Bartlett & Ghoshal, 1989). The analysis shows that the reliance on templates created at the centre has been problematic for VCM and their knowledge about the templates. Improving the internal communication will thus make the understandings of the replication easier. This is necessary for the mind-sets of VCM members to be in line with the central strategy, especially when there have been numerous changes to the global strategy of Volvo in the past years. As a result, VCM can adapt the replications and balance integration with responsiveness more efficiently.

A proposition similar to the previous one is therefore for Volvo to invest in a consistent use of internal communication systems. Such systems should be integrated and accessible throughout the entire organization. Also, by optimizing channels of internal communication, Volvo can efficiently reach all their markets in order for their central strategy behind the replication to become more understandable and consistent on a global level. By doing so, this consistency will also be crucial in order to create an integration-responsiveness balance in all international replications. An interesting related quote by VCC Director 1 was as follows:

"You can be at any McDonald's restaurant in the world, and still get the same feeling in each restaurant you go to. That is what being consistent in internally communicating the strategy does. This applies to other car brands as well."

7.3 STRATEGIC PARTNERSHIP

Once experiential learnings from across borders are applied to a transnational Arrow core, and when internal communication has been emphasized, this will then contribute to VCM being able to increase their role as a strategic partner by the central unit. This is because the sharing of experiential learnings, together with a strong internal communication, will result in VCM becoming an individual contributor to the replications and the Arrow core and thus gain higher roles, whereas interdependent networks will be improved. These are factors that characterize a strategic partnership in transnational theories (Bartlett & Ghoshal, 1989). Furthermore, these efforts will also result in a knowledge increase at the Malaysian subsidiary, which will therefore give them the opportunity for more decision makings.

However, it was made clear that VCM is a much smaller market than other more central markets, with less resources and a lower budget. Naturally, and as discussed in the theoretical framework (e.g. Bartlett & Ghoshal, 1989), this will affect the level of differentiated roles and responsibilities that VCM will gain. It can therefore not be expected for VCM to gain the same level of autonomy as larger markets such as Sweden, the US or the UK. Nevertheless, by forming transnational replications through the mentioned methods, a stronger interdependence will still be created between VCC and VCM, as well as other markets. In this sense VCM can be viewed more as a strategic partner, as the subsidiary will contribute to the replication process and a transnational solution to the replications.

8 CONCLUSION

The purpose of this research has been to study how international replications can be adapted in order to increase their local responsiveness and become more transnational, by answering the research question:

How can MNCs adapt international replications in order for them to become transnational?

A case study made on Volvo Car Corporation has shed light on the research purpose. The results show that knowledge and communication are key aspects to the adaptation of international replications. Based on the case study of Volvo, it is evident that firms first and foremost need to share experiential learnings from foreign subsidiaries back to the home market. Adaptations should consequently be made at the exploration stage of a replication, where new experiential learnings should be gained from international markets and applied to the development of a transnational Arrow core. This creates a further expansion of the replication theory by moving away from the original two-stage model of a replication strategy (Winter & Szulanski, 2001). Instead, additions are made to the exploration stage in order to create transnational replications. Hence, MNCs can adapt international replications to a transnational solution by adding the sharing of experiential learnings from foreign subsidiaries back to the home market, and apply it to the Arrow core.

The case study of Volvo also found that internal communication is highly important for the international replications. The analysis indicates that a proper level of internal communication flows is needed to develop the right mind-sets and increase the knowledge of subsidiaries throughout the entire organization. This results in a higher and more consistent integration-responsiveness balance, where an increased understanding of the replications, together with a transnational Arrow core, allows subsidiaries to both deliver the central strategy while still becoming locally responsive. Hence, international replications can also be adapted enough to reach a transnational level through a consistent use of internal communication flows.

This study has managed to contribute to theories on replications used as a strategy (Winter & Szulanski, 2001). This has been done by further developing the exploration stage of the theory by adding implications on experiential knowledge and learnings gained from foreign markets.

This has been an important contribution to such replication theory, since it has presented an understanding of the need for local responsiveness and for how a transnational solution (Bartlett & Ghoshal, 1989) should be applied to replications made on international levels in order to create transnational replications.

In relation to managerial implications, this case study of Volvo Car Corporation suggests that transnational replication is a practical strategy for replications made internationally in order to better respond to differences in international markets. By contributing to replication theory, this study manages to show how the transnational solution needs to be applied to replication, which opens a new research field. Therefore, in order to further generate valid managerial implications, this research allows suggestions for future research. This contribution can be further strengthened by theories that study the importance of trading off the alignment of today's business demands with the adaptability to changes in the business environment. This is referred to as organizational ambidexterity, and has received interest from several researchers within international business (e.g. Raisch & Birkinshaw, 2008; Birkinshaw & Gibson, 2004). It discusses how MNCs need to organize themselves in order to balance the process of exploration and exploitation, and can either be structural (alignment and adaptability are done in separate units) or contextual (individuals divide their time between alignment and adaptability) (Birkinshaw & Gibson, 2004).

Achieving such balance between exploration and exploitation is argued to be gained through, inter alia, organizational learning (Raisch & Birkinshaw, 2008). Therefore, studying how MNCs can organize themselves through such organizational learning in order to balance the exploration and exploitation of a transnational replication can help to further lift the contributions of this study and to legitimize the concept of transnational replication.

Also, as mentioned in the case description, the case study of Volvo has allowed for the introduction of a new type of industry within this research field. In order to further develop managerial implications, future research should take on a comparative case study in another industry to further explore the approach of transnational replications and the extent to which this applies to other industries.

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APPENDIX 1 – VOLVO CAR CORPORATION INTERVIEW QUESTIONS

1) How does VCC normally work and communicate with local subsidiaries in relation to tasks and projects that are being applied to Malaysia?

2) How do you usually proceed and go about when applying projects from VCC to other markets such as Malaysia?

3) What is usually the role of the VCM subsidiary when the projects are applied into their market, and during the process?

4) How are decisions made and the decision making process when applying projects to VCM?

5) How do you usually communicate the projects, and relevant knowledge about the projects from VCC to VCM?

6) What has been your view and approach to local adaptation when going about putting a project from VCC into use in VCM??

7) What have been the main challenges identified when applying projects into the Malaysian subsidiary?

8) How do you measure if the application of the project has been successful?

9) How do you learn and gain new experience from the application of projects to other markets?

APPENDIX 2 – VOLVO CAR MALAYSIA INTERVIEW QUESTIONS

1) How does VCM normally work and communicate with VCC in tasks and projects that are being done in Malaysia?

2) What is usually the procedure for VCM when there are projects from VCC that are to be applied in Malaysia

3) What has been your role during the process when projects that come from VCC are applied to VCM?

4) How is the decision making process when projects are applied from VCC?

5) How (and why) are projects, and relevant knowledge about the projects, usually communicated from Sweden to Malaysia?

6) What has within projects from VCC normally been adapted/not adapted to your local market, and how?

7) How have projects that VCC put into use in VCM usually responded in the Malaysian market?

8) What have been the main challenges for VCM when projects are applied and put into use by VCC?

APPENDIX 3 – INTERVIEW PARTICIPANTS

Volvo Car Corporation

Participant	Position	Presented title	Date of interview	Type of interview	Interview location	Length of interview
Participant 1	Director	VCC Director 1	2014-03-26	Telephone	VCM to VCC	60 minutes
Participant 2	Director	VCC Director 2	2014-03-28	Telephone	VCM to VCC	42 minutes
Participant 3	Director	VCC Director 3	2014-03-31	Telephone	VCM to VCC	45 minutes

Volvo Car Malaysia

Participant	Position	Presented title	Date of interview	Type of interview	Interview location	Length of interview
Participant 1	Director	VCM Director 1	2014-03-12	Face-to-face	VCM Office	45 minutes
Participant 2	Director	VCM Director 2	2014-03-14	Face-to-face	VCM Office	52 minutes
Participant 3	Director	VCM Director 3	2014-03-19	Face-to-face	VCM Office	33 minutes
Participant 4	Manager	VCM Manager 1	2014-03-18	Face-to-face	VCM Office	40 minutes
Participant 5	Manager	VCM Manager 2	2014-03-24	Face-to-face	VCM Office	55 minutes