The Reshoring Decision Making Process

A Multiple Case Study

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Abstract

Background: Offshoring has been a trend for the last decade, but not all attempts have generated the expected success for the companies. However, as we can see today, a new trend has started to emerge, called reshoring. Reshoring refers to the decision by international firms to bring back, all or some of their previously offshored activities, to the home country. Although reshoring is relatively a new trend which has not enough research so far, we find that this phenomenon is reoccurring more and more, both globally and in Sweden.

Purpose: The purpose of the study is to investigate how companies decide on reshoring and how this decision-making process looks like, exploring the experience of three companies, to analyse the differences between these companies, comparing this at the same time to the SSEM model by Presley, Meade and Sarkis’ (2016), then to develop a new model derived from the original model.

Method: This study uses a qualitative approach, where a multiple case study of three case companies is conducted under an abductive methodology. One theoretical framework from
the literature is used for this study. The empirical data have been collected in a semi-structured interviewing approach. In addition, some secondary data have been used from sources such as the companies’ websites and news journals. The empirical data have then been analysed and compared to the theoretical framework that has been chosen from the literature. Finally, a new framework has been developed based on the original SSEM framework.

Conclusion: The results show that companies do not always follow a sophisticated and advanced method of decision making as the theories often suggest. Companies that are planning to reshore focus mostly on the market perspective towards the reshoring initiative and analyse the costs and benefits of reshoring before deciding on moving their production to their home country. The need for organizational changes before implementing the reshoring decision is another aspect that companies consider. However, the usage of advanced metrics is sometimes absent during this process.

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1. Introduction

The purpose of this chapter is to introduce the topic of reshoring decision making, making the reader familiar with the phenomenon of reshoring in general and what drives this trend. Then, the topic is narrowed down to the research problem, purpose and question. Finally, we summarize the structure of this paper before the research continues in the second chapter of the paper, that is the theoretical background of the topic.

1.1 Background

As offshoring has been a trend for the last decade, not all attempts have generated the expected success (Wiesmann, Snoei, Hilletofth & Eriksson, 2017). In fact, a comparatively new trend is drawing more attention. Bringing the production back home is how reshoring is defined in simple terms (España, 2013). In other words, reshoring refers to the decision by international firms to bring back to the home country some or all of their previously offshored activities, either outsourced or relocated (Bailey & De Propri, 2014).

Even though this phenomenon has been given different names during this literature research, such as “backshoring”, “home-shoring” and “onshoring”, perhaps due to the newness of the phenomenon no consensus on the terminology has been reached yet, the essence of the phenomenon is the same for all definitions, that is moving the manufacturing back home. For simplicity, this study will use the term “reshoring” from this point onwards in this thesis.

This phenomenon has started to draw the attention of students, scholars, and mostly...
According to Harry Moser, founder and president of the Reshoring Initiative, prospects of expectations are other reasons that drive companies to consider reshoring (Tate, 2014). Economic downturn, value creation in their decision to offshore, or reshore (are realizing the need to move beyond the cost saving to total c

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The decision to reshore, this study’s focus point, is derived by certain drivers. These drivers exert their impact on different stages of the reshoring decision making as factors in this process (Bals, Kirchoff & Foerstl, 2016). Furthermore, the motivations to reshore interconnect with the governance mode, the country characteristics, and guide the location decision (Di Mauro, Fratocchi, Orzes & Sartor, 2017). Consequently, it is quite important to go through the motivations to reshore before studying the reshoring decision-making process. The importance to understand why companies are going back home is also confirmed by Hartman, Ogden, Wirthlin and Hazen (2017) and Kinkel (2012). Therefore, we will go briefly through why companies reshore before we move to our topic on how they reshore.

1.2 The Drivers of Reshoring

The drivers of reshoring exist on different levels. Some motivations are related to the changes in the global economy and the accompanying awareness of these changes and what must be done about them. Tom Derry, Institute of Supply Management in the US, expresses this concern as he says: "The macroeconomic conditions fundamentally have changed around the globe, and the time is right to start evaluating what manufacturing work to bring back." (Blanchard, 2013, p. 4).

Some firms reshore as they find that the lower labor costs obtained from offshoring the production have become offset by impaired capabilities in flexibility/delivery; quality, and the value of the Made in the home country (Canham & Hamilton, 2013). Furthermore, firms are realizing that their move to offshoring was based on a herd instinct which has lead them to miscalculate the cost advantages of offshoring (Bailey & De Propris, 2014). In addition, firms are realizing the need to move beyond the cost saving to total cost, profitability and customer-value creation in their decision to offshore, or reshore (Ellram, Tate & Petersen, 2013).

Economic downturn, an increasing emphasis on sustainability, increasing customer expectations are other reasons that drive companies to consider reshoring (Tate, 2014). According to Harry Moser, founder and president of the Reshoring Initiative, prospects of
manufacturing domestically, in the US, have been made more feasible, mainly as a result of economic troubles and rising wages in China (Sauter & Stebbin, 2016). Labor costs have increased substantially in countries such as China and India, but without any considerable improvements in quality (Foerstl, Kirchoff & Bals, 2016; Gylling, Heikkilä, Jussila & Saarinen, 2015).

The erosion of the comparative advantages such as quality concerns, increased transportation costs, and the realization of the importance of the supply chain resilience are other factors driving reshoring, according to a study made in the UK by Bailey and De Propris (2014). In a similar fashion, Albertoni, Elia and Piscitello (2017) posit that the mutations of the business context, performance shortcomings and interconnections along the value chain motivate reshoring in the same way.

Moreover, currency exchange rate changes in the world drive reshoring in the same way (Basu & Schneider, 2015). Exchange rates have increased tremendously in China, which has affected many companies as the production costs have increased dramatically. Other countries, such as Thailand, Taiwan, Singapore, Malaysia and the Philippines have had the similar currency trends (Basu & Schneider, 2015).

However, there are also behavioral and human drivers to reshore (Foerstl, Kirchoff & Bals, 2016). Moving the production back to the original country might strengthen the buyer-supplier relationship.

Basu and Schneider (2015) relate the motivation to reshore to level of automatization in manufacturing. They argue that due to the increase in the level of automatization in the manufacturing process and the technological advancements in the developing countries, it is more beneficial to have the manufacturing in the home country. This is because manufacturing costs are more stable in the home country than they are in the host countries. Furthermore, the technological advancements in the home country solve the quality problem that those companies have faced (Gylling, Heikkilä, Jussila & Saarinen, 2015).

Tate, Ellram, Schoenherr and Petersen (2014) consider the reshoring drivers from another perspective when they regard that environmental awareness is one of the biggest factors affecting the offshoring decision. The awareness and the sense of responsibility for the environment have changed during the last couple of years, which has led companies to make the decision on what gives the best total value for the company. On the other hand, Kinkel and Maloca (2009) relate the motivation to reshore to the knowledge of the host countries. They argue that many of the companies are moving back due to the lack of knowledge they have about the foreign country.

On a different level, Ancarani, Di Mauro, Fratocchi, Orzes, and Sartor, (2015) conjecture that it is more likely and quickly that firms terminate their offshore manufacturing and reshore back home if those firms are in technology-based industries, if they are small-sized firms, if shrinking cost differentials exist, and due to the psychic distance between home and host country, the organizational archetypes, and quality related motivations.

However, the effect of the industry on the decision to reshore is rejected by Fratocchi, Di Mauro, Barbieri, Nassimbeni and Zanoni (2014). Fratocchi et al. (2014) confirm that reshoring activities are implemented in almost all manufacturing industries, without any relevant difference among capital or labor-intensive industries, at least in the counties they included in their study.

However, with having discussed some of the motivations that drive companies to reshore, understanding these motivations does not complete the picture of the reshoring phenomenon. What is still missing is the practical side of the phenomenon, that is how the reshoring decision making process is managed. Fratocchi, Ancarani, Barbieri, Di Mauro, Nassimbeni, Sartor, and Zanoni (2016) argue that it is important to understand not only why companies reshore but also how they can reshore successfully.

Furthermore, the importance of the reshoring decision making process comes from the fact
that reshoring is a strategic decision that impacts the organization at the strategic, tactical and operational levels (Presley, Meade & Sarkis, 2016). Therefore, analyzing the “how” not only adds to the understanding of the topic, but also may form a guideline to the companies who intend to follow suit, using this research to help managing the decision-making process in a way that leads to positive effects on the organization and the supply chain as a whole.

1.3 Research Problem

Even though the topic of reshoring has been drawing more attention in literature, it still lacks sufficient studies and researches (Brandon-Jones et al., 2017; Fratocchi, Ancarani, Barbieri, Di Mauro, Nassimbeni, Sartor, Vignoli & Zanoni, 2015; Leibl, Morefield & Pfeiffer, 2011; Bailey & De Propri, 2014; Hartman et al., 2017 & Kinkel, 2012).

Much of the literature that exists focuses mainly on the drivers of this phenomenon, rather than on how it is implemented (Barbieri, Ciabuschi, Fratocchi & Vignoli, 2017). Gray, Skowronski, Esenduran and Rungtusanatham (2013) confirm that we not only need to understand what reshoring is, but also, we need to understand how reshoring can contribute to both science within supply chain and to practice.

In brief, there is lack of scientific knowledge about reshoring, but mostly about how the decision to reshore is being made. There is need to research further to understand what lies behind the decision to reshore and how the process of decision making itself is designed.

1.4 Research Purpose

As many of the articles in literature elaborate more on the reshoring phenomenon itself and its drivers, the purpose of this study will be to analyze the process of decision making and planning to reshore.

We find this as a gap in the literature and an opportunity to analyze and explain this process through performing a case study on few companies in Sweden which have reshored back to Sweden. In this way we have a practical example that we, the authors, as well as the reader can draw lessons from.

1.5 Research Question

Having discussed the research problem and purpose, we arrive now to the research question of this paper:

RQ: How do firms decide on reshoring, and how does the decision-making process look like?

1.6 Structure of the research

The structure of this research will be as follows (See figure 1). This thesis has begun with an introduction to the topic of choice, as well as what the purpose and the research questions will be for this study. Afterwards, the literature background to the topic will follow where the theories that exist on this topic will be presented and discussed.

Later, the methodology of research will be presented, where we motivate our choice of the method, as well as how we performed our research. After that, the empirical study will be presented followed by the analysis where the empirical data are discussed and compared to the existing theories that we have found in literature.

The study ends with a conclusion, as well as the contributions, the limitations of the study and suggestions of future research.
2. Literature Review

The purpose of this chapter is to provide the theoretical background to the topic of the reshoring decision making process. Before we go through the different models and frameworks of the decision-making process that exist in literature, we explain how the topic is viewed from two different theoretical perspectives. The factors that should be considered under the process are also included in this review.

Much of the existing body of literature on reshoring focuses on why firms reshore (e.g. Wiesmann et al., 2016; Tate, 2014; among others). This paper takes a more practical perspective to discuss and analyze how reshoring is decided on. There is not much literature on this issue. Therefore, we will review what we were able to find on both the decision-making process and the reshoring process in addition to the factors considered during this, even though the focus later will be mainly on the decision to reshore.

1.2

2.1 Reshoring Decision Making Process

The decision to reshore is considered from two different perspectives in literature; as a strategic choice of its own or as a correction of a previous managerial error.

2.1.1 Reshoring as a Correction of a Previous Decision

Scholars like Joubioux and Vanpoucke (2016) regard the reshoring decision-making process as a reversion of a previous decision to offshore, rather than an independent decision. In this way, they agree with Gray et al. (2013) that the reshoring process depends on the previously offshored process. This means that this process depends on why, when and where the previous activities were offshored, and to whom they were delegated. On the other hand, the decision to reshore or offshore for Ellram (2013) is essentially a manufacturing location decision.
Similarly, Joubioux and Vanpoucke (2016) confirm that the decision is not to reshore or offshore, but to “right-shore”. They state that arriving to the right-shoring decision needs a close consideration of the location of the activities to be reshored. However, this does not mean that their approach to the reshoring decision making process is so narrow to be a location decision only, like Ellram’s (2013). Other factors need to be considered, such as the skilled workforce in the home country, quality considerations, friendly governmental policies, and comparative advantage (Joubioux & Vanpoucke, 2016; Bals, Daum & Tate, 2015).

Two examples of decision making factors they refer to, and in which they agree with both Ashby (2016), and Margulescu and Margulescu (2014), are the emergence of new production processes and technologies that companies use for effectiveness and the costs that are declining when it comes to the implementation of the processes. These factors are reducing the willingness of companies to offshore to low-cost countries. Therefore, they present a model to choose the right location for the company business (Figure 2).

![Figure 2: Conceptual model for location decision-making. Source: adapted from Joubioux & Vanpoucke, (2016).](https://cdn.fbsbx.com/v/t59.2708-21/33173474_1021450648...oh=ffc31d3179ba957cdf0e33f640dfa915&oe=5B3EEB95&dl=1)

The location decision making process goes through three stages, the initial offshoring decision, reconsidering the initial decision and the new decision. Joubioux and Vanpoucke (2016) confirm that considering those three stages enables companies to make the right decision on whether to offshore their production or to reshore.

When it comes to the reshoring decision itself, Joubioux and Vanpoucke (2016) give the example of Bellego's (2014) three kinds of reshoring decisions; tactical, developmental, and home reshoring. Bellego (2014) defines tactical reshoring as when international companies look for the best international locations for their high value-added activities. Developmental reshoring, on the other hand, takes place after companies have considered the total costs of offshoring to the low wage countries. In this case, those companies return to their home countries to search for unmarked good. The third strategy is home reshoring, and is implemented by the companies that have been disappointed by their previous offshoring experience and affected by changing market conditions.

In a similar fashion, Gray et al. (2013) explain that there are four reshoring options available for companies: In-house reshoring that is the transfer of production from the company’s own foreign branch to the internal structures of the company on its home market, backshoring for outsourcing that is the transfer of production activities from the company’s own foreign branch to an external supplier on its home market, reshoring for insourcing that is the transfer of production activities from the foreign supplier to the internal structures of the company on its home market, and finally outsourced reshoring that is the transfer of production activities from the foreign supplier to an external supplier on its home market.
Moreover, there are other factors that affect the reshoring decision. Gray, Esenduran, Rungtusanatham and Skowronski (2017) did a research on six small to medium-sized enterprises (SME), and found that environmental changes did not affect the decision to reshore. The decisions were mostly influenced by the governance structure change and the relationship with the partners in the other country. One example the authors give is that communication with the Chinese partners for those SMEs was a difficulty which led to miscommunication when it came to the manufacturing specifications.

Weber (2013), on the other hand, refers to the automatization that has been developed in the industrial countries as another factor. He agrees, in this regard, with Coates (2015) and Stentoft, Mikkelsen and Johansen (2015), who posit that innovation and automatization need to be considered when a company decides to move to another country, which includes the home country of course. Stentoft, Mikkelsen and Jensen (2016) also argue that the automatization of manufacturing affects the decision of the companies that want to pursue the new processes that makes manufacturing more efficient.

Tate, Ellram, Schoenherr and Petersen (2014) refer to some other factors that need to be considered in the decision-making process and argue if reshoring is really the best option for the company (Table 1). One advantage of reshoring, according to the authors, is that if the logistics and transportation are in the home country, the supply chain becomes more streamlined which therefore increases efficiency and reduces costs more than an offshoring strategy can do.

<table>
<thead>
<tr>
<th>Factor indicating need to reconsider location</th>
<th>Potential advantage of nearshoring or reshoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong domestic customer base is being served by offshore manufacturing</td>
<td>Reduced inventory and transport costs, especially with the lowest global fuel costs in North America</td>
</tr>
<tr>
<td>Very sensitive IP</td>
<td>Domestic and nearshore locations offer greater protection and enforcement. Easier to monitor closer locations</td>
</tr>
<tr>
<td>Increasing shortages and price increases of local, routinely needed services, like transportation, warehousing, and labor as indicated by factor market rivalry. Generally increasing price levels significantly faster than global averages.</td>
<td>More predictable pricing and availability</td>
</tr>
<tr>
<td>Repeated environmental and/or human rights violations</td>
<td>Greater visibility, commonality, and enforcement of sustainability laws</td>
</tr>
<tr>
<td>Regional financial instability in manufacturing location</td>
<td>Locating in the same region as customer may create a more balanced financial flow, stability in currency exchange</td>
</tr>
<tr>
<td>Labor costs are a decreasing factor in manufacturing due to automation, or could be due to potential automation</td>
<td>Since cheap labor is generally a major advantage of low cost countries, it might be worth reanalyzing the situation</td>
</tr>
</tbody>
</table>

Table 1: Factors that generate the need to consider manufacturing location and advantages of nearshoring and reshoring. Source: Adapted from Tate, Ellram, Schoenherr & Petersen (2014)

2.1.2 Reshoring as a Strategic Decision

The second perspective of reshoring in literature considers the decision to reshore as the result of strategic change not a correction of a previous error, and an evolution in the firm’s strategy not a failure in offshoring (Di Mauro et al., 2017). Di Mauro et al. (2017) posit that the
decision to reshore results from a change in companies' strategic focus to be more competitive and customer-focused, whereas that of offshoring is mostly cost-focused.

In fact, the positive effect that reshoring may have on responsiveness and customer service have been referred to more than once in literature. Wu and Zhang (2014) argue that the decision to reshore manufacturing to the home country enhances the company’s response to the market changes and improves its customer service, which in turn makes the company more competitive in the market and more customer-focused.

For Di Mauro et al. (2017), reshoring is more of a strategic change and not a step in the company’s de-internationalization process. Here, they agree with Młody (2016) who confirms that despite the similarities, reshoring cannot be regarded as de-internationalization nor divestment, as the motives, scope, and level of voluntariness of relocation of the manufacturing processes to the home country between the two are different. Consequently, the decision to reshore requires adjustments in the supply chain, focusing on flexibility more than on volumes and economies of scale (Di Mauro et al., 2017). Moreover, it requires closer collaboration between production and development functions. In addition, considerations should be made to the supply chain reconfiguration and innovation (Di Mauro et al., 2017; Bals, Kirchoff & Foerstl, 2016).

Analyzing the strategic choices available to firms requires the consideration of some factors like the ones Sarder, Miller and Adnan (2014) refer to, such as the ease of doing business with the customers, product quality and so on. In this way, they agree with Ancarani et al., (2015) that companies reshore when they pursue a more customer-focused approach.

To assist in the decision making and implementation, Bals, Kirchoff and Foerstl (2016) have developed what they call the Future Research Avenues (FRAs). They take into account both the decision-making process and the implementation process frameworks already established in literature in this framework (Figure 4).

Figure 4: Future Research Avenues (FRAs). Source: adapted from Bals et al. (2016)

Shih (2014), on the other hand, does not provide a framework or explain how firms reshore successfully, but presents what it requires for the reshoring to be successful. Focusing on the US, the author presents a list of requirements that are necessary for any company that wishes to reshore. This includes an assessment of the readiness of the organization for reshoring. Organizations need to stabilize the workforce through training to make them familiar with the new production of the organization in the home country. Furthermore, addressing organizational skill gaps that have resulted from offshoring, rethinking the capital/labor ratio, thinking of less automation not more, localizing the supply base by finding local suppliers in the home country or encouraging the current suppliers to move, are other requirements. In brief, this means adopting a strategic view of supply relationships, rather than a transactional view, and rethinking product design to leverage the proximity to manufacturing. "Having the work in-house is important for our learning” explained the head of the Plastics Competency Center at Appliance Park (Shih, 2014, p.7).

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In this regard, Van den Bossche, Gupta, Gutierrez, and Gupta (2014) also confirm that the readiness of the organization for the reshoring is important. They posit that before deciding or initiating the reshoring process, the company needs to check if reshoring is right for the company by answering three questions; is our reshoring decision future-proof? is our company ready to reshore? Where is the best reshoring location?

To answer those questions, they recommend the use of scenario planning to check for all possible scenarios that are open or may face the organization. To assess the readiness of the organization, several factors that are specific to each organization, such as skills availability, need to be investigated before taking on the decision to reshore. In addition, to check for the best location for the company operation, a thorough location selection exercise must be conducted, including an evaluation of quantitative cost measures and qualitative capability assessments (Van den Bossche, et al. 2014).

On the other hand, Blanchard (2013) considers the concept of readiness for reshoring but from a macro-economic perspective. He states that the home country, the US in this case, should be ready for reshoring. Building the required skills and expertise of the workforce is necessary. In other words, the whole economy should be ready for reshoring not only the organization. His view calls upon the actions of the politicians and economists of the home country if they are interested in inviting the US companies to bring jobs back to the US.

Similar to Blanchard’s (2013) is the view of Lavissière, Mandják and Fedi (2016). They address the key role of infrastructure in the reshoring process, specifically free ports, as supply chain and logistics infrastructures, because they play a key role in the reshoring decision.

On another dimension, Grappi, Romani and Bagozzi (2018) focus on readiness from the demand side or the consumer. The authors believe that consumers in the home country may have different attitudes toward the reshored production and in this way, they form different segments in the home country market. Consumers express different sentiments towards reshoring decisions, and different ethnocentric orientations. For example, some express strong and positive sentiments towards reshoring decisions, supported by strong ethnocentric orientations and others express a low level of consumer ethnocentrism and relatively weak reshoring sentiments.

On the other hand, Presley, Meade and Sarkis (2016) have come up with another framework to help in the reshoring decision making process, which they call the Strategic Sourcing Evaluation Methodology SSEM (Figure 5). The SSEM integrates both financial measures and nonfinancial measures and uses activity-based costing and management, multi-attribute decision-making, and utility theory (Presley, Meade & Sarkis, 2016). The SSEM consists of four phases of the decision-making process: identifying the impact of the sourcing decision on the organization, estimating the costs and benefits (both financial and strategic), performing decision analysis to reach a decision recommendation, and monitoring and evaluating the decision to make sure that the promised costs and benefits come to be true.
The first step in the SSEM framework is to identify the organizational impact of the reshoring decision. The objective here is to identify how and where the organization is impacted by the decision to reshore. At this stage, a strategic plan, including a vision and a set of strategies and objectives should be in place. In some cases, this strategy will be related to a single organization. However, this decision may not only impact the organization but also the whole supply chain (Presley, Meade & Sarkis, 2016). The framework then turns to the second phase that is estimating the costs and benefits of the decision. The first task here is to develop the actual cost estimates for Activity Analysis Matrix (Presley, Meade & Sarkis, 2016). Persley, Meade and Sarkis recommend here using NPV and ROI as inputs into the Activity Analysis Matrix. This matrix is developed to both the reshoring option and the continued offshoring option to compare both options based on that. Performing decision analysis makes the third stage of the framework. This phase is based on the values of the previous calculation of the costs and benefits performed in the previous stage. As mentioned, the two options are evaluated both individually and in comparison, to each other (Presley, Meade & Sarkis, 2016). The final phase of the decision-making process according to the framework is to monitor the decision (Presley, Meade & Sarkis, 2016). This is a key of auditing of the decision to review the results of the decision by comparing the actual results to those which were estimated.

Another, but narrower approach to the reshoring decision making process in its focus on the location decision only, is suggested by McIvor (2013). His approach is based on the Resources Based View (RBV) and Transaction Cost Economics (TCE) to assist in the location decision, which may include reshoring. In his opinion, the objective of each theory, that are the search for competitive advantage and the most efficient governance structure, are two main issues of the sourcing of the manufacturing process, to insource/reshore or outsource. He concludes that organizations need to perform internally (reshore) in the case of a superior resource position (RBV) and high opportunism potential (TCE), and offshore in the case of a weaker resource position and low opportunism potential. His approach is not limited to reshoring, but reshoring can be a method to use when a company decides to perform internally.

On the other hand, Stentoft, Olhager, Heikkilä, and Thoms (2016) confirm that due to the dynamic nature of the reshoring, the decision to relocate should be supported by dynamic analyses of, for example, the rates of change in markets and currencies, and explorations of the transition phases from the decision to relocate to actual implementation of the relocation. They identify twenty-five factors that affect the reshoring decision-making and categorize them into seven clusters. These clusters are: cost, quality, market, access to skills and knowledge, time and flexibility, risks, and other factors.
Nujen, Halse and Solli-Sæther (2015) focus more on another issue that is relevant to reshoring, which is knowledge transfer. When a company decides to move back to its home country, knowledge transfer from the host country to the home country should be carefully considered. This means that it is important to know what type of knowledge is needed and how it will be re-integrated. This is a factor that must be integrated into the decision-making process on reshoring (Nujen, Halse & Solli- Sæther, 2015).

2.2 The Reshoring Process

There is not much literature about the reshoring process, perhaps due to the newness of the phenomenon and the difficulty that comes with this newness to judge the success or failure of the firms who started or implemented this process. However, a few researchers have written about this issue such as Benstead, Stevenson and Hendry (2017). The reshoring process is not regarded here as one factor of the decision to reshore but a result of that decision.

In their work, Benstead, Stevenson and Hendry (2017) try to show how the decision to reshore is implemented and how firms execute the reshoring successfully. They have developed a framework of reshoring (Figure 6) combining reshoring drivers, implementation considerations and contingency factors. Their framework has been developed based on previous literature then redefined based on empirical evidence, which adds to its practicality and robustness. The framework encompasses the drivers of reshoring in categories such as risk, uncertainty and ease of doing business, cost-related, infrastructure-related, and competitive priorities. Implementation considerations are also included. The contingency factors include company related factors, product related factors, and behavioral/individual related factors.

Figure 6: Framework on Reshoring. Source: adapted from Benstead, Stevenson & Hendry (2017).

On another dimension, Grappi et al. (2018) states that there are four categories of consumers; reshoring advocates, ethnocentric reshoring advocates, reshoring neutrals and ethnocentric reshoring neutrals. Therefore, they have created what they call Customer Reshoring Sentiment Scale (CRS), to evaluate and categorize the segments based on their attitude, or readiness, to accept the reshored activities. This model, the authors believe, can be useful for companies in their effort to lead an effective strategy of reshoring using the right market segmentation and profiling of the customers. In this way, the scale helps the decision makers
understand the customers before initiating the reshoring process, which may increase the probability of the reshoring process success.

Baraldi, Ciabuschi, Lindahl and Fratocchi (2017) take on a network perspective of the reshoring process stating that the reshoring and offshoring processes are enabled and constrained by the micro-interactions and interdependencies in the industrial networks in both the host and the home country. Moreover, offshoring or reshoring is a long-term process which depends on the firm's strategy and on its interplay with the embedding network. This means that reshoring does not happen in isolation but in interaction and its activities are connected to other players in the business network. Therefore, the reconfiguration of the network and maintaining those interactions are important for the success of the reshoring process.

The models that have been described so far have their strengths and limitations (summarized in table 2). The Conceptual Model for Location Decision-Making by Joubioux and Vanpoucke, (2016) covers many factors that should be considered during the decision process, ranging from the macro-economic dimension to the company itself. This is a robust and strong approach for considering the factors that play a role in the decision-making process. Another strong point is that the model specifies the types of reshoring that are available to the decision makers and integrates this in the decision-making model, which this research could not find in any other model. However, the model implies that the decision to reshore is always a correction of a previous error to offshore, which is not the case as we have mentioned. The decision to reshore can be a strategic decision of its own.

One the other hand, Tate, Ellram, Schoenherr and Petersen’s (2014) model focus mostly on the factors and does not describe the process of the decision-making to reshape nor how to consider those factors. Therefore, this study has chosen to not include this model as a part of the decision-making process.

Furthermore, even though the Future Research Avenues (FRAs) framework created by Bals et al. (2016) might seem to be a mere combination of different factors and previous frameworks, its strength lies in the fact that it combines both the decision making and implementation process in one framework. In addition, it considers the factors on all the possible levels, from the individual level to the whole economy. It also specifies the reshoring decision magnitude, to include reshoring on the task level and the plant level as some companies might not be willing to relocate the entire production or the production activities but to perform it partly as our case companies did. However, this model may be losing some focus as it does not focus on the decision-making process, which is the aim of this study. This process may not lead to the decision to implement at all. Therefore, including the implementation in the model might be of no use, or it is too early to consider.

On the other hand, the framework created by Benstead, Stevenson and Hendry (2017) shows a map of factors and considerations rather than a decision-making model, and that is why this research includes it under the reshoring process (implementation) rather than among the decision-making process models. This model can be very useful to practitioners but as an assistance tool for what to consider, not for how to decide on the reshoring.

<table>
<thead>
<tr>
<th>SR</th>
<th>The Model</th>
<th>Created by</th>
<th>Year</th>
<th>Strengths</th>
<th>weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Conceptual Model for Location Decision-Making</td>
<td>Joubioux and Vanpoucke</td>
<td>2016</td>
<td>Covers numerous factors</td>
<td>Implies that the decision is always a correction of a previous decision</td>
</tr>
<tr>
<td>2</td>
<td>&quot;Factors that generate the need to consider manufacturing location&quot;</td>
<td>Tate et al.</td>
<td>2014</td>
<td>Covers numerous factors</td>
<td>Focuses only on the criteria</td>
</tr>
<tr>
<td>3</td>
<td>Future Research Avenues (FRAs)</td>
<td>Bals et al.</td>
<td>2016</td>
<td>Covers numerous factors on several levels</td>
<td>Does not focus on the decision-making process</td>
</tr>
<tr>
<td>4</td>
<td>Framework on Reshoring</td>
<td>Benstead et al.</td>
<td>2017</td>
<td>Covers numerous factors</td>
<td>Focuses mostly on the implementation and ignores the decision-making process</td>
</tr>
</tbody>
</table>
When it comes to the Strategic Sourcing Evaluation Methodology (SSEM) by Presley, Meade and Sarkis (2016), this model is more robust and useful in the sense that it integrates both financial measures and nonfinancial measures and uses activity-based costing and management, multi-attribute decision making, and utility theory. This is one important reason for choosing this model for this research’s analysis in this study. However, this framework lacks considering the demand perspective to reshoring. This means how the market and the customers would consider and react to the reshoring decision. Their attitude is an important point to consider because an opposing attitude to reshoring can lead to determinant impacts on the company. Furthermore, the demand-side perspective can be critical to the company value creation (Priem, Li & Carr, 2012). Furthermore, the framework does not account for how the organization’ set of skills and capabilities matches the reshored production. Assessing the organizational skill availability is an essential task in the reshoring decision making process (Shih, 2014; Blanchard, 2013). The strengths and weaknesses of this model are summarized in table 3 below.

<table>
<thead>
<tr>
<th>The Model</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Sourcing Evaluation Methodology (SSEM)</td>
<td>Integrates both financial measures and nonfinancial measures</td>
<td>Lacks essential phases like considering the demand perspective of the decision to reshore and the organizational readiness to reshore.</td>
</tr>
<tr>
<td></td>
<td>Uses Activity based costing, multi-attribute decision making, and utility theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goes through subsequent phases that can also go in parallel</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. The strengths and weaknesses of the SSEM framework.

As may have been seen, the drivers to reshore that we have mentioned in the introduction are converted into factors considered during the different phases of the reshoring decision making process. For example, the cost of manufacturing and the cost of transportation are two drivers that are used as process factors that companies pay attention to and analyze before moving home. Another example is the feasibility of automation in the home country when firms study this feasibility before deciding on reshoring.

To conclude and as previously mentioned, this study will follow a similar trend to the one that exists in literature, that is to focus more on the decision-making process rather than on the implementation or the factors.

3. Methodology of Research

We present in this chapter our research methodology, elaborating on the methods and
approaches we have chosen for this research. This part will begin by describing the research philosophy of nominalist ontology and constructionist epistemology and the abductive research approach, the qualitative method and the design of the multiple case study. After that, an explanation of our approach to the literature review will be presented, as well as how the data were collected and handled. The quality criteria and ethical considerations will be the described last as we explain what we have done to increase trustworthiness and ethical practices in our research.

1.3

3.1 Research Philosophy

This study adopts a nominalist ontological and constructionist epistemological approach. Ontology is about the nature of reality and existence, and epistemology refers to the philosophy of knowing where knowledge is of significance only if it is based on observations and is a result of empirical verification (Easterby-Smith, Thorpe & Jackson, 2015). Furthermore, nominalism implies that social reality is created through language & discourse (Easterby-Smith, Thorpe & Jackson, 2015). In a similar fashion, constructionism is the process of creating reality through people’s actions and interactions (Easterby-Smith, Thorpe & Jackson, 2015). The link between the ontological and the epistemological approaches appears here in the link between constructionism and nominalism. According to Easterby-Smith, Thorpe and Jackson (2015), constructionism is fitting most with nominalism.

Furthermore, the constructionist epistemological approach aims to draw a rich picture of life (Easterby-Smith, Thorpe & Jackson, 2015), and the nominalist ontology implies that any decision is taken after discourse and discussions among the actors (Easterby-Smith, Thorpe & Jackson, 2015). In our case, this picture is of the reshoring decision making, and of why and more importantly how the decision is taken in real life.

The constructivist view of research distinguishes between instrumental and expressive studies. Instrumental studies involve looking at specific cases to develop general principles, whereas expressive studies involve investigating cases because of their unique features (Easterby-Smith, Thorpe & Jackson, 2015). Therefore, this study is instrumental as it focuses on a few specific cases to derive general understanding of the reshoring decision making and how it is planned and performed.

3.2 Research Approach

3.2.1 Scientific Approach

There are different scientific approaches that are available to researchers; inductive, deductive, and abductive. The inductive approach to research is a bottom-up approach, where the study starts with the collection of empirical data (Dahlberg & McCaig, 2010). The analysis of the data contributes to an understanding of the reality and generates theories (Dahlberg & McCaig, 2010). A deductive approach, on the other hand, is a top-down approach where the researcher uses theory as a starting point. A number of hypotheses are derived from the theory and these are tested empirically (Dahlberg & McCaig, 2010).

A third approach exists as well, that is the abductive approach. According to Dubois and Gadde (2002), the abductive approach is not to be seen merely as a mixture of the two other approaches. The abductive approach is used if the researcher wants to discover new things — other variables and other relationships (Dubois & Gadde, 2002; Dubois & Gadde, 2014). Dubois and Gadde (2014) also confirm that the ultimate objective with abductive approach is to match the theory with the reality. Kovács and Spens (2005), on the other hand, consider that the abductive approach as a combination of both deductive and inductive. They argue, however, that the abductive approach process differs from the other two approaches, which can be showed by the following model:
Dubois and Gadde (2002) call this process a ‘systematic combining’ grounded in an ‘abductive’ logic for case studies aimed at theory development. It is a process where theoretical framework, empirical fieldwork, and case analysis evolve simultaneously (Dubois & Gadde, 2002). This “going back and forth” between the theory and empirical data, enhances the researcher’s understanding of both the theory and the empirical phenomenon, according to Dubois and Gadde (2002). This also may lead to the expansion or modification of the theoretical model. In other words, the objective of this type of research is confronting the theory with the empirical world.

This study adopts the abductive approach as the aim is to create new concepts from the empirical data comparing them to the existing theory (The process of implementing this approach in the data analysis is detailed in section 3.6.2). Another reason for choosing this approach is because the aim of this study is to improve the theoretical model chosen for the analysis. In addition, this approach fits with the research philosophy, the method of case study, and the practical topic of the research.

3.2.2 Methodical Approach

There are two methods of research, quantitative and qualitative. Some researchers even use a mixture of both. Qualitative methods deal with difference in kind, while quantitative methods deal with difference in numbers/degree (Dahlberg & McCaig, 2010). While qualitative approaches use general descriptions to describe or explain phenomena and to gather deep and particular information, quantitative approaches use numerical means and rely on counting and statistical analysis and gather broad and general information (Dahlberg & McCaig, 2010).

A qualitative approach is mostly suitable when the purpose of the research is to study how things work or/and systems work and to understand how and why context matters (Easterby-
Smith, Thorpe & Jackson, 2015). It provides rich and detailed descriptions of the studied phenomenon from the participants perspective.

The qualitative approach is what we use in this study, since it suits the topic, and the objective of the study that is to probe deeply into the phenomenon of reshoring decision making, how it is performed, and how the contextual factors affect the decision to reshore.

3.3 Research Design

Research design is the overarching strategy for finding useful answers to problems (McCaig, 2015). The case method looks in depth at one, or a small number of, organizations, events or individuals, generally over time (Easterby-Smith, Thorpe & Jackson, 2015).

We use a multiple case study method in this study because it is a qualitative method that allows the researcher to analyze the cases across settings and within each setting (Baxter & Jack, 2008), which fits with the objective of this research. In addition, the phenomenon of the reshoring decision making process requires probing into more than one case to be able to generalize, since each case is unique in some ways and shares some aspects with other companies, which is what we can use to generalize from.

Yin (1994) argues that a multiple case study has similar traits to a single case study, and only that a multiple case study uses more individuals or phenomena. The difference according to Yin (1994) between these two approaches is that multiple case studies are more robust and are considered more compelling than a single case study.

The need to gain a deep understanding of the experience of several firms and to get a rich picture of the topic in its context makes this method considerably useful. However, since the phenomenon of reshoring is new and not many organizations who have implemented it and succeeded exist yet, the number of the case companies used in this paper is limited to three companies.

Another reason that justifies the use of multiple case study is that it provides a better explanation than a single case study (Dubois & Gadde, 2002). Using a multiple case study also benefits the research by having more perspectives from the cases. Furthermore, the end result is richer and stronger as a multiple case study brings several patterns together (Dubois & Gadde, 2014).

The multiple case study fits with the purpose of the paper, how organizations plan and decide on reshoring in real-life. Focusing on multiple case organizations enables the researcher to compare between the different cases looking for a trend among them and get more robust data regarding this field of topic.

This method goes well with the constructionist epistemological philosophy of research (Easterby-Smith, Thorpe & Jackson, 2015), and as we aim to draw a rich picture of the reshoring decision making and to generalize based on observations, a multiple case study is a good choice for this research.

However, one caution regarding multiple case study, according to Baxter and Jack (2008), is that a multiple case study is a very time-consuming method, and expensive to conduct. This is something that researchers must consider when using multiple case studies. This is avoided in this study as the number of cases included is not that wide and it limited to three companies only, as mentioned before.

3.4 Literature Review Method

“A literature review is an analytical summary of an existing body of research in the light of a particular research issue” (Easterby-Smith, Thorpe & Jackson, 2015, P. 59). The objective is to learn from the previous research about a certain topic.
There are two kinds of literature reviews: traditional literature reviews and systematic literature reviews. A traditional literature review summarizes a body of literature drawing conclusions about a certain topic (Jesson, Matheson & Lacey, 2011). A systematic review, on the other hand, identifies, appraises and synthesizes all relevant studies on a certain topic (Petticrew & Roberts, 2006)

Since the topic of reshoring decision making and reshoring process is new and lacks sufficient studies and researches, we use the traditional literature review method. This is because systematic reviews consider peer-reviewed academic articles only and tend to favor journal articles over other sources such as book chapters and reports (Easterby-Smith, Thorpe & Jackson, 2015). Our intention here is to comprehensively include the different kinds of literature that exist on the topic of reshoring decision making and reshoring process. In addition to the comprehensiveness of the traditional literature review method, it also helps add new insights on the topic (Jesson, Matheson & Lacey, 2011). However, this method is accused of being biased and has no formal methodology and lacking transparency (Jesson, Matheson & Lacey, 2011). We tried to avoid those drawbacks in detailing our method of search, even though it is not as detailed as a systematic literature review.

The sources of information we use in this study are mostly articles and reviews, regardless if they were peer-reviewed or not. As for searching for relevant literature, this was performed under the period from January to February 2018, using the academic search engine Web of Science, Google scholar as well as Jönköping University library database. It is reasonable to assume that more recent articles may have been published after this period, but the time limitation and the nature of this study as being a thesis with a pre-defined submission date, it was not possible to include all the literature up to the date of the thesis submission.

To include as much literature as possible, we used the snowballing method during our search and reading of the articles to reach more articles that had not shown up during our preliminary research. In other words, during the reading of the articles and when we found a quote or an idea that is relevant to our topic, we went to the reference and searched for that article to include it in the literature review list. Almost 30% of the literature used for this study was added in this way since many articles did not show up during our first research. The articles and reviews were then summarized, highlighting the most relevant points to our research. The next step was to sort out and arrange the main points into themes. Finally, we wrote the literature review considering the different views and perspectives following an argumentative method.

### 3.5 Data Collection

Before going into the data analysis and before and during data collection, managing the data of the research is important to keep track of the interviews and to keep the data safe (Smith & Davies, 2015). Therefore, a research diary was used to register the activities of the research such the dates of interviews and references to important articles.

On the other hand, and since transcription of every detail of the data obtained during the interviews is a time consuming and not always valuable process, selective transcription with reference to expressive quotes was used. The interviews were recorded after the consent of the interviewee to refer to them anytime we needed to.

The empirical data collection method used was semi-structured in-depth interviews. In other words, the interviews were guided-open interviews in the sense that they were based on a list of questions that were addressed in a more flexible manner as the interviewees talked and answered the questions. The reason behind this, in our opinion, is that since the topic is about a process that goes through many phases and considers many factors, elaboration on each phase and factor or consideration is necessary. This method would be more useful than asking short questions and receiving yes-or-no, or short answers.

As for the type of the interviews, we used both remote and face-to-face interviewing. Remote interviewing offers more flexibility, as managers feel less committed to host the researcher. However, it may not benefit the researcher as it lacks the immediate contextualization, depth and nonverbal communication of face-to-face interviews (Easterby-Smith, Thorpe & Jackson, 2015). Therefore, combining both remote and face-to-face provides flexibility without
affecting the quality of information and communication required for this study.

As for the sampling strategy, the sample size depends on the nature of the research (Ritchie, Lewis, Elam, Tennant & Rahim, 2003), and in qualitative research the sample size tends to be smaller (Patton, 2002). Therefore, and because most of the companies we contacted (18 companies in total both in Sweden and Norway) hesitated to reveal their internal processes to the public, the sample was limited to few companies as previously mentioned. Another reason for this, as we believe, is that the focus on few cases helps the researcher get a richer and deeper understanding of the topic or phenomenon under research.

Five interviews were held under the period from March to April 2018, with approximately 1:30 hours long for each interview. In this way, the data used was mostly primary data, with a minor use of secondary data when possible, such as news articles, and the company websites. Even though the use of the secondary data such as the company websites was comparatively limited, these websites provided a useful amount of secondary data even though these data are marginal in terms of scope and do not reach the level of the primary data used in this research. Table 4 below provides some information about the interviews and the interviewees.

Table 4: Introduction to the case companies

<table>
<thead>
<tr>
<th>SR</th>
<th>Company</th>
<th>Contact person</th>
<th>Interviewee Position</th>
<th>No. of interviews</th>
<th>Duration of the interviews</th>
<th>Type of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DinBox Sverige</td>
<td>Olle Årman</td>
<td>VD</td>
<td>1</td>
<td>1:15</td>
<td>Remote</td>
</tr>
<tr>
<td>2</td>
<td>PWS Nordic</td>
<td>Dan Håkansson</td>
<td>VD</td>
<td>1</td>
<td>1:15</td>
<td>Remote</td>
</tr>
<tr>
<td>3</td>
<td>Ewes</td>
<td>Anton Svensson</td>
<td>VD</td>
<td>3</td>
<td>3:30</td>
<td>Face to Face and remote</td>
</tr>
</tbody>
</table>

3.6 Data Analysis

3.6.1 Coding the Data

Coding is the process of identifying and categorizing the parts of the data that the researcher believes to be useful to the research (Smith & Davies, 2015). A code is a word or a short phrase that summarizes the meaning of a set of data (Charmaz, 2014). Therefore, and for the sake of simplifying the process of analyzing the data, we coded the data looking for special categories among them. The process of coding went as follows; initial coding, re-reading the data, identifying any overlapping codes and combining codes. The method of coding was topic coding as we looked for topics in the data that could be grouped together.

3.6.2 Analysing the Data

As previously mentioned, the scientific direction of this thesis is the abductive approach. Therefore, we chose a framework from literature to apply to this study analysis but we confronted this framework with the empirical data we obtained from the case study to see what changes or redirections might be needed to be done to this framework, for the theory to match the empirical world of the case companies. In other words, we went back and forth between the framework, the cases and the empirical data we obtained from these cases, even during the data collection phase where we started analyzing as more data came in. This means that the data collection and analysis went in parallel. The modified framework went into several phases of modifications of the phases and within each phase as we discovered new aspects of the reshoring decision making process of the case companies in comparison with those in the literature. This included what these companies did during each phase and how the framework describes the tasks required in the phases. At the end, we modified and improved the chosen framework based on the empirical data.

3.7 Research Quality

Numerous criteria have been developed to assess the quality of qualitative research and there are several basic elements to the study design that can be used to enhance the quality or trustworthiness of the study (Baxter & Jack, 2008). One criterion is Guba’s (1981) four
factors of credibility, transferability, dependability and confirmability.

Credibility refers to how the findings are congruent with reality (Merriam, 1998). Transferability refers to the extent to which the findings of one study can be applied to other situations (Merriam, 1998; Clissett, 2008). Dependability, on the other hand, means that if the work were repeated, in the same context, with the same methods and with the same participants, similar results would be obtained (Shenton, 2004). Finally, confirmability refers to the concern of objectivity by the researcher where the work’s findings must be the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher (Shenton, 2004).

To ensure credibility in our paper, we have used triangulation. Triangulation is a primary strategy that can be used where the phenomenon is viewed and explored from multiple perspectives (Baxter & Jack, 2008). In the data collection phase, it may involve the use of different methods such as observation, focus groups and individual interviews (Shenton, 2004). According to Guba (1981), the use of different methods at the same time compensates for each method limitations and exploits their benefits. To get credibility in the literature review phase, we have sought after different perspectives from different authors to be able to broaden our research, even though this posed a challenge on us due to the newness of the topic. We even borrowed models and theories from other fields such as offshoring and relocation. In this way, the research is based on several and different theoretical perspectives. In the data collection phase, pursuing different perspectives has been a challenge as well, but we tried to consider other perspectives such as what has been written in the press about the experience of the case organizations, not only taking the perspectives of the interviewees.

As for the transferability, thick descriptive data have been used. Detailed, or “thick” description is important to promote transferability (Shenton, 2004) and credibility (Guba, 1981), as it helps to convey the actual situations that have been investigated and, to an extent, the contexts that surround them (Shenton, 2004). Therefore, we made sure to detail the process that the case companies went through in their reshoring decision making process and touched upon the reshoring process itself. In addition, and as transferability is about the context, the context of the decision-making process was considered in the analysis, represented by the factors included in the process itself.

The third factor that contributes to trustworthiness according to Guba (1981) is dependability. As dependability is about verifying the findings that can be dependable, we tried to be as detailed as possible on how we did our research and how we searched for the sources in literature. In addition, we detailed the methods used for data collection, the sample size and data sources. Furthermore, we saved all the data that have been collected during this research and recorded all the changes that were done during this process. Providing this kind of information may help other researchers follow the same process and to reach similar results.

The last factor to ensure trustworthiness is confirmability. As confirmability is similar to the third factor, dependability, we tried to be as precise and objective as possible during the data collection process. We recorded the interviews, transcribed some important ideas, and reconfirmed with the informant about data given to us. The use of triangulation mentioned above also contributed to confirmability as it helps reduce the investigator's bias (Shenton, 2004). Furthermore, the detailed methodological description we used increases confirmability as it enables the reader to determine how far the data and the constructs emerging from it may be accepted (Shenton, 2004).

3.8 Research Ethics

Esterby-smith et al. (2015) mention that ethical issues in researches must be looked upon as this protects not only the interests of the organization, but also the employee itself. As According to Bryman and Bell (2011), there are two ethical concerns that researchers must think of, (1) How should we treat the people with whom we conduct research? And (2) are there activities in which we should or should not engage in our relations with those people?
Bryman and Bell (2011) argue that there are three factors that the researcher needs to be aware of; anonymity, confidentiality and privacy. With anonymity, the author means that the participant of the research has the option to be protected from any information about them as a person, but anonymity can be about the organization itself. Confidentiality, on the other hand, is about the handling of the gathered data and information. What Bryman and Bell (2011) discuss is that this is about building a trust relationship and that the information should not be shared with others without a previous consent by the participant. The last point is privacy. This relates to which degree the invasion of privacy can be condoned. In other words, the researcher should not intrude someone’s privacy and respect the participants’ values and norms.

Both Esterby-smith et al. (2015) and Bryman and Bell (2011) argue that these three factors can be handled by having an informed consent that is given to the participant. The informed consent should include the participant’s rights and the necessary information for the participant to decide whether to participate in the research or not. By having a consent form, the researchers know what they can include in the study, and what they cannot use in the research.

In this study, we tried to follow these standards or factors to protect the participants and avoid doing harm. Therefore, a consent form was brought to the interviewees, or sent to them via mail, where the necessary information were given to the participant. In this way, the participants knew about our study, its purpose, field of study, where it will be used, and the participant’s rights regarding the study. By having a consent form, we could avoid harming the participant and followed the three standards of anonymity, confidentiality and privacy.

Another ethical aspect that we took into consideration was that we had continual communication with the participants, where we sent a mapping of the decision-making process performed at the company, when no model existed at the company. The modelling of the process was made after we obtained the required information from the participant to ensure that it matched the reality of the organizational reshoring decision making process. Doing this enabled us to eliminate any potential misunderstandings regarding the data and provided as accurate result as possible.

### 4. The Empirical Study

In this chapter, the three case study companies, Ewes AB, PWS Nordic AB and Dinbox AB are presented shortly. After the presentation of the companies, we go through the drivers of reshoring for those companies, since most of these drivers are converted into factors in the decision-making process for the case companies. Then we move into the decision-making process itself and the factors considered during this process. However, before all of that, a short table summarizing the main aspects of each company and its reshoring initiative is presented.

<table>
<thead>
<tr>
<th>SR</th>
<th>Company</th>
<th>Industry</th>
<th>Reshored from</th>
<th>Partial/ Total</th>
<th>Imple. Start</th>
<th>Imple. End</th>
<th>Location affected by reshoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ewes</td>
<td>Manufacturing of steel springs</td>
<td>Serbia</td>
<td>Partial</td>
<td>2014</td>
<td>2014</td>
<td>Bredaryd</td>
</tr>
<tr>
<td>3</td>
<td>DinBox Sverige</td>
<td>Manufacturing of real-estate mailboxes</td>
<td>China</td>
<td>Partial</td>
<td>January, 2018</td>
<td>-</td>
<td>Stockholm</td>
</tr>
</tbody>
</table>

Table 5: Main aspects of the case companies
1.4

4.1 Ewes AB

4.1.1 Introduction to Ewes AB

Ewes AB is a Swedish company located in Bredaryd, South of Sweden. The company was founded in 1935 by Einar Svensson. Today, the company is managed by both Anton Svensson and Anders Cederquist, the third generation in the family (Ewes, 2018). Ewes AB produces and sells steel springs to many industries, such as the electronic industry, the automotive industry, and the construction industry.

Ewes AB is a small-to-medium size company, which has subsidiaries in other countries, such as in Serbia, Bosnia and China, with approximately 80 employees in Sweden, 30 co-workers in Serbia and 4 employees in China (Ewes, 2018).

In 2017, the company had a turnover of 134 million SEK, which was an increase of 8% from previous year (Ewes AB, 2016). Ewes AB is divided into three departments, which are Ewes Steel Springs, Ewes Engineering and Ewes Environment, where Ewes Steel Springs is the main department in the company. Ewes wants to be seen as a company that is open minded with entrepreneurial spirit when the goal is to create new solutions for their clients.

4.1.2 Introduction to Ewes AB Reshoring Initiative

Ewes AB started to reshore its production in 2014 from Eastern Europe when they saw a demand from the customer and a change in the market. As Ewes AB vice director, Mr. Anton Svensson explains, the company has always been driven by the technological industry and the company has always wanted to keep up with the trends in the market. The company started to see changes in the market and in the shape of demand. The customers started to prefer that the production is located closer to them.

According to Mr. Svensson, in 2004-2005, many companies had a “Wild West mentality”, when many companies offshored their production to the developing countries, such as China, only because this was the trend at that time. Many companies followed that trend and offshored their production to a developing country, without actually any reason behind it.

Many of those offshoring initiatives, as explained by Mr. Svensson, were based on an emotional bunch rather than realistic calculations and financial analysis. However, as the time passed, many companies realized that offshoring may not be the best option. Consequently, this mentality has changed during these couple of years.

“The decisions were not made on economical basis, but were more as emotional decisions” - Anton Svensson, VD, Ewes AB

Changes in the global economy and the economic policies of many countries had their influence on the change in the attitude toward offshoring. Many countries have become more protective with import and export, such as US and China, with more tariffs raised for foreign products. These changes, among others, made companies reconsider their decisions. According to Mr. Svensson, Swedish companies should focus more on the local market especially after the political changes that have affected globalization and the ambition of companies to go global.

“It was always in our mind to thrive and develop as a local company” – Anton Svensson, VD, Ewes AB

In addition to the change in demand and in the market, Ewes AB aimed to have a centralized point in Sweden by bringing its production closer to the customer. This, according to Mr. Svensson, would help the company gain more control over the production.
4.1.3 The Drivers behind Ewes AB Reshoring Initiative

Ewes AB reshoring initiative was triggered by the customers’ demand for more flexibility and shorter delivery times (Metal Supply, 2015). “The customers are demanding shorter delivery times, they do not have time to wait” explains Mr. Göran Göhln, the chairman of Gnosjöandans (Renulf, 2015). Furthermore, as confirmed by Mr. Svensson, the decision to reshore was mostly motivated by a change in the customer's’ attitude toward offshored production. Those customers realized that producing overseas, in the low-cost countries, did not necessarily affect the total costs positively. Calculations of the total management cost and life-cycle cost showed no major difference between producing in the home country, Sweden, and in producing overseas. In addition, the customers became more open to rethink their attitude and started to cooperate more with the company in its decision-making process for the best location.

In addition, concerns for the product quality and quality control when the production facilities were far away from the head-office were other motivations. This proximity to the market and the customer could give the company a better ability to control its processes. The aim of the company was to produce the “right kind of product to the right customer, as close as possible to that customer” explains Mr. Svensson.

Moreover, the loss of flexibility and control over the different process pushed the company to rethink its strategies and location decisions. Furthermore, the logistics costs of producing overseas and then shipping back to the customers in Sweden was a driver of great importance. It was not logical for the company’s board of directors, that this company and its customers were located in Sweden but the production was done overseas then shipped back to Sweden. This increased the transportation and handling costs substantially. Added to those costs, are the costs of tariffs and border clearance. Moreover, it was required to pay bribes in the host countries sometimes, which did not fit with the company’s ethical standards.

“Having control of the production and the different parts in the company is more of an advantage for the company nowadays.” – Anton Svensson, VD, Ewes AB

On another dimension, the technological advancement that happened in Western Europe the last decade has made the company consider increasing its production automation level. This formed another major motivation to reshore back to Sweden to take advantage of the technology. Mr. Anton Svensson mentioned that one reason to move back to Sweden was to enable the automatization in the production line, but also to be ready for the “industry 4.0”. The technology of automation has become even cheaper, as explains Mr. Anton Svensson (Renulf, 2015). This fitted with the company’s goals of continuous development in its processes. Mr. Anton Svensson also pointed out that having a more automatized production would make them much more versatile. Ewes AB invested approximately 2 million SEK to upgrade their machines in order to match the criteria they had for automatization.

In fact, the experience that Ewes already had in automatizing the molding of products was an enabler (Metall Supply, 2015). Furthermore, the automation of the previously manual molding was believed to be the solution to increase flexibility and to shorten delivery times and reshoring to Sweden was what could make this possible (Gnosjoregionen, 2015).

In brief, the company saw that the future lies in locating the production in Sweden, which was not the case in 2004-2005. The future of the market in Sweden seems very promising to Ewes. Contributed to this is the refugee crisis that Ewes sees in it an opportunity as this means more working and purchasing power which will affect the economy positively at the end.

4.1.4 Ewes AB Decision Making Process

Ewes AB started the decision-making process to reshore considering many factors that contributed to the process and its success. The total costs, quality issues, delivery times, loss of flexibility and control of operations overseas, and the feasibility of automation at home are
important factors considered in the decision-making process. These factors were also considered during the whole process until before the implementation.

However, what triggered the decision to reshore, was the change in the demand of the customers who saw that bringing the production closer to them would improve the total costs and the level of the service. The company did not perform any market analysis, since the change in the attitude of the customers was enough for them to reshore. They had the idea of reshoring for a long time but it was the old opposing attitude of the customers who had the idea that offshoring had been better for them that prevented that move to reshore earlier.

After that, what was next to do was performing a cost and benefit analysis to evaluate the pros and cons of the reshoring initiative. Some of the benefits the company considered were increased quality, improved customer service in terms of delivery times, and lower total costs. Moving the production back to Sweden could produce proximity to the customers, which positively could affect the shipping delivery time and then the cost, or as Anton Svensson, the VD of the organization explains “if we save time, we save money, time is money”. The cost of the initiative was far less than the gains that the company could achieve from reshoring, especially that the cost of automation in Sweden is a one-time cost that generates a continuous revenue, increased control of quality, improved delivery times and flexibility, as Mr. Svensson explains to Metall Supply (2015).

Reshoring the production to Sweden could allow the company to use its logistics capabilities and to rely on its people, which would save costs in terms of manpower and transportation costs. Furthermore, more benefits could be obtained from this reshoring in terms of the knowledge that the company had got about automation since it had decided to reshore the production back to Sweden. The company has now much more knowledge and competence in automation than 10 years ago (Metal-Supply, 2015). The automation improved cost saving as less manpower was needed to manage and operate the production lines.

The next phase of the decision-making process was performing an organizational readiness assessment. The company’s board of directors raised questions, such as “are we ready to reshore in terms of knowledge and competence required? Do we have the skills in-house? Do we need knowledge transfer?” For Ewes AB, the competence and knowledge already existed since they had been producing similar products in Sweden for many years. No knowledge transfer was needed. One advantage that the company had in Sweden is its proximity to the customers and knowledge of the customer’s needs due to this proximity.

Performing the necessary organizational change, in structure and roles, followed. A new role was created to take charge of managing the logistic process in Sweden from the factory to the customers. This role was subsequently eliminated from the subsidiary in Serbia. Having done that and before the execution, an implementation action plan and a timetable were set for the reshoring process to begin. The time frame for the process was six months. The execution started with building enough stock here in Sweden to satisfy the customers’ demand during and after the execution so that the reshoring process would not affect the customer service. The machinery to produce the reshored products were purchased and set in place.

After the execution was complete, a phase of evaluation and follow up started. A few refinements were performed to improve the reshored production to reach the same and even an improved level of product quality. The use of automation contributed to the improvement in product quality.
4.2 PWS Nordic AB

4.2.1 Introduction to PWS Nordic AB

PWS Nordic AB is a Swedish company located in Perstorp, south of Sweden. PWS Nordic AB specializes in waste management, especially within the waste bins, and is the leading company in the Nordic market. The company was introduced into the market in 1984 and launched their first waste bins in collaboration with the Municipality of Malmö (Pwsab, 2018).

Dan Håkansson, VD, leads the company which has approximately 25 employees according to the company’s 2016 annual report, and approximately 506 million SEK in turnover (PWS Nordic, 2016). Today, PWS Nordic AB has production in Sweden, Germany and France, and has sales offices in 9 countries.

As mentioned, PWS Nordic AB specializes in waste bins, where they collaborate with the government, but also sells to the common households. The company’s main goals with the waste bins are the functionality, the ergonomics of the waste bins and the efficiency of the bins, but it also follows an environmental friendly standard (Pwsab, 2018).

PWS Nordic AB is a part of the ESE World, which is the leading company in Europe regarding temporary storage systems for waste and recyclables. With the knowledge from ESE world, PWS Nordic AB can produce products that are durable and suitable for the Nordic climate. As PWS Nordic AB wants to be seen as a creative and innovative company, they hope that they can produce new products that are more environment-friendly and to reach the best results in waste management (Pwsab, 2018). As for today, PWS Nordic AB has their production in three countries, Germany, France and Sweden according to the vice director.

4.2.2 Introduction to PWS Nordic AB Reshoring Initiative

PWS Nordic AB started their reshoring in 2014, where they started to move back their production from China. As Mr. Dan Håkansson, the vice director of PWS, mentioned during

Figure 9: Ewes AB decision-making process. Created based on the interview data
the interview, they wanted to be closer to the Nordic market, but they also saw a demand from the customers to deliver the products faster.

As Mr Håkansson explained, the decision to offshore to China was the right decision at that time, where they could produce their products cheaper. But as the time went, they knew that the customers appreciated that the production to be brought closer to them and had a highly positive attitude toward the reshoring initiative. He added that they learned a lot from the experience of producing in China which benefited them in their reshoring. Mr. Håkansson also mentioned that they are working in a niche market, which would benefit them to move back production and be closer to the market to respond faster.

According to Mr. Håkansson, the decision to reshore the production back to Sweden in 2014, was a strategical choice, rather than a correction of previous failed offshoring. The intention of offshoring the activities to China was to produce cheaper, faster, and easier which was obtained at the time, but as the circumstances in the market and the global economy changed, there was a need to reconsider that decision.

What they did is that they cancelled their contracts with the local suppliers in China at the beginning of 2014 but kept producing the moulds that are used to produce the finished products and moved the production of the finished products (waste bins) to Sweden. They subcontracted other local suppliers in Sweden, such as Pekå Plast AB in Broby, south of Sweden (Johansson, 2017a), to produce the reshored products in Sweden. Furthermore, they asked the Swedish suppliers to move closer to the company using the company’s vacant premises in Sweden to shorten the transportation time even more.

4.2.3 The Drivers behind PWS Nordic AB Reshoring Initiative

The major driver behind PWS’ decision to reshore was to shorten the delivery time and gain more flexibility, as Mr Håkansson explained. Brining the finished products from China to be delivered to the customer took 10 weeks, which is a long time.

The concept of “Made in Sweden” with its positive influence on the customer makes another motivation to reshore back to Sweden for PWS (Johansson, 2017a). In addition, even though the cost factor is important, it was not a major concern to PWS rather than improving their customer service in terms of the shorter delivery times. However, they had no exact calculations of the cost difference to confirm that, as Mr. Håkansson explained. The most value-added factor which they focused on was the delivery time and being closer to the customer and in this way shortening the response time. Another motivation for the reshoring initiative was to minimize the impact on the environment and improve the chances of customization (PWS, 2015).

4.2.4 PWS AB Decision Making Process

A clear decision-making process did not exist for PWS AB, in the sense that it was not drawn and planned on paper. However, the process clearly had stages that they went through one by one before taking the decision to reshore.

The process started with a sort of market analysis, where they studied the changes in the market which was growing faster than before, and the change in the attitude of the customers who preferred that the production being brought closer to shorten the delivery time. Ten weeks for the delivery was not acceptable anymore, and they appreciated a shorter time to deliver. It was at this stage were the factors of delivery time and the response to the market were considered.

The second stage of the decision-making process was to evaluate the readiness of the company to reshore. In fact, and since the production was performed by subcontractors using the company own moulds, it was an evaluation the readiness of the local subcontractors to produce the required products for PWS AB. The subcontractors analysed their capabilities and confirmed this to PWS.

The third stage in the decision-making process was to perform a kind of cost and benefit
analysis comparing the costs and benefits for producing in Sweden and China. It was cheaper to produce in Sweden in comparison to that in China if we add the transportation costs. Furthermore, flexibility increased in comparison to producing in China (Johansson, 2017a). The customer did not need to wait anymore for a long delivery time to receive its order (Johansson, 2017b) and it has become even easier to plan the production than how it used to be when the production was located in China, explains Mr. Håkansson to 8till5 News (Johansson, 2017a).

Another benefit from the reshoring was that it created more job opportunities for the locals. PWS Nordic AB has their office in a small municipality, Perstorp, and this contribution in terms of the created new job opportunities was highly appreciated by the municipality officials. At this stage, the factors of cost of transportation and the increased contribution to the well-being of the community were considered.

“PWS is located in a small municipality, and we wanted to help the people as well as to create job opportunities” – Dan Håkansson, VD, PWS Nordic AB

In the final stage, the decision to reshore was taken. PWS AB informed its customers of the decision to reshore to get their feedback and their response was positively “overwhelming” as Mr. Håkansson liked to put it.

Figure 10: PWS Nordic AB decision-making process. Created based on the interviews data

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4.3 Dinbox AB

4.3.1 Introduction to Dinbox AB
Dinbox AB was founded in 2007 in Stockholm, Sweden. The company is run by Olle Årman, who is the vice director of the company. Dinbox AB specializes, and is the leading company in Sweden, in real-estate mailboxes. As Mr Årman mentioned during the interview, the company has grown rapidly these couple of years, and the company has added other products to their list in the last 4-5 years, such as touchpads, electronic mailboxes, access controls and booking systems.

Dinbox AB has approximately 60 employees today, and a turnover of approximately 100 million SEK, according to Mr. Olle Årman. Today, they operate in the Nordic countries, but as it is now, the biggest countries that Dinbox AB operates in are Sweden and Denmark (Dinbox, 2018).

The goal of the company is to provide a product that makes it easy for people by having a smarter and integrated system in the real estate. They also focus on combining quality with safe products, and where they can lower the price for the customer (Dinbox, 2018). Dinbox AB also follows the five principles of: good customer service, selected products that follow a specific standard, easy to adapt, customer security and environmental responsibility (Dinbox, 2018).

4.3.2 Introduction to Dinbox AB Reshoring Initiative
The reshoring initiative for Dinbox AB started in January 2018, when they decided to move their production back to Kistad, Sweden. Mr Årman mentioned during the interview that the reason behind this was that no huge difference in cost between the two countries existed, but also due to the digitalization of products that they have added during these couple of years.

Mr Årman mentioned that due to the customization that they have on their products nowadays, it is very hard to change a product that is produced in a huge volume, as they did in China. Therefore, they started this reshoring process back to Sweden as it was more flexible and to gain more control of the production. The vice director also discussed that the initial offshoring to China was a good idea, where they could produce their mail boxes cheaply, but also in a good quality. But as the world has changed during these couple of years, the tariffs have increased which has increased the transportation cost from China, and the digitalization of their products has advanced.

The vice director also argued that the choice of reshoring was more as a strategic choice than a failed earlier offshoring. He mentioned that as the company had grown to be the leading company of real-estate boxes in the Nordic countries, he felt that it would be much better to have the production in Sweden, where they could do changes to the product much easier, and could incorporate the digitalisation of the products much better.

Therefore, Dinbox AB moved their production back to Sweden, where they can produce their products with almost the same cost, but they can also focus more on the customization of the products and they can be more flexible in Sweden.

4.3.3 The Drivers behind Dinbox AB Reshoring Initiative
There were three main drivers that Mr Årman mentioned during the interview that motivated the decision to reshorse the production back to Sweden. The first driver was the cost. Mr
Årman discussed that the currency of the Chinese yuan has fluctuated a lot these couple of years, and it was moving in the wrong direction which made their production more expensive. He also discussed that the total cost of producing the product in China would be the same as producing in Sweden, as the tariffs were getting higher. As well, the company had to take the delivery and shipping time into consideration.

The second driver that Mr Årman mentioned was efficiency. This was connected to the delivery time of the products to the customer, and how they could produce the right product to the right customer. The third driver was the environmental friendly aspect of the production. As the company wanted to take more responsibility for the environment, reshoring was a good option, as they thought that they would have more control over the production.

4.3.4 Dinbox AB Decision Making Process

As for Dinbox AB, Mr Årman mentioned that there was no specific process that they followed, where they had little or no documentation of the process itself. But there were a few stages that they went through during the decision-making process. Dinbox AB, like Ewes AB, did not perform any market analysis. The reason was that they had worked with the same customers for a long time and they knew their customers and their change of attitude very well.

The first stage, in the decision-making process, was performing cost and benefit analysis. Mr. Årman confirmed that they analysed the budget needed for the reshoring. In addition, they had to study the benefits and the costs of the reshoring to see if it was beneficial to move back. Therefore, they analysed and compared the cost of the production between China and Sweden. As Mr Årman mentioned, production used to be cheaper in China, but considering the rising tariffs and the transportation costs, it became almost the same as producing the products in Sweden.

The second stage was checking if DinBox AB was ready to move back the production. The vice director mentioned that they hired a few consultants who helped them see what was missing in the company to make the reshoring successful. Mr. Årman gave an example of machines that they needed to use to produce the product. Questions like “How many machines do we need?” was something that they thought of at this stage.

The third stage can be connected to the second stage, where Mr Årman discussed that they had to change some parts of the organization to adapt to the reshored production. New roles in the company were created to handle the new production facility, and new employees were hired to the new production plant.

The last stage was to take the decision on whether to reshore or not, and the decision was to reshore based on the results of the previous stages.
5. Analysis

In this chapter, the empirical data are analyzed based on and connected to the theories presented in the literature review, more specifically based on the framework chosen for the analysis. We start with presenting which perspective defines the reshoring decision for each of...
the case companies, then the reshoring option they chose for their companies. Finally, the
decision-making processes for the case companies are analyzed, discussed and criticized
based on the chosen framework before providing our modified framework for the decision-
making process on reshoring.

1.5

5.1 The Type of the Reshoring Decision

For all the case companies included in this study, the decision to reshore was a strategic
decision of its own, considering the change in the surrounding circumstances, the markets,
and/or the global economy. It was not a correction of a previous error, since their offshoring
initiative was the right decision at the time of that decision. This decision was a change in
the companies’ strategic focus from being cost focused to be more customer-focused by bringing
the production closer to the customers and/or to customize the products to the needs of those
customers. In part, this confirms the ideas of Di Mauro et al., (2017), Sarder, Miller and
Adnan (2014), and Ancarani et al., (2015) described in the literature review chapter.
Moreover, as Wu and Zhang (2014) argue about the effect of reshoring on responsiveness and
customer service. Ewes AB, PWS Nordic AB, and Dinbox AB reshoring has improved the
level of their customer service and responsiveness in terms of shorter delivery times.
However, the reshoring initiatives also improved the total costs for Ewes AB and Dinbox AB,
even though this cost was not the main objective of their reshoring.

5.2 The Factors of the Reshoring Decision

As for the factors that were considered in the decision-making process, the possibility of
bringing the production closer to the customers base was the most important factor that was
considered by the three companies. This is also found in Tate, Ellram, Schoenherr and
Petersen’s (2014) list of reshoring factors. Bringing the production closer to the customer,
reduced transportation costs and shortened delivery times. It also enhanced the companies’
ability to control and monitor their operations, which makes the second factor of Tate, Ellram,
Schoenherr and Petersen’s (2014) list.

What distinguishes Ewes AB from the other two case companies is its consideration of
feasibility and efficiency of automating the production in Sweden which eliminated the
advantage of the cheap labor costs in the host country. This factor is referred to by Weber
(2013), Coates (2015) and Stenoff, Mikkelsen and Johnsen (2015) who consider the
automatization that has been developed in the industrial countries as an important factor as we
mentioned before. They posit that innovation and automatization levels need to be considered
when a company decides to move to another country.

Furthermore, one factor that Dinbox AB considered during their decision-making process was
the feasibility and capability of the company to customize their products to match the
customers’ needs. This was found to be a new factor that does not exist in the literature and a
contribution of this study to the set of factors included in the reshoring decision making
process that previous researchers have included in their studies.

5.3 The Decision-Making Process

As mentioned before, the Strategic Sourcing Evaluation Methodology SSEM by Presley,
Meade, and Sarkis (2016) presents the decision-making process as consisting of four phases; identifying the impact of the sourcing decision on the organization, estimating the costs and benefits (both financial and strategic), performing decision analysis to reach a decision recommendation, and finally monitoring and evaluating the decision to make sure that the promised costs and benefits come to be true.

Figure 12: The Strategic Sourcing Evaluation Methodology (SSEM). Source: adapted from Presley, Meade & Sarkis (2016).

Having performed a case study of the decision-making process of three case companies that reshored to Sweden, we find a few steps or procedures that existed in the reality of the case companies, but not in the theoretical framework, and vice versa. We think that complementing the theory with practice will improve the framework in a way that makes it more practical and useful for companies that are studying the possibility of reshoring, and to researchers.

The first procedure that PWS Nordic AB performed, and which is lacking from the SSEM framework and from the reshoring decision-making process of the other two companies, was performing a market analysis in the home country to check the feasibility of the reshoring initiative. Grappi et al. (2018) argue that reshoring decisions can be driven by the home country’s local demand characteristics. Ewes AB and Dinbox AB knew already that the market prefers reshoring and that was why they did not go through this phase, as we believe. The changes in the market conditions in the host countries, changes in the demand in the home country, and changes in the global economy pushed for the consideration of reshoring. In fact, as for Ewes AB, it was the change in the market, represented by a change in the customers’ attitude toward reshoring that triggered the reshoring decision. Dinbox AB decision, on the other hand, was welcomed by the customers. This is something that both Di Mauro et al (2017) and Wu and Zhang (2014) mention in their research that reshoring is not only about moving back the production, but also companies nowadays focus on being more customer-focused by bringing the production closer to that customer to respond to the market faster. Dinbox AB, however, did not specifically mention that they wanted to be closer to the customer, but they did mention that reshoring would enable the customization of the products to fit the needs of the customer, which is an important objective of the company.

The importance of the assessment of the organizational readiness for reshoring, on the other hand, was referred to by many researchers, as we have seen in the literature background of this study. This means assessing the organizational skill availability or gaps, the required expertise, and/or localizing the supply base by finding local suppliers in the home country or encouraging the current suppliers to move (Shih, 2014; Blanchard 2013; Van den Bossche, Gupta, Gutierrez, & Gupta, 2014). In the literature, some researchers refer to the readiness of the customer to accept the reshoring, such as Grappi, Romani and Bagozzi (2018). This confirms also the need for the first phase mentioned above about the market analysis. We believe that an assessment of the readiness of the organization is an important step in any location decision-making process because there is no point in reshoring if the company does not have the skills nor capabilities to produce locally. In this way, keeping the production
overseas is more beneficial for a company than reshoring to the home country.

All three case companies did assess their readiness in some way during their reshoring decision making process. For example, Ewes AB focused more on the knowledge and knowledge transfer aspect of reshoring, where they asked themselves if they had the knowledge in the company to produce the product locally. However, even though Dinbox AB also focused on the knowledge aspect, this was more about if they had the qualified staff for the reshored production and if they had the required assets and machinery to produce the product once they reshore. This is something that Nujen, Halse and Solli-Sæther (2015) discuss in their research, where they confirm that knowledge transfer is something that companies need to think about when reshoring and must incorporate it into their decision-making process. In this regard, PWS Nordic AB considered the issue of knowledge transfer not to the company but to its subcontractors. As they did not produce the product themselves, they had to find the right local subcontractors that could help them with the production if they would reshore back to the home country. Therefore, as we see in cases of the three companies, the organizational readiness was something that the companies assessed but is not included in Presley, Meade, and Sarkis’ (2016) (2016) SSEM framework.

The need to study the need of any organizational change based on the previous phase of skills assessment is also important as we have seen from the experience of the three case companies. This may include restructuring, or creating new roles, as Ewes AB did, or hiring new recruits with the required skills. As Di Mauro et al. (2017) and Kirchoff and Foerstl (2016) discuss in their research, reshoring requires adjustments in the organization, which can be, for example, adjustments in the supply chain, and the collaboration method, among other things. This is something that we see in two of the three companies, Ewes AB and Dinbox AB, but the changes were mostly made inside the organization. For example, Dinbox AB performed some changes in some roles in the company for the reshored production to work. They also hired new staff for both the administration office and for the new production plant.

This phase is also lacking from the SSEM framework, but it should be included, as we believe. It can happen for example, that some companies may not afford or are not willing to implement this change, and if this change is not made, the reshoring initiative is at the risk of failure due to the existence of organizational structures or internal processes that may not fit with the reshored production.

The forth phase of the decision-making process according to the chosen framework, is to analyze the organizational impact of the reshoring initiative. This phase is lacking from the decision-making processes undertaken by the case companies. However, this analysis is essential if the decision makers want their reshoring initiative to produce a positive impact on the organization, not a devastating one. Considering how this reshoring initiative may impact the activities and strategies of the organization, and on its focus on the costs or the customer, for example, is quite fruitful. An activity-based approach is used in this step to estimate financial costs and benefits. However, combining both financial metrics as in this step with the non-financial ones as in the next step is very useful for the decision-making process.

According to the SSEM framework, the actual estimates of the values are determined in the Estimate Costs and Benefits phase (Presley, Meade, & Sarkis, 2016), which makes the fifth stage of the framework. What we see in the decision-making process for the case companies is that they mostly focused on non-financial terms and followed a hunch regarding the financial ones. Both PWS Nordic AB and Ewes AB mentioned that the financials were not the focus when reshoring to the home country. Both companies mentioned, as said above, that the decision was mostly done by a gut feeling. Both companies focused mostly on being more customer-focused, because there was a demand from the customer and/or that they felt that they would have more control and flexibility to respond to the customer demand, which can be considered a non-financial decision. However, Dinbox AB did focus a little on the financial aspect when reshoring, where a budget was set but by the company and an analysis was made as they looked if they could afford the reshoring back to the home country. However, Dinbox AB considered some non-financial aspects as well, where they discussed that flexibility is a great value for them as customization is a huge part of their business.

On the other hand, all the case companies agreed that by moving the production back to the home country, the delivery time would be much shorter and the transportation efficiency would be improved at the same time. This is something that Tate, Ellram, Schoenherr and Petersen (2014) discuss in their research. The authors mention that the increase of efficiency
Performing decision analysis is the next phase of the SSEM framework. Here, both alternatives are analyzed to reach the best alternative, either to reshore or keep the production offshore, or even to offshore to some location elsewhere. We did not find that this phase existed in the same level of advancement for the case companies. This was perhaps due to the nature of those companies as being small-to-medium sized with less sophisticated analysis procedures.

The final phase for the reshoring decision according to the SSEM framework is to make a sort of auditing activity in which the organization would review the results of the decision, whether to reshore or to continue offshoring. This is an evaluation of the decision itself and the metrics used to reach this decision. This step was not performed by the case companies in the same systematic and structured way as it is in the framework, even though this evaluation existed like “it felt right”. In fact, we believe that this feeling, or hunch, was the reason that many organizations offshored to discover later that it was not the right decision. More structured evaluation and analysis of the decision before deciding on the implementation is required.

An important point to refer to here is that Ewes AB model of the reshoring decision making process included also the implementation process. Since this company is small-to-medium sized firm, it is understandable that they did not have well-defined and separate processes for the decision-making process and the implementation process. Furthermore, for all the case companies, no feedbacks loops were found in the decision-making processes. Each phase ended before the next one started subsequently. No evaluation, systematically at least, of the previous process was performed neither before nor during the implementation of the next phase.

5.4 The Modified SSEM Framework

Based on empirical results that we have gathered from the three case companies and the analysis, we hereby present our modified framework that was developed from the original SSEM framework created by Presley, Meade, and Sarkis (2016). This framework consists of seven steps: perform a market analysis, make an organizational readiness assessment, study the need for organizational change, identify organizational impact, estimate costs and benefits, perform decision analysis, and monitor the decision.
5.4.1 Perform a Market Analysis

Performing a market analysis makes the first phase of this framework. Studying the customers’ demand and attitude to reshoring and their acceptance of the reshored products, analyzing the market conditions, markets restrictions or permissions are examples of the things that should be analyzed at this phase.

Performing this market analysis, to check the feasibility of the reshoring decision is an important step in the decision-making process and should be the starting point for the whole process, because the reshoring initiative would be predestined to failure in terms of the outcomes, if it were not accepted by the market and customers.

5.4.2 Assess the Organizational Readiness

Assessing the organizational readiness means evaluating the skills and capabilities required
for the reshored production. Before deciding on to reshore or to keep the production offshored, the company needs to check its ability to produce the same product with the same quality, if not the same cost, locally. Does the company have the know-how, skills, competence, or even the assets to produce in the home country, is an example of the questions that the company needs to ask. This assessment may include not only the organization, but also its partners in the supply chain, such as the suppliers. The assessment may direct the company to hire new people with the required skills or to initiate training programs to develop those skills. Based on the results of this assessment, the company may decide to reshore, or even to keep the production offshored if the company is unable or unwilling to acquire the required skills and competence.

5.4.3 Study the Need for Organizational Change

Reshoring back home may require changes in the organizational structures, processes, and procedures. This may mean creating new roles, and therefore hiring new people, especially in the managerial positions with high salaries. New processes or procedures to produce the products with the same quality and a similar cost might be needed to achieve success after reshoring the production. Some companies may not afford this change, and as this change is necessary, keeping the production offshored might be the best alternative in this case.

5.4.4 Identify the Organizational Impact

This phase is the same as in the original framework and concerns the need to identify how the organization is impacted by the reshoring decision. Usually, an activity-based approach is used to estimate financial costs and benefits. In addition, the impact of this decision on the company’s strategies is also identified at this phase. As mentioned by Presley, Meade, and Sarkis (2016), this impact may affect not only the organization, but also other organizations in the supply chain, such as the suppliers and other partners.

5.4.5 Estimate Costs and Benefits

Estimating the costs and benefits of the reshoring initiative makes the fifth phase of the modified framework. This means developing actual cost and benefit evaluations of the reshoring and the continued offshoring alternative. Presley, Meade, and Sarkis (2016) recommend using metrics such as ROI and NPV at this phase. The estimation should not be confined to financial or non-financial measures only, but both. For example, taking the decision to reshore if the results of the ROI and NPV alone are positive, regardless of the attitudes of the customers, may lead to a reshored production faced with rejection by the customers who may turn to other suppliers overseas. This means losing a huge part if not the whole business. On the other hand, focusing on non-financial metrics only may lead the company to loss even if the customers are satisfied with the decision. In this case, the winners of the reshored production might be the customers only and at the expense of the organization.

5.4.6 Perform Decision Analysis

As in the original framework, at this stage, each option, to reshore or continue offshoring, is analysed and compared to the other options. This is because the option of reshoring might not be the best option for the company. The decision is dependent on the scores and values obtained from the previous phase. If those scores are higher for the reshoring option, then this is the right decision for the company, and vice versa.

5.4.7 Monitor Decision

Monitoring the decision means auditing the decision to review the results of this decision, either to reshore or to continue offshoring. This is achieved by comparing the results of the decision to those which were estimated during the previous stages of the decision-making process. This step is also the same as in the original framework.

A final note to mention here is that we have chosen not to mention the factors included in the decision-making process separately. We believe that these factors are already incorporated into the stages of the process and they can be quite different from a company to another. For example, we believe that the cost of manufacturing and transportation in the home and the host countries are already incorporated into the cost and benefits analysis phase and there is no need to mention these separately.
5.5 The Modified SSEM Framework compared to the Original One

What makes the modified framework more comprehensive than the original is, among other things, its consideration of the demand perspective to reshoring. This is done during the first phase of market analysis. In addition, this phase considers the conditions of the market if they are permissible or suitable for the reshoring initiative or not.

Furthermore, the framework also considers the organization’s set of skills and capabilities to see if the organization can succeed in the home country as it has done in the host country. As we have seen, many companies lost the know-how to the host country when they reshored. In addition, many companies do not have people with enough skills to produce with the same efficiency or quality as they have in the host countries as we learned from some cases that we came across during our study of the literature on reshoring. Finding suppliers who can produce the product in the same way as the foreign suppliers do can be a difficult task as well.

Furthermore, the framework incorporates the possible need for organizational change to produce locally. Brining a production line, partly or wholly, needs some changes in the structures and processes of the organization, just like adding any new production line.

However, this framework might be more suitable for small-to-medium sized firms than for big companies with sophisticated decision-making processes that involve many variables that do not exist in smaller ones. The framework is too simple to be adopted by such companies as it may have missed some important aspects that should exist in the decision-making process for bigger companies.

Table 6 summarizes the strengths and weaknesses of the modified SSEM framework in comparison to the original and other models mentioned in the theoretical background.

<table>
<thead>
<tr>
<th>SR</th>
<th>The Model</th>
<th>Created by</th>
<th>Year</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Conceptual Model for Location Decision-Making</td>
<td>Joubioux and Vanpoucke</td>
<td>2016</td>
<td>Covers numerous factors</td>
<td>Considers the type of the reshoring available</td>
</tr>
<tr>
<td>2</td>
<td>&quot;Factors that generate the need to consider manufacturing location”</td>
<td>Tate et al.</td>
<td>2014</td>
<td>Covers numerous factors</td>
<td>Focuses only on the criteria</td>
</tr>
<tr>
<td>3</td>
<td>Future Research Avenues (FRAs)</td>
<td>Bals et al.</td>
<td>2016</td>
<td>Covers numerous factors on several levels</td>
<td>Specifies the reshoring decision magnitude</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Combines both the decision making and implementation process</td>
<td>Does not focus on the decision-making process</td>
</tr>
<tr>
<td>4</td>
<td>Framework on Reshoring</td>
<td>Benstead et al.</td>
<td>2017</td>
<td>Covers numerous factors</td>
<td>Focuses mostly on the implementation and ignores the decision-making process</td>
</tr>
<tr>
<td>5</td>
<td>Strategic Sourcing Evaluation Methodology (SSEM)</td>
<td>Presley, Meade and Sarkis</td>
<td>2016</td>
<td>Integrates both financial measures and nonfinancial measures</td>
<td>Lacks essential phases like considering the demand perspective of the decision to reshore and the organizational readiness to reshore.</td>
</tr>
<tr>
<td>6</td>
<td>The Modified Strategic Sourcing Evaluation Methodology (SSEM)</td>
<td>Hindi and Ly</td>
<td>2018</td>
<td>Considers the demand side of the reshoring decision</td>
<td>Considers the organizational readiness to reshore</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Incorporates the need for organizational change</td>
<td>Does not fit large companies with well-developed systems of decision making</td>
</tr>
</tbody>
</table>

Table 6. The strengths and weakness of the different models on the reshoring decision-making process.
6. Conclusion

The final chapter of this thesis presents the answer to the research question stated in the introduction about how the reshoring decision-making process looks like both in theory and in practice, along with the theoretical and empirical contributions. Furthermore, the research limitations as well as a few recommendations for future research are given.

1.6

6.1 Conclusions

To conclude, companies that are planning to reshore do not always have a defined model of the reshoring decision-making process. Moreover, this process is not always documented. However, what we found is that companies focus mostly on the market perspective toward the reshoring initiative, even if this is not always incorporated into the decision-making process and they analyse the costs and benefits of reshoring before deciding on that. The need for organizational change before implementing the reshoring decision is also something that companies consider. However, the usage of advanced metrics is not always used during this process.

Both the theoretical framework and the case companies used cost and benefit analysis in their decision-making process. However, market analysis, readiness assessment, and the need for organizational change lack from the theoretical framework. However, the market analysis phase existed partly in the decision-making process of the case companies, but not in all of them. On the other hand, identifying the organizational impact, performing the decision analysis, and monitoring the decision were not found to exist in the decision-making process of the case companies.

As mentioned previously, the modified SSEM model combines both the theory and practice and shows that the reshoring decision-making process consist of the seven steps, which are: perform a market analysis, make an organizational readiness assessment, study the need for organizational change, identify organizational impact, estimate costs and benefits, perform decision analysis, and monitor the decision.

6.2 Theoretical and Empirical Contributions

Regarding the theoretical contribution of this paper, we have provided a modified reshoring decision-making framework, based on an existing framework in the literature. The new framework consists of seven phases, the original four phases, in addition to three phases that we have added to the framework.

We believe that the new framework is more robust and has a better practical use for the companies that are planning to reshore back to the home country. Its robustness appears in its consideration of both the market and the organizational dimensions of the reshoring decision. We believe that this framework can be a useful tool for managers in those companies to assist in the decision-making process to reshore.
6.3 Limitations

One of the limitations of this study is the sample size of companies included in this study. It was not possible within the time frame and purpose of this study to include many companies, especially that finding companies which were willing to participate in this research was a challenge as we have mentioned. In addition, the number of companies that have completed the reshoring process of the whole or part of their production is still limited. However, the study is still valuable in the sense that it takes a practical example of a few companies who have achieved reshoring and succeeded. In addition, the type of the companies included in this study is limited to small-to-medium sized firms with no advanced processes and procedures for the decision making.

Moreover, the focus of this study was on the production field. Reshoring of services was not possible to be analyzed in this study due to its nature and focus on a few companies whose main industry is manufacturing and since most cases of reshoring in the world today include the reshoring of production, perhaps due to the nature of services and the required direct contact with the customer.

The last limitation that can be found in this study is that much of the decision-making processes of the case companies were not documented and thus do not show up in the secondary data. In other words, there are limitations in what secondary data are available which led our choice of using mainly primary data for this study as mentioned before.

6.4 Suggestions for Future Research

Based on the limitations of this study, especially that which concerns the sample size and size of the firms included, the authors recommend the conduction of a more extensive study of the reshoring decision-making process. A broader sample size including more companies with different sizes and types is recommended to reach a more representative explanation of the decision-making process, or in other words, how companies decide to reshore in real life.

In addition, and since the topic is comparatively new to the literature, many theories and theoretical perspectives may have come out under the time of conducting this study and the time that will follow. A more recent study using all the new literature that might have been or will be published is recommended.

Furthermore, since the focus of this study was mostly on manufacturing companies which reshore back, service companies might be included in any future research, if any exist. This will lead to a deeper understanding of the phenomenon in both the manufacturing and the service fields.
7. Reference list


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8. Appendix

Appendix 1 - Interview Guide
Reshoring Decision Making and Reshoring process
Thesis By: Rasheed Hindi and Dennis Ly
Interviewee:

Introduction
Thank you for agreeing to meet us regarding our master thesis about reshoring and the experience of your company in this regard. We have the consent form with us and we need your signature on it if you agree on its terms.

During this interview and the coming ones, we will record everything we say, it this ok?

We are planning that the first interview will be an introduction about the company and the topic. We will go in details in the subsequent interviews.

Main Body
Can you introduce the company to us, about its history, industry, etc.?

What are your position in the company?

We are thinking as you know to analyse the company’s experience in the decision making and/or the reshoring process itself, what do you think about that?

What can you help us with the most?

Topics

Drivers to reshoring
What were your drivers to take that decision of reshoring?
What had the strongest influence on that decision?

The Factors of the Process
What were the factors you considered during the decision-making process? How did you
manage to deal with them?

**The decision-making process**
Did you follow some sort of existing model for the decision-making process?
If yes, what kind of model did you use?
How did you take the decision to reshore?
What are the stages of the decision-making process?
How was it carried out?

**Ending**
Can you help us with some sources of data for our analysis in addition to the interviews?

Do you have anything else to add more than what we have asked about?

We would like to confirm that the data we get from you will be used for this thesis only. This may include that this data will be available for other readers, wither inside the school or outside. Do you agree?

Is it ok that we will mention your name and position and the company name?
Appendix 2

– Information and Consent form

Date: 2018-01-07
Denell Ly & Rashood Hindi
Jönköping International Business School (JIBS)
Email: denelllyi@gmail.com, rashood.hindii@gmail.com

Re: Master’s Degree Research Project - “Rehiring Decision Making and Implementation Process”

We are researchers from Jönköping International Business School (JIBS), Jönköping University and we are studying in a Master’s degree program of study there. We are doing a research project called “Rehiring Decision Making and Implementation Process”. The basic aim of the research project is to explain and analyse the process of deciding on, planning and implementing rehiring.

The project will be gathering information from participants through face-to-face interview, telephone interview or other methods of choice. We invite you to take part in this research project. If you consent, we will ask about your knowledge, understanding and attitude towards rehiring and your practical experience of that in the workplace. Your reflections and answers will contribute to our deeper understanding of this important aspect of this paper.

The interview will take approximately 45 minutes to 1 hour and, with your permission, the discussion will be recorded to facilitate accurate data collection. All audio recordings and transcripts will be kept in a secure and locked place. We do not expect that you will find the questions difficult or confounding in any way. However, if you find that the discussions make you uncomfortable, you may decide at any time to withdraw your consent without reason and without any disadvantage to you. The interviewer will answer any questions that you have about the research at any time before, during, or after the interview.

If you are willing to participate in this study, please complete the consent form. If you have any queries regarding this project, you may contact us at any time.

Student team members,
Denell Ly
Rashood Hindi

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CONSENT FORM FOR RESEARCH PARTICIPATION

This form indicates that I consent to participating in the JIBS administered Master’s Degree Research Project: “Reframing Decision Making and Implementation Process”.

I understand the information provided and my questions have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw at any time without reason and without prejudice. I understand that my organization has agreed to participate in this research, and that my participation is voluntary.

I understand that all information provided is treated as strictly confidential and will not be released by the investigator, if agreed upon. I have been advised on what the purpose of the project is and what will be done with the data upon completion of the research (including safe storage).

Participant’s name

Date

Participant’s signature

Participant’s email address: