

The Element of Knowledge Transfer through Network Organizations: the case of Turkish Textile Sector

ABSTRACT

This paper proposes a Knowledge Transfer and Network Organization approach to the development of Textile Sector in Turkey. The modern world is frequently referred to as a world of knowledge. The study examines the knowledge transfer process of SMEs business network organization in the Turkish Textile Sector. The problem firm's face is how to manage knowledge to gain efficiency and competitive advantage forced modern companies to think about Knowledge Transfer and its applications. However, many Turkish Textile SMEs seem to be unaware of the importance of managing this process. This research reviews and develops a First Aid model for SMEs in Turkey in order to implement or better the existing knowledge transfer procedures. This also helps one understand the level to which the process of knowledge transfer is entertained in Textile Sector in Turkey.

Keywords: *Network organization, Turkey, Knowledge transfer .SME, Textile Sector.*

INTRODUCTION:

Textile industry had encouraged world's industrialization progress, and now, it has significant amount of world trade. The textile and clothing industry is also very important both economically and socially for Turkey. Knowledge Transfer (KT) has attracted particular the attention in the business world. To understand how the KT and Networking operates in Turkish Textile industry, will give insight into the competitiveness of SMEs. Knowledge transfer networking has been defined by Seufert, Von Krogh, and Bach (1999), as "signifying a number of people, resources and relationships among them, who are assembled in order to accumulate and use knowledge primarily by means of knowledge creation and transfer processes, for the purpose of creating value." In order to survive and grow, there are many methods that firms can use. Firstly, networking can be an end in itself according to Gilmore et al (2001) and has proven a successful tool for smaller firms. In order for firms to appreciate the importance of networking and to consciously and successfully implement the networking concept through planning, they need to overcome the regular problem of lack of networks expertise. The difference between the success and failure of small firms can be the availability of and access to the relevant information and support services that have become increasingly common (Summon 1997). The business support infrastructure such as IT, government support

and support by private organisation that we see today are of great value to struggling SMEs (Sparrow 1999) and the benefits of this form of knowledge transfer are perhaps not emphasised enough. In numerous cases, however, outside help is often sought too late – that is at the stage when firms are almost beyond help. Knowledge transfer is, therefore, a critical factor in improving the growth prospects of many smaller businesses via network organizations. In the following sections, the relevant literature is reviewed to identify the gaps with respect to knowledge transfer and network in Turkish Textile Sector.

Turkish Textile Sector:

Turkish clothing industry is number 2 in the EU Market and number 3 in the world market. Turkish textile industry is number 2 in the EU market. The future growth markets for the Turkish clothing and textile industry are USA, Canada, Japan and China. The Importance Of The Branding Concept “Made In Turkey” In Creating Greater Global Awareness Of The Local Market. Turkey has made a rapid transition from organization to manufacturing industry. Now the target should be to create and produce its own collections. Products with higher added value should be favourite in manufacturing. To create the “Made in Turkey” image, world’s latest fashion trends must be well followed and forecasts must be made for a few years ahead. Turkey has the cultural inheritance and traditional experience to create its own fashion trends. On the other hand, to establish a globally renowned brand, requires a lot more than fashion and collections. The recent economical crises have adversely effected the financial positions of many companies, which would have otherwise spare finances for various aspects of becoming a world label. (Source: Turkish Clothing Manufacturing Association (TGSD)).

Today Turkish SME's effect in regional distribution of industry cannot be neglected. They are instrumental in decreasing the relative importance of Istanbul in the national economy. 7.8 percent of SMEs in the manufacturing sector are in the Marmara region. The shares for other regions are as follows: Aegean 17.4 percent, Central Anatolia 16.6, Mediterranean 11 percent, Black Sea 9.2 percent, South-eastern Anatolia 5.7 percent and Eastern Anatolia 3.3 percent. Data from different sources offer diverging figures, but there is evidence that Istanbul is gradually losing its central position. (Source: www.tusiad.org.tr)

According to the results of the SIS (State Institute of Statistics) surveys, Istanbul has a 25.3 percent share in the total number of SMEs; Izmir immediately following it, has only 7.8 percent; and Ankara has 6.5 percent. Bursa, a

neighbouring province of Istanbul known traditionally as the city of SMEs has 5.6 percent. These cities are followed by Konya, Adana, Gaziantep, Denizli, Manisa and Icel. Cities such as Corum, Malatya and Maras which are often mentioned as the new poles of development have lower shares. In terms of employment, the shares of the regions are as follows: Marmara 47.2 percent, Aegean 15.9 percent, Central Anatolia 13.4 percent, Mediterranean 9.2 percent, Black Sea 8.4 percent, South-eastern Anatolia 3.5 percent, Eastern Anatolia 2.4 percent. In Marmara the SMEs are responsible for 29.4 percent of employment, while the share of major enterprises is 17.8 percent. The total for Marmara, the Aegean and Central Anatolian regions shows that SMEs provide 47.8 percent of employment (Source: www.tusiad.org.tr).

Historical Background:

In Turkey 98% of companies fall within the SME sector and in the textile sector alone there are 40,000 companies actively working of which 80% are SMEs. Enterprises with fewer than 250 employees constitute over 99% of the 210,000 acting manufacturing enterprises in TURKEY. They account for 77% of the overall employment, provide 27% of value added; and represent 38% of fixed capital investments. (Ref: State Institute of Statistics)

The textile industry, combining cotton and synthetic yarns, fibres and fabrics, home textiles, ready-wear and apparel, continues to be the largest economic sector of Turkey, employing an estimated 2.5 million people and providing indirect jobs for 6.5 million others. The industry contributes to around 10 percent of the GNP. The clothing industry until recent times was characterized by small, low-capital family-run operations, many of which were simple cut and paste operations with no original designs and products. The country has around 180,000 clothing producers. The country has around 2,000 textile manufacturers, which are large-scale, heavily mechanized operations, employing more than 150 persons each and having more than \$15 million in annual sales each. The industry accounted for 23.45 percent of all Turkish goods sold abroad in 2007, down from about 36.1 percent in 2000. About 60 percent of the nation's textile and clothing are exported. Turkey is the world's sixth biggest ready wear and apparel manufacturer and the European Union's second largest supplier after China. Its textile industry is the world's tenth biggest and the European Union's number one supplier. The nation controls a 4.3 percent share in the global export trade in clothing, a 6.4 percent share in foreign sales of apparel in the European Union, and a 1.7 percent of exports of apparel to the U.S, according to the Turkish Clothing Manufacturers' Association and the Center for the Promotion of Exports (İGEM).

TURKEY'S TEXTILE, CLOTHING, LEATHER AND CARPET EXPORTS IN 2006 AND 2007 (IN 1000 U.S. DOLLARS)			
PRODUCTS	2006	2007	CHANGE IN % OVER 2006
Ready wear and apparel	13,987,651	16,049,100	16.30
Textile and Raw Materials*	5,576,097	6,551,800	17.48
Leather and leather products	1,141,436	1,239,500	5.17
Carpets	744,967	1,003.800	35.20
Total	21,450,151	24,845,200	17.31

(*Textile and raw materials: cotton yarn, gray cloth, fabrics, home textiles, synthetic fibres and yarns and fabrics, accessories, and technical textiles. Source: Istanbul Textile and Apparel Exporters' Associations (ITKIB))

In 2007, Turkey exported a record \$22.600 billion in clothing and textiles, up 15.53 percent from 2006, when it sold \$19.562.billion abroad, the Turkish Exporters' Assembly (TIM) reported. Textile industry officials said that export sales were increasing because of lower taxes, despite a contracting domestic market and the strength of the Turkish Lira against the dollar and the euro. Along with leather products and carpets, total sector exports in 2007 stood at \$24.845 billion, p 17.31 percent from \$21.485 billion in 2006. Ready wear and apparel exports climbed 14.75 percent to \$16.049 billion from \$13.968 billion in 2006. Exports of textile and raw materials (cotton yarn, gray cloth, fabrics, home textiles, synthetic fibres and yarns and fabrics, accessories, and non-woven and technical textiles) increased 17.48 percent to \$6.551 billion from \$5.576 billion in 2006. (Source:<http://www.turkeynow.org>)

The beginning of 1980s and preceding decades can be named as the first phase of development, namely textiles oriented exports period. The textile and clothing industry benefited from the process of trade liberalization that Turkey began in the 1980s (Ata Securities, 1997). In 1980 the government started to employ export oriented manufacturing policies. This new policy has accelerated the export performance of the sector. Although the investments were fluctuating in 1980s, the portion of textiles and clothing investments increased to nearly 25% in total manufacturing industry investments by 1983 (Dunya, 1998). In the first half of the 1980s, Turkey put emphasis on textiles exports. Although the cotton yarn production was capital intensive, the add value was low. Exports were based on basic items. Turkey was the largest supplier of cotton yarn to EU. Turkey was competing in the lower end of the market, which was very open to fierce competition. The level of international competition in low value added

products jumped and countries reacted with increased tariffs, quotas, and anti-dumping taxes. The dynamics for Turkey changed when the Asian countries invested heavily in production of basic textile products. A 12% anti-dumping tax imposed by the EU on Turkish Yarn, made in Turkey (Ata Securities, 1997).

While the export value of the textile sector was 1,42 million dollar in 1990, it has reached to 6 billion dollar by the end of 2006. In other words, total textile exports of Turkey over quadruple within the last 16 years. According to UN statistics for 2005, Turkey ranked eleventh in the world with the share of 3% and second in the EU market with the share of 13.6%. In 2006, as far as country groups are concerned, Turkey exports 44.5% of textile products to EU Countries. The Second Important country group is the former Soviet Republics including Russian Federation, Azerbaijan, Uzbekistan with the market share of 11.4 % advantages of Turkey. In using advanced technology, richness in raw materials and geographical closeness to main markets also lead to market diversification for textile exports. (Source: <http://www.itkib.org.tr>)

Knowledge and Characteristics:

One of the most used and consistent definitions for “Knowledge” is proposed by Davenport and Prusak: “Knowledge is a flux mix of framed experiences, values, contextual information, and expert insights that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms” (Davenport & Prusak, 1998). From this definition the authors identify six knowledge components: experience, truth, complexity, judgement, rules of thumb and intuition, values and beliefs.

Knowledge has some specific characteristics. Firstly, knowledge is hardly measurable. Secondly, knowledge can be transferred from one person to another person, but the original owner of the knowledge will not lose the knowledge. Because of this knowledge is called a non-rivalry good. Thirdly, knowledge is cumulative, for example, if one wishes to absorb new knowledge one should at least have already an adequate base of knowledge. (Kerster et al, 2002) The most simplistic approach to defining the characteristics of knowledge was proposed by Polanyi (1967)

and later reiterated by others such as Nonaka and Takeuchi (1995) who made the distinctions between explicit and tacit knowledge. Table 1 represents a popular approach to knowledge classification from the knowledge management literature. This approach breaks knowledge down into four operational categories, namely ‘know how’, ‘know who’, ‘know what’ and ‘know why’ (Lundvall, 1996). ‘Know what’ is about facts, ‘know how’ about skills and competencies, ‘know why’ about the principles and laws and ‘know who’ about who knows what.

Table 1: Lundvall’s Classification

Lundvall Classification	Knowledge
Know what	About facts
Know how	About the skills and actions needed for the task
Know why	About the principles and laws
Know who	About who knows what and how

Source: Lundvall (1996)

The main focus of the knowledge management and knowledge transfer literature is ‘know how’, the knowledge of skills and actions. ‘Know how’ knowledge holds many tacit elements. These elements are found in the ideas, commitment, relationships and experience behind the knowledge (Cohen & Levinthal, 1990; Huber, 1991; Kogut & Zander, 1995; Polanyi, 1967). Both Szulanski (1996) and Simonin (1999) highlight the fact that the tacit content in knowledge can make it harder to understand and requires more social interaction before those involved have a similar understanding. These authors see this knowledge as knowledge with impact, because it is the transfer of these tacit elements and that give knowledge its unique nature and strategic value. For example, the knowledge management literature highlights the need to recognise the tacit elements in knowledge so that it can be managed by using sufficient social interaction to ensure its transfer (Lam, 1997; Nonaka & Takeuchi 1995; Simonin, 1999). Fahey and Prusak (1998) explain that people shape knowledge creation in a firm by allowing tacit knowledge to

interact with explicit knowledge so it can be captured, assimilated, created and internalised into the organisations knowledge base. Brouwer, Van Ophem and Zijdeveld (2001, pp. 18-19) categorize knowledge into six categories, which are presented in three dichotomies:

1. Fundamental or basic knowledge vs. knowledge that is directly aimed at application.
2. Strategic knowledge vs. general facilitating knowledge.
3. Market or commercially oriented knowledge vs. technology oriented knowledge.

Understanding Knowledge Transfer :

Transfer of knowledge from one set of individuals to another has been a key area of interest for knowledge management and knowledge transfer researchers. The terms, knowledge transfer (Garvin, 1993; Gupta & Govindarajan, 2000a, 2000b), knowledge dissemination (Demarest, 1997; McAdams & McCreedy, 1999), knowledge flows (Gupta & Govindarajan, 2000b), and knowledge distribution (Huber, 1991) appear to be used interchangeably in the literature to describe the process of knowledge transfer. The literature identifies that knowledge transfer is a dynamic process between the individual or group and the organisation's knowledge stocks. Knowledge moves simultaneously forwards and backwards between individuals, groups and the organisation to become embedded in the organisation's routines, behaviours and strategic orientations (Argyris & Schon, 1974; Argyris & Schon, 1978; Grant, 1996; Levitt & March 1988; March & Olsen 1975).

Alavi (2000) highlights the importance of knowledge transfer by suggesting that for superior performance of a social entity, knowledge generation and its successful transfer needs to take place. Cross, Parker, Prusak, and Borgatti (2004, p. 62) also posit the value of knowledge sharing in today's economy, "where collaboration and innovation are increasingly central to organizational effectiveness." The transfer of knowledge occurs when knowledge is diffused from one resource to another by storing or sharing it (Bajracharya & Masdeu, 2006). Knowledge transfer can be defined as a "Knowledge systematic approach that obtains, organise, restructures, warehouse or memorise, deployment and distribute knowledge to points of action where it will be used for sharing and adopting best practices" (Wiig, 1997). The transfer of knowledge depends on time, scope, complexity, and strategic importance because it determines the effort and resources of the organization. The organization needs to

consider pedagogical skills, teaching and learning capabilities, and social networks for successful implementation (Pradhan & Rainer, 2004).

It is important to distinguish between knowledge transfer at individual and organisational level. Knowledge transfer between individuals may not always be easily seen as some knowledge transfer can alter a person's awareness but not their behaviour (Huber, 1991). Knowledge transfer at organisational level occurs when knowledge becomes part of the organisation's process, systems and activities. However, it is important to remember that while knowledge can often be codified and become embedded in a firm's practice, some knowledge cannot be truly represented outside the heads of individuals (Fahey & Prusak, 1998).

Transfer of knowledge includes two actions: one is transmission which means sending knowledge to potential receiver and another is absorption meaning that knowledge must be incorporated either by a person or a group. As such, Davenport and Prusak have expressed this concept as “***Transfer = Transmission + Absorption***” (Davenport & Prusak, 1998). The availability of knowledge is not sufficient; it should also ensure the usability of available knowledge. “*Knowledge that isn't absorbed hasn't really been transferred*” (Ibid). Davenport and Prusak further argues that transmission and absorption has no meaning if new knowledge does not lead to some change in behaviour. Bajracharya and Masdeu argue that considering this notion, it appears that transferring knowledge is rather very smooth process. Therefore, while knowledge transfer between firms includes the flow of knowledge between SMEs and the ability to understand and to utilise this knowledge, it also includes the reality that the evidence of knowledge transfer may not always be easy to observe because tacit knowledge is not as tangible; therefore when considering knowledge transfer we need to consider the character of knowledge.

SMEs Network Organizations

In a successful knowledge transfer, the experience of one network actor affects another (Argote and Ingram, 2000). While individuals ultimately have to perform the transfer of knowledge, this article focuses on knowledge transfer between business units, extending the work of previous authors at this level of analysis (e.g., Hansen, 1999, Hansen, 2002, Tsai, 2001 and Tsai, 2002). Recent studies extend the notion that firms improve their performance by cooperating with and acquiring knowledge from other organizations from the dyadic to the network level (e.g., Ahuja, 2000a, Bonner et al., 2005, Gulati, 1998, Knight, 2002, Liebeskind et al., 1996, Möller et al., 2005, Powell et

al., 1996, Ritter and Gemünden, 2003 and Shan et al., 1994). Not only have strategic alliances emerged and proliferated as interorganizational designs that enable firms to tap into external knowledge, resources, markets, and technologies (Baum et al., 2000, Inkpen and Dinur, 1998 and Lavie et al., in press), but a firm's embeddedness in its network of alliances crucially influences its behavior and performance (Granovetter, 1985 and Uzzi, 1996). Empirical studies support this argument and demonstrate the significance of selected network dimensions, such as relational and structural social capital, on knowledge transfer and subsequent firm performance (e.g., Andersson et al., 2002 and Rowley et al., 2000).

SME networks have been classified as 'personal', 'support' and 'industrial' with emphasis being given to the sets of dyadic relationships that comprise the network (Shaw & Conway, 2000: 367). Industrial networks are the exchange relationships involving customers and suppliers forming part of SMEs value adding processes. These three types of networks are central to the existence of many SMEs (Martin, 2000). In practice an SME's personal, support and, even sometimes, industrial networks may overlap significantly. Interest in personal networks has been stimulated by attempts to understand how involvement in these networks can help create, develop and grow small firms (Shaw & Conway 2000: 370). Personal contact networks, it has been found, help generate social support for the owner, extend strategic competencies in terms of identifying opportunities and threats, and can supplement internal resources to resolve major operational problems. Owners can save significant time and money by accessing information, advice and resources through their personal networks. Social networks help build relationships that can give the small firm access to new markets, technology, finance and political protection (Doukas & Kalantaridis, 2000).

The concept of knowledge transfer and network organization is explained in the following section with the help of a simple block diagram.

The diagram below describes the process involved in knowledge transfer as applied between various firms of a Textile industry in Turkey. This helps an easier way of communication between SMEs with the help of IT (Knowledge transfer process).



As shown in the above diagram, the knowledge transfer networks in textile industries in Turkey depends on the availability of modern technology particularly IT (information technology). The bi-directional arrow indicates the communications process that depends on the IT. I make two main points from the above diagram. Knowledge transfer could be achieved by two different routes depending on the resources available. The first is the direct route

that follows path 1, 2 and 3. It shows that any knowledge that is arriving from different SMEs where this knowledge could be utilized for final production or it might be sent back with improvements amended to it. SME's S, T and U have modern technologies, good network and enough resources to communicate with Firm F. The second is the Long Path route (that follows route 1, 2, 3, 4, 5 and 6) where knowledge collected to/from various entities lack modern technology and network that makes communication and knowledge transfer delayed and difficult. The knowledge transfer networks is bi-directional that depends on innovation and the demand for the product in the business/market. Ideas can be exchanged via networks from different SMEs in Turkey.

After a thorough analysis of existing literature on Knowledge Transfer and Knowledge Networks, this research paper came to a conclusion where there is a wide gap in between the communication systems in SMEs and would like to propose a model below to bring down the communication gap to offer a better Knowledge Transfer process.

First Aid Model:

The Network First-Aid model is a new concept this research would like to propose. The below diagram shows that any department within the organization should start by listening to each other, understand, trust and collaborate with each other in the network.

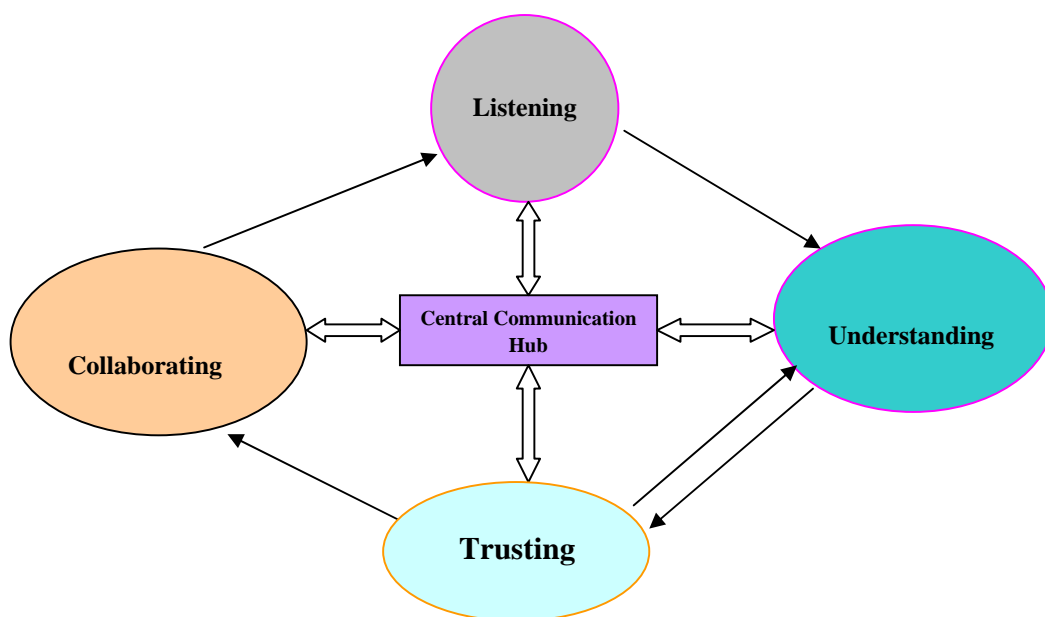


Diagram 2: Network First Aid Model for SMEs.

In any form of knowledge transfer business network, listening, trusting and collaborating are the main elements to connect each other to businesses that are geographically separated. The Listening section of the above diagram shows that any conversation in the network is gathered and passed on to the understanding section. Understanding the gathered knowledge is trusted and then collaborated with the entire organisation to share the knowledge. Network First Aid forms a central communication hub which helps the entire knowledge transfer process within the organization. Central communication hub could be a set of expertise, group of IT experts or a computer that receives and forwards the information to other sections. It is a reserved knowledge that constitutes experienced knowledge transfer professionals and could be contacted for any sort of procedural help that may be required by other sections. The Central communication hub may be able to develop SME training presentations, design and develop various awareness materials, maintenance of existence database systems and develop a web strategy for collecting and storing information related to knowledge transfer procedures. Knowledge transfer becomes incomplete if the information being shared is not trusted and the entire process is complete only when the information is trusted once it is clearly understood. In practice, for example, when two firms are aimed a particular task and only one firm end up with its product then there is a loss in the final product. So, both firms needs appropriate communication and this is where Network First Aid box plays its important role. Similarly, collaboration, trust and understanding elements will contact the Network First Aid with the help of IT for any sort of help that they might need to ensure that the final product is completed in a stipulated amount of time.

Scott (2000) argues that the method is best suited for network analysis, where some players act as key information distributors within a network and others act as bridges between networks. For example, if an organization receives advice from a network partner, the organization should be prepared to help them in the future. Partners who are willing to pass on skills to each other will establish the network as a centre of excellence or expertise and facilitate future collaborations. A well established network will thrive if its participants play an active role in keeping the network topical and relevant (Dwyer, 2000). Therefore the first aid model may be play as bridges between networks in SMEs.

Method of Research:

The entire process of collecting and processing the data is schematically represented as shown in diagram 3.

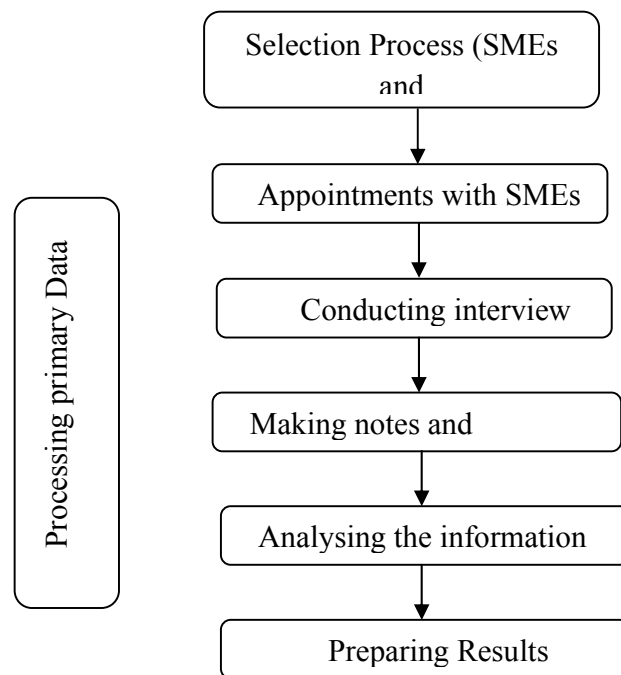


Diagram 3: Interview Process

Primary data is believed to be used to explore a specific research objective, which will be gathered using interview techniques. According to the nature of the topic, I decided to use semi-structured interviews which facilitated a better understanding of the relationship between variables in an exploratory and explanatory study and allowed us to discover interesting and unanticipated phenomena related to the research topic (Saunders et al., 2000). Interviews have been used to gather data on Knowledge Transfer practices within the Turkish Textile SMEs under research. An interview is a survey method designed to collect extensive information from each respondent. It is an ordinary conversation, with one individual at a time that has been extended and formalized in order to collect data. Keeping in mind the purpose, the research method was to interview the managers, owners/founders and CEO in order to gather as much information as possible. Moreover, the interviews are expected to provide information that reflects the opinion of both their customers and employees in SMEs. The process of interviewing implies not only asking questions but also a systematic recording and documenting of responses. All the interview questions were originally written in English and then translated into Turkish language. An appropriately designed semi-structured questionnaire was more likely to encourage the interviewees to express their points of view accurately. After

finishing each interview, the taped interviews were uploaded in the computer and also stored in CDs for the safety of the collected data. 18 interviewers had a copy of the recorded interview to clarify any confusion by referring to the record whenever needed. The entire interviews of respondents were noted down. The draft of each interview was made in order to select the information that is interest of this paper. Finally, the corrected version of primary data of each interview was processed and framed in the paper. The interviews were conducted in Company's offices. Most interviews lasted between 30 to 60 minutes. Below table 2 shows the summary of the responses.

Table 2. Summary of the responses to Key Issues

Question asked	Number of respondents			
What are the advantages of doing business in Turkey?	Easy to communicate: 7	Turkey's Geography: 10	No Answer: 1	
What type of information/resources do you share with other SMEs	IT and Management: 8	Management Skills: 5	Marketing Strategies: 2	No Answer: 3
What are the most important obstacles in Knowledge Transfer (Idea Sharing) to SMEs in Turkey?	Trust: 15	IT support: 2	Lack of KT Awareness: 1	
Why do you think Knowledge Transfer (Sharing Ideas) in SMEs is important?	Share ideas: 10	Improve business ideas: 5	Get closer to other SMEs: 3	
What kind of IT resource you use for KT?	Internet: 14	Existing Knowledge: 2	Company Database: 2	
Why do you use private	Develop	Improve Trust: 4	Collaboration: 12	

and public knowledge in your company to develop any product?	business skills: 2			
---	-------------------------------	--	--	--

Focusing on the textile industry in Turkish SMEs the research was capable to explain the theoretically driven assumption and to show the relation between the concepts of Knowledge Transfer and SMEs network. 18 SMEs responded to this survey and majority of the responders are in the higher position in the company and aged between 24 and 48. They have good business ideas but not many were familiar with modern technology. However, they were happy to implement and hire expertise when they are in need. Some of them were not happy with business because they are still using old technology which makes it difficult to cope up with the market demands.

From the above survey results, we have decided to describe the following three key ‘knowledge sharing’ factors: (1) *having strong trust* (2) *believe in collaboration*. (3) *power of listing and understanding*.

Factor 1: Having strong Trust

In particular, trust as a control mechanism is based on the belief in the other partner’s reliability in terms of fulfilment of obligation in an exchange (Appleyard, 1996). Trust allows both parties to assume that each will take actions that are predictable and mutually acceptable (Uzzi, 1997). These expectations reduce transaction costs—for example, monitoring and renegotiating the exchange in reaction to environmental changes — particularly in highly complex tasks facing strong time constraints (Kluge, Stein and Licht 2001). Trust also affects the depth and richness of exchange relations, particularly with respect to the exchange of information (Lee and Al-Hawamdeh, 2002.)

Giving without expecting something in return is a show of trust. As outlined by Peter Blau (1986: p.8), social exchange is distinguished from strictly economic exchange by the unspecified obligations incurred in it and the trust both required for and promoted by it (Blau, 1986). This process of exchange innately hinges on trust as crucial for the provider to take initial action based on a belief that the receiver will respond in like kind at some future point (Coleman, 1988). Szulanski (1996) explain that both applied and scholarly research have made it clear that relationships are critical for knowledge creation and sharing and that ineffective relationships can

block knowledge transfer. This factor was considered one of the most critical for the success of the SMEs in the process of knowledge transfer. In Turkish SMEs knowledge sharing by being the first ones to do so, and by setting

the ground rules to establish the trust that gave other members the confidence to share their knowledge. One of the respondents indicated that Trust is the most importance aspect for SMEs in order to share information/resources with others. Other respondents explained that business with other SMEs is impossible without Trust. However, we lose our profit margin because of sharing business skills with others where trust is not considered important. Some of the respondents formed the equation trust = risk. Textile industry in Turkey is very competitive industry and every SME wants profit without sharing the information. We can conclude that if a firm X want to get involved with firm Y, they need to trust each other in order to achieve a common profit. Therefore it is clear that the issue of trust arose during the discussion of collaboration.

Factor 2: Believe in Collaboration

Collaboration of Networks is established for collective benefits and is most successful and effective where there is give and take by participants and members. This involves sharing organisational experiences through dialogue and interaction with other partners, as well as learning from theirs. For instance, the organization could attend debates and discussion groups to contribute their ideas and experiences or offer to speak at a conference. Other related research efforts have analyzed communities of practice (Wenger, 1998), actor-networks and networks of strong and weak ties (Granovetter, 1973). In his proposition, Granovetter explains that regular flow of information depends on the presence of multiple short paths between persons, as opposed to a local bridge does not represent a likely path of information flow, though it represents a possible path of such an information flow. Participants agreed they needed to believe in collaboration in order to share knowledge. One respondent said that collaboration has to be delivered on time similar to exchanging trust and get access to the resources/information. Few mentioned that collaboration is a big asset of knowledge sharing. Large SME's are thinking twice before they shake hands with smaller SMEs. This forms a gap in the understanding that directly affects effective knowledge transfer. SMEs owned by family members and friends find it easy to collaborate no matter the size of the SME and SMEs in the same area/groups collaborate with each other with ease.

Factor 3: Power of Listing and Understanding

Listening and Understanding concepts are vital for effective knowledge transfer in SMEs. Sender and receiver should be using a similar method of exchanging ideas. Some respondents explained that listening and understanding

is very difficult in Turkish SMEs. Real knowledge should be understood by other SMEs before the Knowledge is exchanged between each others. Some of the respondents complained that listening and understanding is poor in Turkish SMEs because all SMEs are interested to their ideas and assets. However, in general we can see that successful SMEs have deployed a good method of listening and understanding. Some of the SMEs spend plenty of time in understanding these concepts.

Discussion:

The results of this study have implications for the research and practice of business engaged in knowledge sharing. Three of those implications are now considered. First, there is a need to conduct a survey of SMEs in Turkey to find out the detail their approach to KT. This survey would increase the validity of the factors we have identified in this study offering us a better understanding of KT in Turkish SMEs. Second, one of the key elements identified in this study is the role of the SMEs Trust. As discussed earlier, Trust encourages knowledge sharing by being the first to do so and by developing an environment of Business. How these conditions for knowledge sharing are developed. Finally, we believe the results from this study could be used as a key element of SMEs knowledge transfer in Turkey. For example, an inventory of factors influencing knowledge transfer could be used as an instrument for examining where the SMEs stand in relation to deploying knowledge transfer process in their organizations.

Conclusion and Limitation

Knowledge is an important asset and is vital for enhancing capability and competitiveness of Textile firms in Turkey. Without any mechanism to deploy that knowledge, Turkish firms may not cope with changes and challenges in the dynamic business environment in today's world. New technologies find and increasing demand and quickly introduced into the market in order to meet global needs .While in many industrial countries new technologies have to replace the previous ones step by step, Turkey, an rising market, implements state-of-the-art systems from the beginning. The study has made an attempt to identify several important factors and explain knowledge transfer and network organizations in Turkish Textile firms.

Effective Knowledge Transfer implementation helps SMEs with free flow of information, ideas and resources. But, this often may not be easy as there might be a communication gap between various entities in or between Turkish SMEs. The main challenge faced by most businesses is to manage the flow of information among different

entities. Firms may not be able to handle complex knowledge transfer procedures with the changes and challenges in the dynamic business environment. Therefore, SMEs need a clear understanding on what to be shared, when to should be shared or accessed and with whom the resources has to be shared. This study has made an attempt to identify and examine several important factors and developed. *First Aid Model* in order to reduce the communication gap with the help of Trust and Collaboration in knowledge transfer process in Turkish Textile firms. Turkish SMEs will be able to achieve a desired level of participation in Knowledge Transfer and network organizations process with the help of the *FirstAid model*. For these reasons, research into the nature of knowledge Transfer environment is important and constructive and should be conducted on a continuing basis.

The study remains subject to several limitations. Firstly, since the researcher consulted very few SMEs and the response might not truly representative of the whole Turkey, then the findings may not be generalized at large. Secondly, the study's small response in the context of Textile companies in Istanbul, Ankara, Bursa and Izmir may limit the findings' statistical power. To overcome this, the researcher will conduct further study with larger number of SMEs. Thirdly, there is a potential risk with respect to the responses due to the use of self-reported views by the respondents. This could be reduced by asking the questions included in the study at different points of times during the interviews.

References :

Ata Securities, 1997. Industry Reports, *Textile in Turkey: Overview*, January 02.

Adamson, I. (2000) *Management consultant meets a potential client for the first time: the pre-entry phase of consultancy in SMEs and the issues of qualitative research methodology*. *Qualitative Market Research: An International Journal*. 3(1), pp.17-26

Alavi, M. (2000). Managing organizational knowledge. In R.W. Zmud (Ed.), *Framing the Domain of IT Management: Projecting the Future Through the Past* (pp. 15-28). Cincinnati, OH: PinnFlex Education Resources Inc.

Appleyard, M. (1996), 'How does knowledge flow? Interfirm patterns in the semiconductor industry', *Strategic management Journal*, vol. 17, Special Issue, pp. 137-154
wyer D. (2000) *Interpersonal Relationships*, London: Rutledge.

Argote and Ingram (2000) L. Argote and P. Ingram, Knowledge transfer: a basis for competitive advantage in firms, *Org Behav Human Decis Process* 82 (2000) (1), pp. 150–169.

Andersson et al., (2002), The strategic impact of external networks: subsidiary performance and competence development in the multinational corporation, *Strateg Manage J* 23 (2002), pp. 979–996. Andersson et al., 2002 U.

Andersson, M. Forsgren and U. Holm (2002), The strategic impact of external networks: subsidiary performance and competence development in the multinational corporation, *Strateg Manage J* 23 (2002), pp. 979–996.

Argote and Ingram, (2000), Knowledge transfer: a basis for competitive advantage in firms, *Org Behav Human Decis Process* 82 (2000) (1), pp. 150–169.

Baum et al., (2000), Don't go it alone: alliance network composition and startups' performance in Canadian biotechnology, *Strateg Manage J* 21 (2000), pp. 267–294.

Bonner et al., (2005), Self-perceived strategic network identity and its effects on market performance in alliance relationships, *J Bus Res* 58 (2005), pp. 1371–1380.

Blau, P. (1986). *Exchange and power in social life*. New Brunswick, NJ: Transaction Publishers.

Bajracharya, P & Masdeu, N.R. (2006) TACIT KNOWLEDGE TRANSFER, In Small Segment of Small Enterprises, International Master's Program in Strategy & Culture LIU – EKI/STR - D - - 06/003 - - SE. Linköping University, Sweden.

Brouwer, N.M., H. van Ophem and C.E. Zijdeveld (2001), *Samen innoveren, een onderzoek naar publiek-private en private kennisrelaties in Nederland*.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94 (Supplement): S95-S120. Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York: Free Press.

Cross, R., Parker, A., Prusak, L., & Borgatti, S. P. (2004). *Knowing what we know: Supporting knowledge creation and sharing in social networks*. In E. Lesser & L. Prusak (Eds.), *Creating Value with Knowledge* (pp. 61-81). Oxford: Oxford University Press.

Davenport, T. & Prusak, L. (1998), *Working knowledge: how organizations manage what they know*, Harvard Business School Press, Boston.

Dunya Newspaper Special Issue, 1998. The Turkish Economy at the 75th Year of Republic.

Dwyer D. (2000) *Interpersonal Relationships*, London: Rutledge.

Doukas, M., & Kalantaridis, C. (2000): 'A Framework for Analysing Socioeconomic Relations within Interorganisational Networks in the Small Enterprise Sector', Proceedings of The 2000 Small Business & Enterprise Development Conference, p82

Ercan, E., 2002. Changing World Trade Conditions Force the Turkish Textile and Apparel Industry to Create New Strategies, *Journal of Textile and Apparel, Technology and Management*, Vol. 2, Issue IV. Fall.

Granovetter, M. (1973) *The Strength of Weak Ties*, *American Journal of Sociology* 78(6), pp.1360-80.

Granovetter, M (1985), Economic action and social structure: the problem of embeddedness, *Am J Sociol* 91 (1985), pp. 481–510.

Hansen, T. M, (2002) *Knowledge Networks: Explaining effective knowledge sharing in multiunit companies*, Harvard Business School, USA.

Inkpen and Dinur, 1998 A.C. Inkpen and A. Dinur, Knowledge management processes and international joint ventures, *Organ Sci* 9 (1998) (4), pp. 454–468.

Kluge, J., Stein, W. & Licht, T. (2001), *Knowledge unplugged*, Palgrave, Great Britain

Knight, 2002 L. Knight, Network learning: exploring learning by interorganizational networks, *Human Relat* 55 (2002) (4), pp. 427–454

Lee, L. & Al-Hawamdeh, S. (2002), 'Factors impacting knowledge sharing', *Journal of Information & Knowledge Management*, vol. 1, no. 1, pp. 49-56.

Liebeskind et al., (1996), Social networks, learning, and flexibility: sourcing scientific knowledge in new biotechnology firms, *Organ Sci* 7 (1996) (4), pp. 428–443.

Martin.C.(2000) *International and strategic networks: An SME perspective*, The Centre for International Manufacturing, Cambridge University September 2000.

Powell et al., 1996 W.W. Powell, K.W. Koput and L. Smith-Doerr, Interorganizational collaboration and the locus of innovation: networks of learning in biotechnology, *Adm Sci Q* 41 (1996) (1), pp. 116–145.

Rainer. M. & Pradhan, B.N., (2004), "Knowledge transfer after outsourcing: a case study on Saab's collaboration with Denel Aviation in South Africa", Linköping University, Sweden.

Richard Kerste Arnoud ,Muizer Zoetermeer,(2002) Strategic Study B200202 Effective knowledge transfer to SMEs Lessons from marketing and knowledge management

R. Gulati,R(1998) Alliances and networks, *Strateg Manage J* 19 (1998) (4), pp. 293–317.

Ritter and Gemünden, 2003 T. Ritter and H.G. Gemünden, Interorganizational relationships and networks: an overview, *J Bus Res* 56 (2003), pp. 691–697.

Rowley et al., 2000 T.J. Rowley, D. Behrens and D. Krackhardt, Redundant governance structures: an analysis of structural and relational embeddedness in the steel and semiconductor industries, *Strateg Manage J* 21 (2000), pp. 369–386.

Scott, J. (2000). *Social Network Analysis: A handbook*. Second edition. London: Sage.

Summon, P. (1998) *Business Link impact and future challenges*. Journal of Small Business and Enterprise Development, 5 (1), pp. 49-59.

Seufert, A., von Krogh, G., Bach, A., (1999) *Journal of Knowledge Management*.Kempston: Vol. 3, Iss. 3; p. 180

Shaw, E. & Conway, S. (2000): 'Networking and the Small Firm', in Carter.

Shan et al., 1994 W. Shan, G. Walker and B. Kogut, Interfirm cooperation and startup innovation in the biotechnology industry, *Strateg Manage J* 15 (1994), pp. 387–394.

Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17 (Winter): 27-43

Tsoukas, H., & Vladimirou, E., (2001) "What is organizational knowledge?" *Journal of Management Studies*, 38:7, pp. 974-993

Tsai, 2001 W. Tsai, Knowledge transfer in intraorganizational networks: effects of network position and absorptive capacity on business unit innovation and performance, *Acad Manage J* 44 (2001) (5), pp. 996–1004.

Tsai, 2002 W. Tsai, Social structure of "competition" within a multiunit organization: Coordination, competition, and intraorganizational knowledge sharing, *Organ Sci* 13 (2002), pp. 179–190.

Uzzi, Brian. 1997. *Social structure and competition in inter firm networks: The paradox of embeddedness*, *Administrative Science Quarterly*. 42:35-67

Waits, M. (2000), 'The added value of the industry cluster approach to economic analysis, strategy development, and service delivery', *Economic Development Quarterly*, vol. 14, no. 1, pp. 35-50.

Wenger, Etienne. 1998. *Communities of Practice: Learning, Meaning and Identity*, New York: Cambridge University Press

Wigg, K.M., (1997), "Knowledge Management: An introduction and perspective", *Journal of Knowledge Management*, Vol. 1, No. 1.

Internet references:

http://www.itkib.org.tr/english/about/sectors/textile/textile_info.pdf

<http://www.igeme.org.tr/>

<http://www.tusiad.org.tr>

<http://www.itkib.org.tr>

