

BATON-CHANGING ON EGGSHELLS – TRANSFERRING SUPPLIER RELATIONSHIPS WHEN MOVING PRODUCTION

ABSTRACT

Production transfers are a result of outsourcing and offshoring decisions. Though, because of the strategic focus of the outsourcing literature have not the operational issues of how relationship development between sender, receiver and raw material been fully depicted. The purpose of the present paper is to explore relationship development connected to transfer of raw material supplies responsibility during transfer of production. To fulfil the purpose, four different production transfers were studied: three from Sweden to China, Romania and Hungary respectively and one transfer from Holland to Sweden. We can see that the dependence and power shifts gradually between the sender and the receiver and the relationship between them sets the arena for what relationship is developed between the receiver and the raw material suppliers. Furthermore, short social distances can over bridge cultural and technological distances to some extent, because it motivates to take the relationship into a more developed state.

Keywords: Supplier; large corporation; relationship development; distances

Authors: Lise Aaboen & Anna Fredriksson

Competitive paper

INTRODUCTION

Global production networks are linked production facilities performing complementary tasks (Chiesa, 2000). These global production networks can change as a consequence of decisions such as outsourcing and offshoring. With outsourcing or offshoring follows a physical transfer of production from a sending to a receiving unit. In most of the outsourcing literature, the main focus has been on strategic considerations such as choice of receiver (e.g. Kamann and van Neulande, 2010; Trent and Monczka, 2003). Though several authors (e.g. Nordigården, 2007; Boulaksil and Fransoo, 2010) have called for the need of attention on the more operational aspects of outsourcing because of the interdependency at operational level between the sending and receiving unit (Wasner, 1999; Boulaksil and Fransoo, 2010). Well performing suppliers are essential for a production facility to be productive. On the strategic level when outsourcing or offshoring it is the decision of whether to substitute local or regional suppliers of the sender with suppliers of or within the proximity of the receiver that are in focus (Kamann and van Neulande, 2010). However, on the operational level the physical flow of materials is very much related to business relationships. It has been seen that when and how raw material supply responsibility is transferred has an effect on the success of the transfer (Fredriksson et al., 2014). Though, because of the strategic focus of the outsourcing literature have not the issues of how relationship development between sender, receiver and raw material suppliers impact on the success of the transfer been fully depicted. Thus there is a need to increase the understanding of how relationship development between sender, receiver and raw material suppliers impact on the success of an outsourcing/offshoring decision.

When an ‘old’ supplier is to be used by the receiving production facility the transfer in essence means that the relationship between the supplier and the sending unit is ending and a new relationship between the supplier and the receiving unit is initiated. In order for the production to remain effective the new relationship needs to become as developed as the old as quickly as possible. Therefore the two facilities are also interacting with each other in order to make the transfer as friction free as possible. However, the development of relationships is not always as fast as the need for the transfer of the physical flow of materials and that cause problematic situations. For instance, it is common that the raw material supply responsibility is kept within the sending unit and then slowly step-by-step transferred to the receiving unit as the relation develops, which mainly is because of lack of trust in the receiving facility (Fredriksson et al., 2012). Thus, the supplier has two customers during this time. If new suppliers are identified new relationships have to be initiated and the relationships with the previous suppliers are ending. As shown by previous literature on relationship ending (e.g. Alajoutsijärvi et al., 2000; Tähtinen and Vaaland, 2006) and business closure (e.g. Havila and Medlin, 2012) this may cause problems for the actors involved if it is not planned and managed correctly.

A production transfer usually includes combinations of previous suppliers and new suppliers. The relationships are also connected (Ritter et al., 2004) to other relationships such as other suppliers and suppliers’ suppliers. In other words, the transfer causes complex situations on the operational level that may not develop at the same speed as the strategic decision intended. It becomes important to understand how the different relationships develop over time and how the development in the relationships interact with the flows of resources in order to better manage transfers of production.

The purpose of the present paper is to explore relationship development connected to transfer of raw material supplies responsibility during transfer of production.

In order to fulfil this purpose we will study four different production transfers. Three of the transfers of production were from Sweden to China, Romania and Hungary respectively and one transfer was from Holland to Sweden. These four production transfers were chosen in order to provide variation in the situations to be explored. When exploring the production transfers we first identify the current and intended flows of physical resources and the relationships that are connected to these flows of physical resources. Then we analyse the development of the relationships before we view the situation as a whole. More specifically, we answer the research questions:

- How are relationships developed between sender and receiver during the production transfer?
- How are relationships transferred between the sending and receiving production facility?
- What are the distances that have to be over bridged in relationship transfer?

The word “developed” includes initiation, development and ending. By studying how these three research questions in combination we are able to see how the answers are interrelated and identify common factors between the four production transfers. Given that the production transfer takes place in the context of a network, the relationship developments will also affect other relationships in the network but we will only include the sub-suppliers and other actors that are mentioned during the interviews as important for the focal relationships. The structure of the paper is as follows. Section two will present the theoretical framework focusing on relationship development, relationship initiation, relationship ending and relationship connectedness. Section three explains how the data was collected in the four production transfers before Section four first makes a short presentation of the four production transfers before they are analysed using the theoretical framework. Finally, conclusions, implications and suggestions for future research will be provided.

THEORETICAL FRAMEWORK

Relationship dynamics are not sufficiently studied in the current literature (Baptista, 2013). However, in order to answer the research questions we need a theoretical framework consisting of relationship dynamics. In order to capture how relationships are initiated and ended during relationship transfer we include literature regarding relationship initiation and ending. In order to be able to view the processes of initiation and ending in relation to the state of development of the relationship coming to an end or other involved relationships, such as third actors, we also include a section on relationship development.

Relationship development

Relationships develop through stages or states. According to the stages theory the development take place through a movement through consecutive stages. The movement is seen as taking place naturally. Among the stage models there are both life cycle models, which are programmed and often include stages that resemble to the life cycle of organisms, and growth-stages models, consisting of incremental and irreversible stages (Batonda and Perry, 2003). Ford (1980) is an early proponent of the stage model consisting of pre-relationship stage, the early stage, the development stage, the long-term stage and the final stage. An important assumption of the model is that the relationship consists of two active parties that interact in episodes where adaptations take place. These adaptations lead to increased commitment. During the different stages the distances between the parties are becoming smaller when experience increases and uncertainty decreases. The distances have

five elements: social distance, cultural distance, technological distance, time distance and geographical distance (Ford, 1984). Several authors criticized the stage theory for not taking into account the complexity of relationships and for running the risk of becoming deterministic. From these criticisms the states theory (Batonda and Perry, 2003) consisting of an evolution of unpredictable states was developed. In other words, the process can move between the states in any sequence and order. In the state model there is also a possibility for the process to move into a dormant state where the process is inactive for a while.

The frameworks for studying relationship development are still being developed. Baptista (2013) used a framework that focused on the adaptation processes in the interaction in a study of long-term relationships in the Portuguese mining industry. The study identified drivers of the development of long-term relationships such as importance of the supplier's brand name and choice of channel strategy as well as functional reliability and degree of customization versus standardization. According to Biggemann (2012) exchange of information is an important factor in driving the relationship forward since trust starts to grow by the initial disclosure of information and then generates a sense of obligation to reciprocate. However, this finding is only valid as long as the shared information is meaningful. Mitrega et al. (2012) conducted a quantitative study on the behaviours of networking capability and found that there are different network capabilities that are needed to manage networking during relationship initiation, relationship development and relationship termination. Mitrega and Zolkiewski (2012) studied the negative aspects of long-term supplier relationships in Poland and identified exit barriers, opportunity costs, higher risk of unstable supply and worse negotiation position. The authors argued that the driving forces of the negative aspects were to be found in the product, the buyer firm, the relationship, the network, the environment and the seller firm. Relatedly, Ford and McDowell (1999) argue that there is a balance between value created in a relationship and the effects on the relationship. For instance, increasing the mutual dependence or increasing the process may create value in the relationship but have negative effects on the relationship such as decreasing trust. According to Ford and McDowell (1999) it is important to take these trade-offs into account and effects may also be visible on the portfolio or network level. There are also factors that can influence the relationship development both positively and negatively. Well-developed relationships include both a high degree of collaboration and a high degree of conflict (Vaaland and Håkansson, 2003).

Relationship initiation

The beginning of relationships has received little attention in the literature in business-to-business marketing and Holmen et al. (2005) argue that it may be because economic value is often seen as being generated when the relationship has developed for a while. Furthermore, the focus of this literature is long-term relationships and the later states thereby become more interesting. Based on a literature review and an inductive investigation at a Dutch company Holmen et al., (2005) maintain that there are at least 11 different types of relationship beginnings including counterparts that initiate contact, meeting at trade shows and third party known by both initiates the contact. Edvardsson et al. (2008) introduce a model of the seller's position during relationship initiation from the buyer's perspective consisting of three statuses: unrecognized, recognized and considered, leading to business agreement. The process may move between the different statuses at any pace and in any order. The model also includes converters and inhibitors, which are forces. The converters contribute to a movement forward or backward and the inhibitors cause the process to linger. Several different converters and inhibitors may contribute simultaneously. Examples of converters are time, trust and service offering and examples of inhibitors are image, risk and bonds (Edvardsson et

al., 2008). Leek and Canning (2011) examine the role of social capital during the initiation of relationships and found that it is the networking enacted by the parties that was of importance for initiating relationships rather than the existing social capital that they may have at their disposal. The enacted networking differed in terms of deliberate vs unplanned, direct vs indirect and time spent as well as frequency of communication. Aarikka-Stenroos and Halinen (2007) focus on third actors as promoters of relationship initiation through their actions during the initiation process. The third actor could be a person or an organization. The organization serves as a third actor due to economic exchange while the person acts as a third actor based on social embeddedness, on behalf of an organization or as a representative of a profession. Based on 20 interviews with buyers and sellers Aarikka-Stenroos and Halinen (2007) also define twelve different roles that the third actors can have during the initiation: scouter, awareness builder, need creator, access provider, accelerator, advocate seller, match maker, trust builder, evaluation assistant, expectations builder, risk reducer and provider of concrete evidence. The roles can be performed passively, where the third party allows the use of its name, reactively by answering questions as well as actively, where the third party makes introductions. The “status of the third is based on its ability to offer an objective view about the potential business partner” (Aarikka-Stenroos and Halinen, 2007:4).

Relationship ending

Previous literature on relationship ending tends to focus on the consequences of relationship ending per se as well as of the activities performed during the relationship ending. Havila and Medlin (2012) studied relationship ending in the context of business closure. Based on a study of the closure of an Australian car manufacturing plant it is argued that planning ahead of the business closure is of utmost importance. A conceptual model of ending-competence consisting of four elements of ending: earlier experiences of ending, an understanding of different types of commitment, the interdependence of parties and coordinating timing and ending (Havila and Medlin, 2012). Alajoutsijärvi et al. (2000) suggest a matrix of strategies to be used as exit strategies. These strategies are either direct or indirect and other-oriented or self-oriented. The indirect other-oriented strategies include strategies such as fading away and disguised exit while the direct self-oriented includes attributional conflict and diverging state-of-the-relationship talk. In short, the different strategies are way to communicate or hint that you wish to leave the relationship and the actual leaving. However, Alajoutsijärvi et al. (2000) do not reach any conclusion as to which strategy that should be recommended. In contrast, the quality of the dissolution process is discussed as in relation to the different stages: intracompany stage, dyadic stage, aftermath stage and network stage. According to Alajoutsijärvi et al. (2000) both the process quality and the outcome quality are components of all these stages and while the three first stages influence each other chronologically the network stage influence, and is influenced by, all the other three stages.

As mentioned by Batonda and Perry (2003), relationships with no activities may only be dormant and relationships that have entered the termination state do not necessarily need to be terminated but can move to another state. There are several reasons why an actor would want to restore a business relationship that has entered the termination state. Tähtinen and Vaaland (2006) identified the following in a literature review combined with interviews: lost relational investments, dissolution process costs, possible sanctions for future business, network limitations and set-up costs. Tähtinen et al., (2007) suggest a process model that can be used for recovering relationships. The process model consists of triggers and the process itself that can be divided into voicing, blackmail, attenuating analysis and normalising. The relationship can move to the relationship ending process both from the blackmail and attenuating analysis and from normalising the relationship can move to either continued relationship or back to

attenuating analysis. According to Tähtinen et al., (2007) the triggers can be company related, relationship related or network related. The triggers that were most difficult to recover from were misfits between partners in terms of business logics, size and power while financial issues and service failures, as long as they are not permanent, were easier to recover from. Salo et al. (2009) demonstrated the use of an adapted version of the process model on recovery of triadic relationships and it was then shown that the normalising of triadic relationships is related to the attraction, trust and commitment among the parties. Havila and Wilkinson (2002) suggest an alternative view on recovering relationships. In their view, it is not the relationship per se that is recovered. In contrast, it is the relationship energy that is transferred to other relationships in different ways. This means that a focal relationship both can import energy from previous relationships as well as export relationship energy to subsequent relationships through social bonds. Ex-employees are mentioned as examples of carriers of relationship energy.

RESEARCH METHOD

The authors selected an exploratory multiple-case research design to explain the phenomenon under investigation (Yin, 2003). The case study methodology is a valid choice when the context and experiences are critical to understanding the phenomenon comprehensively (Barratt, 2011). In order to take interdependencies, interconnectedness and time into account Ryan et al., (2012) suggest that the complexity that then arises warrants a process perspective and critical realist ontology. The selection of an appropriate population controls extraneous variation and helps to define the limits for generalising the findings (Eisenhardt, 1989). In this paper we study four production transfers, three from Sweden to China, Romania and Hungary and one from Holland to Sweden. The use of a multiple case study makes it possible to study different production transfers were approached. Focus has been on exploring how the responsibility for materials supply has been transferred and how this affected the relationships within the networks. These particular cases were chosen because they would provide differences in the conditions of the moves. A cross-case analysis would then provide a more nuanced understanding of the relationship developments.

The data collection was made through semi-structured interviews. A interview guide was used (Halvorsen, 1992). After each visit, the interview notes were transcribed into an electronic case study protocol; through this protocol, they were analysed based on the themes covered in relation to the themes of the interview guide (Eisenhardt, 1989; Voss et al., 2002). In total 31 interviews were carried out at the Swedish production sites between 2009 and 2011. This means that the perspective of the relationship development is more Swedish compared to if the interviews would also have been carried out at the other production sites. There is then a risk that the analysis becomes build on assumptions of the parties. However, among the cases the Swedish production sites were senders in three instances and receiver in one. It was also a benefit to be able to carry out the interviews in the mother tongue of both the interviewer and interviewee as well as within a cultural framework understood by both. At the units managers and responsible within purchasing, production planning, production, logistics and outsourcing project leaders were interviewed regarding project plan, materials supply, supply chain management and supply chain relationships issues. This way several aspects of the relationships as well as their developments over time could be captured. Notes were taken during each interview. Complementary questions were asked via telephone and email. Asking several persons the same questions validated interview data. Finally, respondents were given the opportunity to read the case description and to comment on it.

There are many ways to identify relationships. Leek and Mason (2010) argue for the benefits of utilizing network pictures in order to capture the employees' perceptions of supplier relationships. In the present paper, however, we begin with the physical resource flows and assume that there is a business relationship connected to each flow. These flows are the starting point during the interviews even though connected relationships that are mentioned during the interview are also included in the analysis.

THE FOUR PRODUCTION TRANSFERS

Holland to Sweden

The Swedish Company F and the Dutch factory were part of the same global US company group but had no previous relationship. The Dutch factory made cast iron and stainless steel pumps and was to be closed down, a decision made by the head quarter of the US company group. The cast iron assortment was phased out, this was the majority of the volume produced in the Dutch factory. The stainless steel assortment was decided to be transferred to the Swedish Company F. During the phase-out period of the Dutch factory, staff started to leave which decreased capacity and the phase-out had to be rushed. The technological distance between the companies was relatively low as they in general produced similar products and had the same machines.

Most of the Dutch factory's existing suppliers were local Dutch suppliers. Because the major part of the bought volumes were phased out, did several existing suppliers experience a large drop in sales and ended the relation. For these components it was necessary to initiate new supplier relationships. Several of these components were re-sourced to the Swedish Company F existing suppliers. Some components had to be changed to fit with the new suppliers. One problem when re-sourcing was that the Dutch factory didn't own any tools used by the suppliers. Further, switching from the Dutch factory to the Swedish Company F components was not always as easy as expected. For example, there was a problem mounting a sign, as screws used in the Swedish Company F were a few millimetres longer than those of the Dutch factory.

About 20 existing suppliers of the Dutch factory were taken over by the Swedish Company F. A position has been established at the Dutch sales company (belonging to the same company group) to manage the remaining existing suppliers in Holland, however it is mostly a question of spare parts. In most cases everything worked out fine. For some standard components it was just a question of changing delivery address. However, there were some problems with some existing suppliers taken over.

The Dutch factory had an ongoing product development project together with a Chinese supplier. This relationship had to be taken over by the Swedish Company F. The Swedish Company F was not aware of this project when the project began; hence, it had to be taken over. However, the Swedish Company F did not have exactly the same machines as the Dutch factory and they could not do all intended manufacturing on the component, which was instead forced upon the supplier. There was an issue due to the geographical and time distances involved in this project, which caused a lot of troubles.

Furthermore, there was a Dutch supplier taken over that have caused several problems. This supplier is a wholesaler who buys components from China, and they have large problems of long delivery times and refuse to keep inventory of the component because they felt mistreated during the transfer and that they lost large volumes. Supplier lead times on certain components from China can be up to 16 weeks plus sea transport of seven weeks. Further,

because some parts numbers were engraved into the mould and therefore needed to be known before casting, it was not possible to order before the new drawings were complete. The question is who should take over their inventories.

All documents and drawings were transferred from the standard of the Dutch factory to the standard of the Swedish Company F, and new product and part numbers were created. The drawings at the Swedish Company F looked different and contained more information and they also used tighter tolerances. These changes were relatively small seen from the perspective of the Swedish Company F, however they created problems for existing suppliers to the Dutch factory that were taken over by the Swedish Company F. There was confusion among some existing suppliers if it was the same product or not. Further, the Dutch factory had accepted tolerance deviations, which the Swedish Company F did not.

Sweden to Romania

The Swedish Company C is a manufacturer of items for the automotive industry. The Swedish Company C is head quarter of a large multinational company group. The product transferred was high tech components seen as complicated products to produce, and containing hazardous materials. In January 2005, it was decided in the company group to build a new factory in Romania for two different product groups with similar manufacturing processes. One product group was made in France and one in Sweden. The reason for building a factory in Romania was to get hold of low cost labour and suppliers. The company group had earlier experience of starting up new factories and had a relatively clear idea of how they wanted the process to be. The construction work in Romania was started June 2005, and finished January 2006. When the construction work was finished, Swedish and French employees were sent to Romania to set up the organization and hire the Romanian employees. The Swedish Company C follows a standard for transferring the production part of the company product development process. In this it is taken for granted that the receiving organization has a well functioning and experienced manufacturing organisation. At the same time as the Swedish Company C started their factory in Romania several other companies were also starting factories there, which decreased the ability to build a local knowledge base and made the factory more dependent on French and Swedish support than expected. There were also problems related to customs and achieving approvals for manufacturing including the hazardous materials. Furthermore, it was very important to get customer support for the transfer. However, these were worried about how the transfer would affect quality, which slowed down the process. There were problems to make the transferred lines work with the production organization on-site in Romania, and the lines never reached the yield and capacity they had before the transfer.

In general were the same suppliers used by the factory in Romania as used by the Swedish Company C and only the relationship had to be transferred, though the change have been small because of the presence of the expats. Some suppliers have been changed in order to utilise local low cost supply and some existing suppliers have in their turn started factories in Romania. In this particular case four suppliers moved along to Romania and started factories there. One worked out well and has even hired local managers. One did not manage well, however they had financial problems already in France. One has gone into bankruptcy and has been replaced by another supplier. The final one have had a 10-12 year plan to establish in Romania, however purchasing think this was to slow. Though, the effect of the following suppliers was that the goal of finding low cost suppliers has not been reach because these suppliers need a lot of support from high-cost countries, which increased prices. The lead times from Romania were relatively long as the infrastructure in Romania was poor.

Sweden to China

The Swedish Company X is a relatively small EMS manufacturer of mission critical communication systems. The products are communication systems that receive information and generate measures including base stations and items. The transfer project was started as a response to the manufacturing management wish to look at possible products to outsource. Purchasing visited seven possible suppliers, all in Asia. The Chinese contract manufacturer selected was world leading within contract manufacturing and was a large supplier since six years to the Swedish Company X. They were selected based on price and earlier experiences of good cooperation. The fact that the outsourcing company was a relative small company and it is time and resource consuming to handle several contract manufacturers in Asia did also come into play in the decision. To quote the purchasing manager "It is better to have all problems collected in one place". The transfer project should have started in May 2009, but there were disagreements regarding contract terms and the transfer project were restarted in August 2009. The production phase out in Sweden was set to a fix date end December 2009 and due to the delayed project start the transfer was rushed and it was not time to build necessary safety stocks. Six weeks ahead of this date the production was started in China. After the transfer, there was a lack of components and the Swedish Company X helped to purchase from other sources than the ones used by the receiving Chinese supplier, because the Chinese supplier prioritised other larger customers. The supplier was steered based on capital binding and were not allowed to buy components not reserved by the forecast. Therefore it could be problems with component availability when late changes in production plan.

The customers of the Swedish Company X were not positive to the transfer and had to be convinced that the transfer would not affect quality. Therefore, were all products produced in China were sent to the Swedish Company X for quality control and thereafter to customers. During start-up it was discovered that the soldering on the circuit boards were too weak. The Chinese supplier paid the extra costs for this. The quality issues were discovered late in the start-up and one explanation was the well-established relationship between the Swedish Company X and the supplier. When the quality problems were revealed experts were sent over. If there was no representative at place, it was hard to get hold of all and the right information.

The Swedish Company X has been allowed to affect who from the Chinese supplier side should be involved in the work. The Chinese receiver has in general a large number of personnel changes every year, especially among the small customers, which the Swedish Company X is seen as. The Chinese receiver usually use small companies to train their newly employed personnel and sometimes changes are made without notification. The Swedish Company X has also had a third person, in form of a local girl, to represent them present. However, it has also been necessary to have Swedes at place. The communication with the Chinese supplier was sometimes a problem, because of lack of English skills. A common document handling system was important. The time difference has also been a problem and sometimes the Chinese receiver calls in the middle of the night. The Swedish Company X has tried to start early in mornings to get as many hours as possible together. A lot of the problems that have been have been related to materials supply to the Chinese receiver and the quality of that material from suppliers.

The suppliers of electronic components remained, as these were global actors. A new supplier of circuit boards was identified. The plastic caps and the packaging material were made by Swedish suppliers, however it was not economic feasible to fly these to China and new Chinese suppliers were identified. This caused some problems, as the Chinese suppliers did

not understand the demands on them. For example the labels did not stick properly since the plastic had not been cleaned sufficiently. A question after the transfer therefore was to find out what information regarding the packaging was missed. The company used a circuit from Israel and to use this circuit in China it was necessary to get export and import permission as it was military material and this took time.

Sweden to Hungary

The Swedish Company A developed, manufactured, and sold products for use in energy production, and the oil and gas industry. The final products were assembled at the Swedish Company A's main site in Sweden. The transfer concerned the production of cold and warm compressor blades, which are mounted to the final product. The compressor blades were, before the transfer, produced in a Swedish factory. The Swedish factory was part of the Swedish Company A, however located in another city in Sweden. It was decided to close the Swedish factory down and transfer the production of cold compressor blades to Hungary. The production of warm compressor blades was transferred to the Swedish Company A's main site in Sweden. However, the case description below will only focus on the transfer to Hungary. The Hungarian receiver and the Swedish Company A belonged to the same company group and the decision to close the Swedish factory down and transfer to the Hungarian factory was taken by the European head quarter. The fact that the Swedish Company A and the Hungarian receiver were sister companies was an issue. The European headquarters sent double messages that more volumes should be placed internally, however at the same time they want to have external competition. Another issue was that the Swedish Company A was a relatively small customer to the receiver in Hungary and that the Hungarian receiver did not like external competition.

The transfer project started in December 2003, and in May 2004 the shutdown of the Swedish factory was communicated to the employees and they were offered a stay on bonus in order to enable a stepwise shutdown. The original plan was to close the Swedish factory in December 2004. In September 2004, it was decided to prolong the production in the Swedish factory to April 2005, since the identification and start-up of second sources took a longer time than expected. In November 2004, the ramp-up at the receiver in Hungary was started. To reach steady state was planned to take six months, however it took about fourteen months. In June 2005, the remaining parts of the Swedish factory were sold to a small local company and remained as a supplier. There were massive quality problems during start-up in Hungary, due to the products not fulfilling tolerances. The receiver in Hungary was not involved in the decision of what machines to transfer and who should do the refurbishing. The receiver in Hungary was not happy with being left out of the decision and this made the receiver in Hungary try very hard to show that the machines did not work as expected. These machines were later on transferred to another sister-company where they worked very well.

Before the transfer 80 % of the volume was made by the Swedish factor whereas 20% was made by existing sub suppliers (1 British, 1 Italian and 1 Swiss). The transfer was for the Swiss and the Italian firm just a different address, however the British supplier got increased volumes to complement the production in the Swedish factory and the Hungarian receiver, as it was the supplier with the highest competence. When the Swedish factory was closed down the purchasing from these three sub suppliers was transferred to the Swedish Company A. Furthermore, some new sub suppliers were also identified. It was a major effort to establish contact with the suppliers and explain the manufacturing technology. In general it can be said that the production transferred was more complex than the standard products that the Hungarian receiver and the other suppliers had experience of. Some part of the production

was transferred to a supplier that was not capable to do what was expected, which had been missed by the Swedish factory. The purchasing function at the Swedish Company A responsible for this constituted of three persons, one operative, one strategic and one key commodity buyer.

During the start-up, the Swedish factory and the receiver in Hungary have been equally important as suppliers to the Swedish Company A of compressor blades. It has been good times and it has been possible to satisfy all suppliers (the Hungarian receiver's, the Swedish factory's, and the sub-suppliers') demand on volumes, however in the future it is planned to prioritize the new suppliers. The Swedish factory is immensely important because of the knowledge it has and that it can provide good service, and prices are ok even though it cannot really compete with the new suppliers. To transfer the knowledge from the Swedish factory to the Swedish Company A has been hard which makes the Swedish Company A dependent on the Swedish factory.

Raw materials were bought on long term contracts. The Swedish factory had their own raw material inventory and until this inventory was emptied, raw material was sent from the Swedish factory to the suppliers (including the Hungarian receiver). However, there were problems assuring raw material and getting material out of the Swedish factory inventory and purchasing of raw material was transferred from the Swedish factory to the Swedish Company A. When the raw material inventory at the Swedish factory was emptied, raw material was sent from the raw material supplier to a VMI warehouse in central Europe, and thereafter to the compressor blade suppliers. Forecasts were sent to the central VMI warehouse and they ordered raw material based on this. This led to extra administration for the Swedish Company A and since the responsibilities were not handed over the Hungarian receiver was in essence treated as a LEGO supplier. As a final step, the purchasing responsibility of raw material was transferred to the Hungarian receiver. In retrospect, the Swedish Company A considered this failure to hand over the responsibilities one of the problems of the start-up of the Hungarian receiver as the main supplier of cold compressor blades.

ANALYSIS OF SUPPLIER TRANSFERS

The first transfer, Holland to Sweden, is an example of bad planning. The empirical material illustrated what happens when parties involved have failed to plan ahead of the factory close down in the manner suggested by Havila and Medlin (2012). Because the company has failed to understand the dependence on the employees the entire process becomes rushed when the employees starts to leave. Furthermore, the company has failed to understand the dependence on suppliers during the facing out period. Some of the Dutch suppliers interpret the drop in orders as a communication of the relationships move into the termination state (Tähtinen et al., 2007) and therefore chose to end the relationship and not transfer to the Swedish Company C. These actors, i.e. the Dutch suppliers and the Swedish Company C, had no relationships from before and few incentives existed for developing the relationships when the Dutch factory was about to be shut down. Consequently, the parties were not adapting to each other and the distances (Ford, 1980) were not decreased. As this happened, a fast solution with supplies from the Swedish Company C existing suppliers had to be found. Especially the technological distance caused difficulties as the different parts did not fit in the production and drawings and tolerances were changed. Furthermore, the Dutch factory did not own the tools and this were inhibiting the development of the new relationships between the Swedish Factory C and the new suppliers. Thus, the relationship to previous suppliers impacted on the relationship with the new suppliers. One of the Dutch suppliers that did not choose to end their relationship is still in the termination state (Tähtinen et al., 2007) voicing its dislike in

the relationship through refusing to keep inventory. This relationship needs to be ended or moved to a different state (Batonda and Perry, 2003). Furthermore, this transfer illustrates that even if it is the same company group the two factories are different actors and when the sourcing is transferred new relationships have to develop. Both the development project that was taken over and the transferred documents and drawings are examples of implications of relationships that are at an early state, with few adaptations made to overcome distances, that are expected to function equally as the more developed relationships that existed between the Dutch factory and the other parties.

The second transfer, Sweden to Romania, shows the importance of overcoming technological distance. The fact that the Romanian factory was a totally new factory, lacking developed routines, methods and processes, was the reason for a large technological distance (Ford, 1980) between the sender and the receiver as well as between the suppliers and the receiver. This technological distance had not been accounted for in the plan. On paper it seemed as only an increased geographical distance since expats are running the factory in Romania and the suppliers have moved along to Romania and started factories there. Hence, the move of production could be viewed as activities taking place within the existing relationships, though with the goal of forming new relationships between existing suppliers and the Romanian factory. However, the local management was not ready and it was hard to recruit suitable persons as there was a competition between several companies starting up simultaneously. The technological distance thereby remained and this acted as an inhibitor of the advancement of relationships as it hindered the Romanian factory to fully take responsibility of the relationship. As argued by Tähtinen et al. (2007) misfits between partners may act as triggers for relationship ending but in this case the suppliers and customers chose to save the potential relationship with the Romanian factory. Furthermore, the Romanian factory was seen as an offshore factory, i.e. only responsible for producing and nothing else (Ferdows, 1997), which also set the expectancy of what responsibilities the factory should take.

The third transfer, Sweden to China, is an existing relationship that is increased by adding further joint activities. It is an example of a well-planned transfer, where a clear analysis regarding what relationships to transfer, to keep and where to identify new relationships have been carried out. So even if the transfer project has to be rushed it does not inflict on the relationship with the raw material suppliers. The relationship is based on both parties' agreement and expectation of that the Chinese supplier should act as a sub-supplier, whose role is to produce. However, this agreement leads to some level of built-in lack of trust. The Chinese supplier is not allowed to decide on which suppliers to use, what inventory levels to have and quality control takes place in Sweden. Though, this lack of trust is not affecting the social distance. Still what impact the social distance are the frequent changes of contact person at the supplier and the lack of willingness to share problems. The reason for keeping the relationship at this state is because the Swedish Company X is so small in relation to the Chinese supplier that they are afraid of not being important enough to be prioritized and thus wants to keep control over some issues. Instead of developing the relationship further in order for the Chinese supplier to be an equal partner in the relationship Company X is maintaining control on also very detailed questions such as raw material inventories. The relationship is therefore not developed to become a well-developed relationship (Vaaland and Håkansson, 2003) including both trust and conflicts. However, Company X is making efforts to improve the relationship by trying to decrease the geographical distance (Ford, 1980) by having a representative in China acting as a third-party. Company X also tries to bridge the geographical distance by adjusting their work hours for more direct communication and the receiver allows Company X to decide who should be their contact person. The long

relationship and the believe that the companies since long has shortened the technological and cultural distances, which in turn has mad the parties underestimate the increased technological distance coming with the new transfer. It is discovered to late which make the relationship return to an earlier state (Batonda and Perry, 2003) with increased control from the Swedish side. Furthermore, the Chinese supplier's supplier does not understand the quality demands, which further show on a technological distance. However, this is not affecting the relationship between the Chinese supplier and the Swedish Company X as the Swedish Company X has selected these suppliers. The customers that show a fear of quality failures in conjunction with the transfer and the Israeli supplier that is reluctant to deliver to China are acting as inhibitor to the transfer.

The fourth transfer, Sweden to Hungary, is an example of lack of trust and fear of dependency. The Swedish Company A has a purchasing strategy of not creating to tight relationships, this strategy lead them to put a lot of efforts into developing the relationship with other suppliers instead of focusing on the relationship starting stage with the receiver. Furthermore, the receiver is bypassed in several decisions due to lack of trust and assumed lack of knowledge that causes the receiver to start to voice (Tähtinen et al., 2007) its concerns about the relationships. The Hungarian receiver feels as they are treated as a sub supplier even though they had the expectancy of being seen as an independent supplier. The lack of trust between the Hungarian receiver and the Swedish Company A creates a technological distance, which is shown in the unwillingness of the Hungarian receiver to accept the Swedish machines. The common headquarter acts as a converter (Edvardsson et al. 2008) in this case by initiating the transfer. However, their wish of both having competition at the same time as they favor internal suppliers is the reason of the actions in own interest, the lack of trust and the efforts of the Swedish company on identifying new suppliers instead of developing the relationship with the existing suppliers. These actions are rather inhibitors, slowing down the process of developing a relationship, and in some instances the actions even provide force of converting the process backwards. For example, instead of developing the relationship with the remaining parts of the Swedish factory to enable transfer of knowledge, do the Swedish company becomes dependent on them for knowledge. However, the Swedish Company A feel threatened by this dependency and talk about prioritizing other suppliers and even take this relationship into the termination state. The transfer in itself is to be seen as well planned, however there are a need to create a central solution of raw material supply to both the Hungarian receiver and the other suppliers, to separate the raw material supply from the sender and create a feeling of independency at the Hungarian receiver.

In the four transfers we can identify several important factors related to the actors, the relationships and the development of the relationships. The relationship atmosphere (Håkansson and Snehota, 1995) is of importance. Especially, how the actors view each other at the point in time when the new relationship is initiated in relation to power and the intended goal of the relationship. In both the transfer from Sweden to Hungary and the transfer from Sweden to China the sender was a small customer to the receiver. This influences how prioritized the sender is and if the sender trust that the receiver will prioritize the sender. In addition to this perceived power there is also the actual power in the process, which is related to which actor is managing the transfer. The intended goal of the relationship refers to whether the actors intend the relationship to become a well-developed relationship or if they will be contend with a more arms-length relationship and whether the two actors share the same view on this issue. The relationship between the sender and the receiver sets the arena for what relationship is developed between the receiver and the raw material suppliers. In contrast, the dependence and power shifts gradually between actors. It is also influenced by

the changes in social distances (Ford, 1980) and development of trust between the actors. As the example of the move between Sweden and Romania showed, the receiver also gradually develops the necessary skills to take over the responsibility. Based on our analysis we therefore suggest that a more gradual shift in responsibility of the suppliers would be better.

Related to the conservation of relationship energy discussed by Havila and Wilkinson (2002) and social distance (Ford, 1980) previous interactions between the sender and receiver seems to be of importance. In the transfer between Sweden and Hungary the social distance was large due to previous interactions, which caused lack of trust and a lengthy process. In the transfer between Sweden and China there had been several interactions previously and the two actors perceived the social distance to be small and they therefore expected the transfer to be easy. Many issues were therefore overlooked and this caused problems. In the Sweden to Romania transfer there were no previous interactions. It was therefore possible to form the relationship in any direction. However, the lack of previous bonds also made it impossible for a fast development of the relationship. Another point that is visible in the analysis in relation to social distance is that social distance and technological distance seems to be the two distances that are most important to decrease in relationship initiation during production transfer. In contrast, the outsourcing literature tends to emphasize the cultural distances as one of the most important obstacles (e.g. Fredriksson and Jonsson, 2009). However, in the analysis it was seen that a small social distance between Sweden and China was seemed to matter more in the decision making compared to the cultural difference which should have been larger in that transfer compared to the European transfers.

The initiation of the relationships includes some common converters and inhibitors (Edvardsson et al., 2008). The time schedule seems to be an important issue. A tight time schedule as in the Holland to Sweden transfer caused the relationship initiation to move through several statuses very quickly compared to the Sweden to Hungary transfer. In other words, the time schedule was a converter. However, it may not have been a converter in isolation. Since the Dutch factory was going to be shut down both actors agreed in the view that a long term relationship would not be necessary to develop and following the time schedule could thereby be prioritized over relationship development. We can see that the parent company can act both as a converter and an inhibitor. In the early statuses of the process it acts as a converter since it initiates the move and thereby mediates the contact between the actors and more or less forces them to interact. The parent company may also initiate relationships with very large social distances since this may be relationships that would not even have been initiated if the senders and receivers could have chosen themselves who to interact with. The parent company can also become an inhibitor to the relationship development that causes it to linger if it tries to manage the developments in the relationship too much. Similarly, the customers may act as both converters and inhibitors depending on their attitude to the transfer.

CONCLUSION

First is the research questions answered based analysis and thereafter are managerial implications and future studies suggested.

-How are relationships developed between sender and receiver during the production transfer? It was clear from the four transfers that the relationship between the sender and receiver is not something that is 1/0 as depicted by the outsourcing literature (e.g. Kamann and van Nieulande, 2010; Trent and Monzcka, 2003). Instead the dependence and power shifts gradually between actors.

-How are relationships transferred between the sending and receiving production facility?

The relationship between the sender and the receiver sets the arena for what relationship is developed between the receiver and the raw material suppliers. In the relationship development process between sender and receiver one of the most important mile stones seems to be the point in time when the receiver stop being a LEGO supplier but instead is treated as an independent supplier. This shows that it is more important for the receiver than the sender to reach a more developed state. It is also important for parties to have a shared awareness of what state the relationship is in and the same goal state. There should be a match between the present state of the relationship and the level of responsibility transferred from the sender to the receiver, otherwise there is a risk of conflicts.

- What are the distances that have to be over bridged in relationship transfer?

Short social distance can over bridge cultural and technological distance to some extent, because it increases the motivation to take the relationship to a more developed state. This confirms the results by Ford (1980) and contribute to the outsourcing literature by showing that this is also true during a production transfer and not regular purchasing relationships. Head quarters involvement can be working as both inhibitor and converter, confirming the survey based research by (Björkman et al., 2004; Lyles and Salk, 1996).

By answering these three research questions have the understanding of how relationship development between sender, receiver and raw material suppliers impact on the success of an outsourcing/offshoring decision been further developed. Managerial implications are the importance of establishing a transfer plan allowing for a synchronized development of the relationship and the transfer of activities. Because of the identified importance of a short social distance should existing relationships be valued higher in receiver selection than what is usual today. Parent company interference in the transfer process should be with awareness that it can also slow down the progress of the transfer.

The present paper provides an overview of the four moves of production from the Swedish perspective. The complexity of the situations and the operational level is highlighted as well as potential dimensions that influence the development of relationships and production performance. For future research we suggest in-depth studies of the different situations where all parties of the relationships are interviewed. This would enable all parties to provide their view of the relationship development and the motivations for the different actions would become clearer. In business cases, the advantages of a new, local, low-cost second tier supplier are often included, however this paper suggests that the transfer should be made gradually in order to facilitate the necessary relationship developments. It clarifies the importance of relationship stage for the success of the transfer of raw material supply. Future studies should therefore focus in more detail on how these gradual transfers should be managed in practice.

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