Knowledge Process Outsourcing
-The challenge to create value through transferring intrinsically tacit knowledge across borders-

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Abstract

A recent development in the service outsourcing sphere has enabled companies to outsource highly knowledge intensive and strategically important processes. Hence, the characteristics of the knowledge process outsourcing industry are extremely complex and it is difficult to comprehend how value can be created for clients. These aspects are particularly intriguing when considering the fact that the services are offered on distance by companies from emerging market economies through the utilization of low cost expertise. Thus, the purpose of the study is to explore the logic of value creation when knowledge process outsourcing services, which are intrinsically tacit, are offered across borders. In order to elaborate on this phenomenon, theories related to knowledge transfers and professional service firms' value creation, in particularly the Value Shop framework, have been investigated. The empirical evidence indicates that Indian knowledge process outsourcing service providers have developed techniques and practices in order to cope with the complexity of the industry. Hence, it could be concluded that a very challenging trade-off between cost reduction and tacitness is evident in the Knowledge Process Outsourcing service provider's operation modes.

Keywords: Knowledge Process Outsourcing, Value Shop, knowledge transfer, intrinsically tacit knowledge, value creation logic

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Acknowledgement

This thesis would not have been possible without the support and assistance of several individuals and therefore we would like to take this opportunity to express our gratitude to them.

We would like to thank Professor Bent Petersen form Copenhagen Business School, for his patience and guidance throughout the process of this master thesis. Without your support we would not have been able to accomplish the research. We also want to show our gratitude for enabling the research excursion to India.

Furthermore, we would like to thank Professor Claes-Göran Alvstam as well as the School of Business, Economics and Law for the financial support, which made the research excursion to India possible.

This research would not have been possible without the participation of the case companies and we would especially like to take this opportunity to thank Selma Kasimay for her support and guidance in India. Without you we would have been lost.

As a final point we would like to thank our families and friends for bearing with us during our years of studies.

Thank You!

Gothenburg May 2009

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Abbreviations

AVP	Assistant Vice President
BPO	Business Process Outsourcing
BFSI	Banking, Financial Services and Insurance
CIO	Chief Information Officer
CISO	Chief Information Security Officer
COO	Chief Operating Officer
C & S	Communication and Strategy
HR	Human Resource
IP	Intellectual Property
KPO	Knowledge Process Outsourcing
ORC	Outsourcing Research Center
SECI	Socialization, Externalization, Combination, Internalization
S & M	Sales and Marketing
TCS	TATA Consultancy Services
VP	Vice President

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1 Introduction to the Research Area

This thesis elaborates on the challenges of value creation through transfer intrinsically tacit knowledge, in an industry offering highly knowledge intensive services from a distance. The following chapter will thereby provide an introduction into the research area including a problem discussion which will guide the reader through the thesis.

"knowledge is a tricky business"
(Gupta 2008)

As outlined by Gupta (2008), the concept of knowledge implies inherent challenges, due to its complexity as well as intangibility dimensions. These critical aspects have to be acknowledged, as knowledge is perceived to be the most valuable source for individual and organizational competitive advantages (Grant 1996; Empson 2001; Beaverstock 2004). Consequently, knowledge is of major importance for organizations' existence, particularly when it serves as the foundation for organizational success, a notion which is evident in highly knowledge intensive service firms. This aspect is especially intriguing when considering that knowledge intensive services can be offered remotely in an outsourcing and offshoring context. Thereby, it has to be emphasized that services in general are intangible, perishable and heterogeneous as well as inseparable from their clients (Normann 2001; Parausaram et al. 1985), which enhances the complexity when outsourcing knowledge intensive services.

1.1 Background

According to Grossman and Helpman (2005, p. 135), "we all live in an age of outsourcing" which indicates that outsourcing is nowadays a well-accepted business strategy in the competitive global business landscape. Especially service outsourcing attempts have increased its occurrence whereby the concept of Business Process Outsourcing (BPO) could be identified as an important offshoring and outsourcing alternative on the global market. The overall purpose of the BPO industry is based on the reasoning to relocate internal standardized business processes to external outsourcing vendors. (Mehta et. al 2006)

As these outsourced and offshored services could be executed remotely, due to increasing technology development, emerging market economies capitalized on the provided business opportunity. This development resulted in a rapid growth of the BPO industry, which became particularly evident in India, where a vast amount of English speaking low-cost labor contributed to the country's success. (Kobayashi-Hillary 2005; Sen &

Shiel 2006) Consequently, India generated 75 percent of the global industry revenues within the BPO sphere in 2006 (Mehta et al. 2006).

This success story of India's BPO landscape became the foundation for the creation of a completely new industry offering highly knowledge intensive and complex services, termed as Knowledge Process Outsourcing (KPO). (Sen & Shiel 2006, Mehta et al. 2006) The outsourced and offshored services require specialized domain based skills as well as expertise in order for the KPO service provider to cope with the inherent complexity of the processes. Thereby, the complexity of the services is based on its embeddedness in the client's context, which requires non-standardized solutions resulting in extreme difficulties when executing the services from a distance (Sen & Shiel 2006).

KPO services range from market and investment research to data analysis services, which are offered either as core business function of the service provider or as part of a service portfolio (Sen & Shiel 2006; Gupta 2008; Evalueserve 2007; TCS 2009a). A majority of these service providers are located in India, due to the prosperous business landscape, as location advantages and the availability of low-cost skilled expertise is evident. In line with this aspect, it needs to be acknowledged that Indian experts are willing to accept on average 80 percent lower wages than their European peers (Kobayashi-Hillary 2005; Sen & Shiel 2006; Raman et al. 2007). Consequently, the Indian KPO industry's competitive advantages are based on the possibility to offer a cost reduction for their client, which allows a decreasing internal cost structure of 40-70 percent. However, next to the cost reduction, the client also gains benefits from the customized solutions provided by the KPO service provider. This customization is evident and necessary based on the aspect that the services outsourced are of strategic importance for the client, whereby quality assurance becomes a major challenge the industry has to cope with. (Sen & Shiel 2006)

In addition, it is outlined by Sen and Shiel (2006) that the great success of India in the global KPO market will continue, as already in 2003 India generated 56 percent of the USD 1.29 billion global KPO industry revenues. This trend is expected to increase as it is estimated that by 2010, out of the USD 17 billion global market revenues, 71 percent will be provided from Indian KPO service providers. (Sen & Shiel 2006).

Although, the KPO industry strengthened its presence on the global market, there is to the best of our knowledge no unified definition of the industry accepted and provided by academia. Hence, for this thesis we define an actor within the KPO industry as: *a provider of unique knowledge intensive problem solving processes, which are executed by expertise sourced from a low-cost emerging market economy and provided mainly to clients in a mature market economy.*

1.2   Point of Departure

Similar to the characteristics of the KPO industry are academic discussions about professional service firms, leading to the argumentation that the KPO industry can be classified as a professional service industry based on the intensive knowledge involved and the dependency on experts. Thereby, it is believed that the value creation logic, which is defined by Stabell and Fjeldstad (1998) as the possibility for professional service firms to solve problems whereby value creation is offered to clients, is highly applicable to the KPO industry. However, it needs to be acknowledged that it is expected that various challenges are occurring in this value creation process, which can be related to characteristics of the KPO service firm and the knowledge intensive services provided.

Consequently, the KPO industry's dependency on expertise is a critical dimension as the knowledge of these experts is the foundation for the value creation logic of the KPO service provider. According to Stabell and Fjeldstad (1998) a low-cost strategy cannot be successfully implemented in the value creation process of professional service firms as services, executed by highly knowledgeable expertise are expected to be priced at a premium level. However, when analyzing the KPO industry, it becomes evident that KPO service providers have by some means and mechanisms managed to solve the paradox in offering value through a low-cost strategy.

The general aspects concerning intangibility and inseparability of services (Normann 2001) are enhancing the local presence requirements of the service execution as these aspects imply that the service provider needs to be co-located to its clients in order to solve the highly knowledge intensive and customized outsourced problems. Conversely, this notion is contradicting the KPO industry's existence as the execution of the service is remotely provided which enhances the complexity within the KPO sphere (Sen & Shiel 2006). Therefore, the unique and highly knowledge based services require particularly an intensive knowledge transfer across borders in order for the client to capitalize on the service provider's expertise. The challenges with transferring knowledge are intensely discussed in academic literature (cf. Szulanski 1996; Hansen 1999; Balconi et al. 2007), and lead to the belief that the complexity of the industry increases due to its high dependency on efficient transfers of knowledge across company and country borders. Thereby, the authors of this thesis are questioning how it is possible to overcome this complexity in order to operate successful and create value in such a highly knowledge dependent business environment.

This complexity is significantly enhanced when acknowledging that the outsourced and offshored services imply considerable levels of tacitness due to their embeddedness in the client's context (Nonaka & Tomaya 2007; Sen & Shiel 2006). Hence, this aspect impedes the KPO service provider's ability to comprehend the full complexity of the services especially as the transfer of intrinsically tacit knowledge requires co-location and co-

performance (Roberts 2000), two aspects which are expected to stress the KPO service providers need for local presence in order to successfully fulfill the value creation process requirements.

Thereby, based on the discussions above, it is very intriguing to reflect upon the KPO industry's ability to create value in such a complex industry setting. In order to analyze the potential offered in this industry and shed light on an upcoming sector of the outsourcing context, the challenges within the industry have to be outlined and acknowledged. Hence, we question:

What are the challenges for Knowledge Process Outsourcing service providers when creating value through transferring intrinsically tacit knowledge across borders?

1.3 Research Purpose

The primary purpose of this thesis is to explore and illuminate the phenomenon of value creation through transferring intrinsically tacit knowledge across borders. Thereby, we are shedding light on the challenges involved into this process, which contributes to the research gap identified by Morris (2001), who claims that the knowledge transfer in regards to professional service firms is still a relatively unexplored area. In line with this aspect, Kakabadse and Kakabadse (2000) explicitly outline the need for additional research concerning the aspect of knowledge transfer within the outsourcing context.

Furthermore, while focusing on KPO service provider's operations an additional contribution to Mehta et al.'s (2006) outlined lack of research concerning the value creation for service outsourcing vendors is provided. Hence, in order to elaborate on the value creation possibilities in such an outsourcing setting, Stabel and Fjeldstad's (1998) Value Shop model is used. The model explores the value creation logic of professional service firms and frames the base for the analysis of value creation in this research.

1.4 Delimitations

A limitation of this research might be the aspect that value creation is perceived as a natural outcome of the Value Shop framework for the KPO industry. However, the success of 'real' value creation for the client company was not analyzed, base on the aspects that it is in general difficult to measure value creation in the service sphere, due to intangibility dimensions. Although, it has to be acknowledge that there might have been a possibility to measure to a certain extend the value creation for clients, e.g. in terms of financial figures, it was not the focus of this thesis and therefore a neglected aspect. In line with this discussion, it has to be stressed that we did not focus on the success rate of the created value, as it was expected that any form of value creation is generating benefits for the client company.

Furthermore, minor limitations could occur through the choice of methodology of this research, which are elaborated in detail in the following chapter. However, we would like to outline specifically one issue in regards to the chosen research design. The primary data collection was focused on interviews and thereby the perception of the interviewee in regards to knowledge transfers might be biased. This aspect could have been diminished while participating in knowledge transfers to observe the activities. However, due to confidentiality issues regarding the strategically important business processes outsourced, it was not possible for us to execute this approach.

In conclusion, there are some aspects which can be perceived as limitations for this thesis. However, we believe that these limitations have not influenced the relevance of the research results. Instead, these limits could be possible arenas for future considerations, both in the academic as well as the managerial sphere.

1.5 Thesis Disposition

The structure of the thesis is following a traditional approach as after the introduction a methodology chapter will provide the reader with a transparent description of the methodological choices, which were used in the development of this research. The third chapter is a literature review which will present the necessary theories for the reader in order to comprehend the challenges of knowledge transfers in the KPO industry. Theses theories will then be incorporated into a conceptual model, which facilitated the confrontation with the empirical findings. Consequently, the next chapter will present the empirical findings in order to illustrate the challenges when creating value through transferring intrinsically tacit knowledge within business processes across borders. The chapter is followed by an analysis which will provide a confrontation of empirical evidence and the conceptual model, resulting into a revised conceptual model with a higher level of applicability to the KPO industries value creation. In the final chapter a conclusion of the confrontation together with a discussion regarding academic and managerial contributions are outlined.

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2 Methodology

The purpose of this chapter is to outline the methodological approaches used in the research process. The authors of this thesis thereby elaborate on the chosen research approach, the usage of a multiple case study and the data collection methods in order to enhance the credibility of this research.

2.1 Research Approach

Our research process was initiated once the phenomenon of KPO was observed to be a relatively recent trend in regards to the outsourcing industry. Aspects such as; how does the KPO industry manages to transfer knowledge across borders and what are the belonging challenges when creating value through these cross border transactions were asked. In order to understand the outsourcing activities of knowledge intensive services and observe its characteristics, an extensive literature review was conducted. However, while reviewing existing literature it became evident that a research gap exists, as no theory completely explained the challenges the KPO industry faces when trying to create value through transferring intrinsically tacit knowledge across borders.

Due to this lack, a general theoretical framework was constructed, which consists of theories related to the KPO industry, the value creation logic of professional service firms as well as the transfer of knowledge. Moreover, a conceptual model was derived from the theoretical framework with the purpose to theoretically explore the KPO industry's operations and thereby outline how value can be created by the usage of various knowledge transfers mechanisms.

After describing the empirical findings, the empirics where analyzed and thereby confronted with theory by the usage of our conceptual model. However, the model could not be entirely applied to the empirical findings, which required the development of a revised conceptual model. In order to theoretically explain this model, additional theories concerning apprenticeship and IT systems had to be outlined and analyzed. Thus, the interplay between theory and empirics has been a continuous cycle of activities, which finally resulted in a conclusion.

The process described above is characterized as an abductive research approach, discussed by Denzin (1978) as well as Alvesson and Sköldberg (1994). The authors have outlined that the abductive research approach process consists of a constant interplay between theory and empirical findings, which allowed us to capitalize on the benefits generated from this interaction also resulting into extended conceptual models. However, it must be acknowledged that we did not have the possibilities to retest our results with new empirical findings as Alvesson and Sköldberg (1994) suggested.

2.2 Case Studies - A multiple case study approach

Traditionally, Yin (2003) considered the case study approach to be beneficial for qualitative research, which focuses upon a real-life contemporary phenomenon. As our thesis is characterized by a 'what' question, the case study approach might not necessarily be perceived as the most applicable choice of research strategy, based on the fact that case studies are traditionally characterized by either 'how' or 'why' questions (Yin 2003). However, Yin (2003) outlined that an exploratory research approach based on a 'what' question is supporting the usage of a case study. Hence, the decision to use a qualitative case study approach is justified by our exploratory research purpose as the overall aim for the research is to explore and illuminate the phenomenon of value creation in the KPO industry through transferring intrinsically tacit knowledge across borders.

When conducting a case study the option of a multiple case approach has been outlined by Yin (2003) to be of advantage as this approach can strengthen the external validity of the findings and its result is considered to be more compelled as well as robust (Merriam 1998; Yin 2003). Furthermore, we want to illustrate the complexity of a situation by providing a thick description of the studied phenomenon, which goes in line with Merriams (1998) descriptive case study analysis. Moreover, with this multiple case study approach, we are providing a more holistic view (Patton 2002) of the KPO industry. In this discussion the author elaborated on the aspect that the sum of parts added together result in synergies, which generates a greater complex system. The overall intention of the case studies can be referred to as interpretive due to the aim of exploring the phenomenon of value creation in the KPO industry through transferring intrinsically tacit knowledge by interpreting and analyzing empirical findings. (Merriam 1998) Hence, the design of combining descriptive case studies together with an interpretive intention is in line with Merriam's (1998) methodology discussion.

The critical aspects of delimiting the cases and deciding the unit of analysis discussed by Merriam (1998) and Yin (2003) were acknowledged in the selection process of the cases. The underlying reasons for choosing the selected cases were mainly based on the characteristics of the companies' KPO operations as well as their size. However, the geographical factors must not be neglected in the decision process, as it had a significant influence. Consequently, as India serves as the global KPO hub, it was a logical and rational decision to look upon two Indian based KPO service providers.

Evalueserve is a KPO service provider founded in India in 2000 with a labor force of 2,300 employees worldwide. Evalueserve offers solely KPO services and can be perceived as the pioneer of the industry as its founders termed the word 'KPO' in order to differentiate its services from traditional BPO operations. (Evalueserve 2007; Evalueserve 2009)

TATA Consultancy Services (TCS) was established in India in 1968 and offers next to IT services, consulting and BPO services. With a labor force of 116,000, TCS is a well-established global consultancy company, which developed its KPO services from its BPO service line as the demand for more knowledgeable solutions became evident. (TCS 2009a)

As illustrated, the chosen case companies imply different operational and firm-level characteristics, whereby the diversity within these companies needs to be stressed. In regards to the purposeful sampling method applied, the distinctive differences between the case companies indicate a maximum variation sampling method, discussed by Patton (2002) as well as Merriam (1998). Moreover, the criteria for the case selection was also deliberately based on the notion of providing diverse results, in order to holistically highlight the various challenges associated with transferring intrinsically tacit knowledge across borders.

In order to gain a deeper understanding concerning the value creation logic of the KPO industry, we saw the necessity to complement the findings with perspectives provided form client companies. Hence, three client companies, which outsource or outsourced KPO services to Indian service providers, participated in this research. The access to the clients was gained through the service providers, which goes in line with a network sampling approach (Merriam 1998; Patton 2002). It has to be acknowledged that the selection conducted by the service provider might bias the findings to some extent.

Novo Nordisk is a Danish health care company operating in the global pharmaceutical industry and outsources clinical trial analysis. (Novo Nordisk 2009; Outsourcing Coordinator, Novo Nordisk 2009)

Company X is a Swedish company operating on the telecommunication market and outsources market research activities. Furthermore, the company preferred to stay anonymous in this research. (Director C & S, Company X 2009)

BombayWorks is a Swedish based startup company in the IT animation industry which outsourced its services to an Indian KPO service provider before recently captive operations in India were set up. (Co-founder, BombayWorks 2009)

2.3 Data Collection and Presentation

In order to gain a profound understanding of the KPO industry and its actors, a multiple data collection approach, based on primary and secondary sources was applied. According to Patton (1990), no single source of information is thoroughly trustworthy to provide an understanding of the research field. Hence, triangulation of information is an important aspect when collecting empirical data, especially in a case study approach (Yin 2003). Thus, in order to strengthen some aspects of the gathered primary data, secondary information in form of published articles and company based publications were analyzed.

However, it has to be acknowledged that the main information source of this research is primary information, gathered through interviews with company representatives, which is due to the lack of publications in the research field as well as due to the detailed information required for our study. This data collection approach is supported by Yin (2003), who outlines the insightful and targeted strengths of interviews as tool for data gathering. The authors of this thesis are aware of the difficulties, which occur in regards to subjectivity when using primary data as main source of evidence. According to Yin (2003) the limitation of interviews are mainly based on the biased behaviour of participating actors, both the subjective response of the interviewee or the subjective interpretation of the interviewer can negatively influence the outcome of the data collection.

Interview situation
The interview type chosen for this research was based on an interview guide approach, which clarifies the structure and content of the interviews in advance however; it also leaves the possibility to adapt questions to the situation (Patton 2002). This method provided the possibility to adjust questions to the interviewee's position and gave us the chance to gain knowledge in a variety of different fields. Although this approach seemed to be the best in order to clarify a range of different aspects, it might lead to a reduction of comparability due to different perspectives gained. In order to reduce these differences, we assured that the most important information was gained from both case companies either through the main interviews or if necessary through a follow-up discussion.

Based on the variety of aspects to consider when analysing how value can be created by the usage of various cross border knowledge transfers, four different question guides for employees with diverse positions and responsibilities have been developed (see Appendix 1 to 4). Furthermore, due to the confidentiality issues regarding KPO services and the holistic knowledge required for our research only interviews with top level management and sales representatives were conducted (see Table 1). Hence, personal interviews were carried out at various company locations in India in March 2009. The time range of the conducted interviews varied between 30 minutes to 1 1/2 hours, with an average of 40 minutes. In addition, all 21 interviews were recorded and transcribed in order to fully analyse the information gained.

Furthermore, it has to be acknowledged that the client perspective was gained through interviews (see Appendix 5) concerning only one project and was based on personal perceptions of the interviewee. Hence, the chosen client companies are outsourcing a variety of projects whereof only one was elaborated on, which might shed a false light on the service provider's operational attempt. However, we believe that it is of importance to

incorporate this perspective, as the value creation for the client is of major importance in this research.

Table 1: Data Collection Illustration - Interviews

Company	Number of Interviews	Location	Interview Type
Evalueserve	6	Gurgaon/India	Personal
	1	Cluj-Napoca/Rumania	Telephone
	1	Stockholm/Sweden	Telephone
TCS	4	Mumbai/India	Personal
	3	Bangalore/India	Telephone
	1	Stockholm/Sweden	Telephone
Novo Nordisk	2	Copenhagen/Denmark	Telephone
Company X	1	Stockholm/Sweden	Telephone
BombayWorks	2	Mumbai/India	Personal/Telephone

Data presentation

The findings of the empirical data collection were analysed through a coding system, which goes in line with Strauss and Corbin's (1990) discussion regarding data mining. After transcribing the interviews and collecting secondary data, we categorized and grouped the information according to words, which represented activities or aspects necessary for our research. This system supported the analysis of the gathered data and increased the understanding of its diversity. The chosen key words were gained by analysing the conceptual model. Hence, according to these key words, the empirical findings were elaborated and analysed. It needs to be acknowledged that the findings are presented as a generalization of the KPO industry, however in certain dimensions the two perspectives of the case companies provided diverse stand points and had to be elaborated separately.

2.4 Evaluation of Results

After the empirical findings were tested by the usage of the conceptual model, various challenges concerning the value creation logic of the KPO service providers became evident, particularly in regards to the transfer of intrinsically tacit knowledge. Hence, the analysis elaborates initially on the characteristics of the Value Shop framework outlined in the conceptual model. Furthermore, the challenges in relation to the transfer of knowledge are outlined specifically, by using Nonaka's SECI model which is also

incorporated in the conceptual model. After analyzing the challenges, a revised conceptual model had to be developed in order to emphasize important aspects and findings. As a summary of the analysis, an additional model was developed, which leads into the final conclusion part of this thesis.

Credibility of the research

In order to enhance the credibility of our research we followed a triangulation and diversity approach (Denzin 1970; Patton 2002). According to Merriam (1998) and Patton (1990) triangulation is important in order to elaborate on the validity of a research. This aspect of triangulation was also an acknowledged issue in our research process especially when subjectivity could have occurred. In order to triangulate the data collection, secondary and primary sources were used. The sources in the primary data collection varied significantly, due to different positions and diverse backgrounds the interviewees implied in the investigated companies, which is an aspect that goes in line with Eisenhardt and Graebner's (2007) interview related discussion. In terms of secondary data triangulation internal company sources as well as official publications from external sources were used.

Furthermore, in order to reduce subjectivity and the dependency on potentially biased perspectives, analyst triangulation was achieved through discussions with peer students and researchers. The last triangulation aspect concerns the theory diversity, which was the base for the analysis of all empirical findings. With these aspects of triangulation, a higher credibility through internal validity and reliability of the data collection as well as the research itself could be reached, which goes in line with Patton's (1990) methodology theories.

In addition, due to the maximum variation sampling approach, in choosing diverse cases, a higher external validity was reached (Yin 2003). This approach gave us the possibility to openly consider various characteristics of the cases and find support as well as additional aspects and dilemmas of the research field, which reflect according to Merriam (1998) the best practice of a research approach. However, a common analysis of certain findings could be elaborated when taking into consideration that according to Patton (1990, p.491) a qualitative research should "provide perspective rather than truth".

3 Theoretical Framework

This chapter provides a literature review in order to outline aspects concerning the value creation of KPO service provider when transferring intrinsically tacit knowledge across borders. Thereby, theories of the KPO industry, its value creation logic and knowledge transfers are discussed.

3.1 Knowledge Process Outsourcing

KPO concerns offshoring and outsourcing of customized high-end business processes which imply strategic importance to the outsourcing company (see Table 1). These services are executed by expertise, which possess required domain knowledge and analytical problem-solving skills. (Sen & Shiel 2006; Agarwal & Nisa 2009)

Table 2: Knowledge Process Outsourcing Services

Finance	Equity research, insurance research, mergers and acquisition due diligence
Pharmaceuticals	Medical content and services, clinical trials, drug discovery
Legal	Intellectual Property research, patent application, claim analysis
Analytics	Data search, integration, mining, benchmarking, risk analysis, market research
R&D	Product design, innovation
Animation	Animations and simulations

Source: Sen and Shiel (2006); TCS (2009b)

Furthermore, the outsourced services consist of intrinsically tacit and explicit dimensions, whereby the tacitness originates from the processes' embedded and context dependent characteristics within the outsourcing company (Nonaka & Tomaya 2007; Sen &Shiel 2006). In an outsourcing setting, the intrinsically tacit dimensions involved in the KPO services are very complicated to manage remotely as they have to be learned by observing the organizational context (Sen & Shiel 2006).

The major driver for value creation in the outsourcing industry is in general the aspect of cost reductions and by outsourcing and offshoring service activities, organizations can release resources, which might be invested into areas concerning its core competences. (Kakabadse & Kakabadse 2000) In line with this aspect, Sen and Shiel (2006) argued that cost reductions of 40-70 percent can be generated when utilizing the KPO industries potential. Consequently, Quinn (1999) stated that solely focusing on cost cutting solutions is a drawback, as building a long-term contract when sourcing for knowledge intensive solutions will generate more value for the client.

Furthermore, the access to talent can be perceived as another driver for the outsourcing industry's value creation abilities (Kobayashi-Hillary 2005). This aspect is particularly of importance when the KPO service provider offers its services from emerging market economies. Hence, experts are willing to accept on average 80 percent lower wages than their European peers (Raman et al. 2007). However, typical characteristics of the KPO expertise are hard to outline due to the difficulty in defining their work task (Raman et al.

2007) as the experts cannot be trained in a standardized way on how to solve non-standardized problems (Sen & Shiel 2006).

The major challenge faced by the KPO industry is to develop trustworthy relationships with existing customers, in order to reach a higher level of integration between the KPO service provider and its clients, which is done by personal interactions. Thus, this type of interaction is of particular importance when highly knowledge intensive services are outsourced, based on the notion that the client has to trust the service provider in order to allow it to absorb its strategic important knowledge. In addition, the aspect of creating a good reputation is essential in the KPO industry, as it confirms that the KPO service provider is able to deliver consistent quality. (Sen & Shiel 2006; Currie et al. 2008)

3.2 *Value Creation Logic of Professional Service Firms*

The general aim for the professional service firm is to provide clients with solutions to problems as well as reduce uncertainties (Wittreich 1966; Løwendahl 2005). Thereby, high knowledge intensity is delivered by educated employees who are frequently closely linked to research and scientific knowledge developments within their areas of expertise (Løwendahl 2005; Løwendahl et al. 2001).

Services provided by professional service firms, such as consulting or investment banking, are based on professional assessments as well as personal judgments of experts. Thereby, the utilization of expertise is creating information asymmetry which leads to competitive advantages for these firms. (Løwendahl 2005; Løwendahl et al. 2001) The services offered imply intensive technology (Thompson 1967; Stabell & Fjeldstad 1998) and are based on customization where a strong client interaction is required (Maister 1993; Løwendahl et al. 2001; Løwendahl 2005). According to Løwendahl et al. (2001) the degree of customization is highly dependent on the services offered, as information gathering and market analysis is implying a lower degree of customization in contrast to expertise advice and problem solving solutions (medium degree of customization). A high degree of customization is necessary within implementation as well as negotiation services (Løwendahl et al. 2001). Consequently, generalization, routinization and standardization are difficult to implement in professional service firms. (Maister 1993; Løwendahl et al. 2001)

Based on the heavy reliance on knowledge derived from experts, professional service firms have to cope with embedded intangible services (Løwendahl 1997; Starbuck 1992). Thereby, challenges occur concerning the intangible dimension of knowledge, which is often socially constructed, context specific and ambiguous (Alvesson 2004), especially when considering that knowledge has property and process dimensions (Morris 2001). Hence, according to Morris (2001), the process dimension, also referred to as the transfer of knowledge in professional service firms, implies rules, policies and structural arrangements.

When professional service firms offer value creation to clients, certain characteristics are evident. In general, a firm offering value creation can be referred to as a support system for its client, according to Norman and Ramirez (1994). It has to be acknowledged that the process of value creation is dynamic, which is complementing the client's activities. It is emphasized by the authors that in order to create value for clients, the firm offers cost reduction as well as increased speed, quality and reliability. (Norman & Ramirez 1994)

In regards to professional service firms, the value creation process is critical and complex as the involved processes do not consist of linear inputs, transformations and outputs. Hence, the process diversity impedes the possibility to efficiently measure the creation of value in professional service firms, which offers services on a case-by-case base. (Løwendahl 2005) Therefore, scale economies in a professional service context are limited and can solely be related to the scale of client problems as well as if clients have multiple locations in which the created value can be used. (Stabell & Fjeldstad 1998) Hence, the value creation logic of professional service firms is to solve a client's problem and thereby move from an existing stage to a desired stage, with the involvement of intensive technology. (Thompson 1967; Stabell & Fjeldstad 1998)

3.2.1 Value Shop

In order to explain the value creation logic of professional service firms, Stabell and Fjeldstad (1998) developed the Value Shop model (see Figure 1) as an extension of Porter's (1985) Value Chain. Firms that can be modeled as Value Shop are differentiated by a number of key characteristics:

Reputation and Relationship. Fjeldstad and Andersen (2003) identified reputation as the major if not the most important attribute for a firm that can be modeled as Value Shop. Reputation is perceived as rare, inimitable and sticky, which indicates the ability to create value leading to competitive advantages (Podolny 1993; Sheehan 2002). It has to be acknowledged that reputation is closely related to trust and both aspects are interlinked (Kreps 1996; Fombrun 1996; Barney & Hansen 1994, Sheehan 2002). From a resource based perspective, reputation is valuable in the sense that the client is reducing searching costs as well as pre- and post purchase costs due to decreasing risks, which enhances a cooperation between the client and the service provider (Podolny 1993). Furthermore, reputation is increasing the value of a firm, due to the ability to attract better people, which is especially important for professional service firms and their dependency on knowledgeable expertise (Maister 1993; Fombrun 1996; Sheehan 2002; Løwendahl 2005).

Multiple disciplines and specialties in spiraling activity cycles. Firms that can be modeled as Value Shops are modifying its problem-solving cycle constantly, whereby each cycle implements solutions which were chosen by previous cycles. Hence, a

constant circulation in terms of various disciplines and specialties is required. Thereby the analysis of value creation in a Value Shop becomes complex, based on the aspect that when conducting a cost analysis it is hard to outline the origin of the cost. Activities which were cost efficiently executed in one step might generate increasing costs in forthcoming steps due to the cyclical form of the model and the heavy dependency on previous activities. Consequently, the value creation achievements in a Value Shop are theoretically estimated by the success ratio of the problem solving and the convenience for the client neglecting the aspect of cost savings. (Stabell & Fjeldstad 1998)

Co-performance of support and primary activities. Based on the fact that the Value Shop consists of primary and supportive activities, which are interlinked, professional service firms utilize both aspects in co-performance when executing services. (Stabell & Fjeldstad 1998)

Problem-independent information acquisition activities. It is important to frame the problem in a right manner, leading to the need of a standardized information acquisition procedure, which is based on the perception of the professional participating in the problem solving process. (Stabell & Fjeldstad 1998)

Cyclical, iterative and interruptable activities. The flow of activities in the Value Shop is iterative and interruptable at all stages. Furthermore, due to the cyclical form of the model, flows across the primary activities lead to constant interactions between hypotheses and new data collection where the result in the end can lead to a solution as well as to initiatives of new and perhaps different activity sequences. (Stabell & Fjeldstad 1998)

Significant sequential and reciprocal interdependence between activities. The non linear nature of the problem-solving in shops is highly dependent on sequential and reciprocal interdependencies between activities, meaning that the right definition of problems, which have to be solved, is vital for all other activities. (Stabell & Fjeldstad 1998)

Configured to deal with unique cases. Even though client problems frequently require more or less standardized solutions, the value creation process is designed to manage unique cases which need non-standardized processes. In order to secure the quality of the services the expert has to be involved in the entire process in order to avoid problems through incorrect problem formulation or execution. (Stabell & Fjeldstad 1998)

Value information asymmetry. The information asymmetry between the company and its client is one of the most important attributes of professional service firms and build the foundation for the offered services (Stabell & Fjeldstad 1998; Empson 2001). This perspective goes in line with established theory about competitive advantages, which elaborate on organizational knowledge and its importance when competing on the market (Teece 1981).

Leverage expertise. Within the Value Shop, the expertise holding the domain knowledge is the core of the service operations. By competently leveraging the expertise internally into the problem solving process, the service provider assures the quality of the services (Stabell & Fjeldstad 1998).

Representation of value creation

The Value Shop model (see Figure 1) is built upon primary and supportive activities whereof the supporting activities are originating from Porter's (1985) well known Value Chain.

Figure 1: Value Shop Diagram
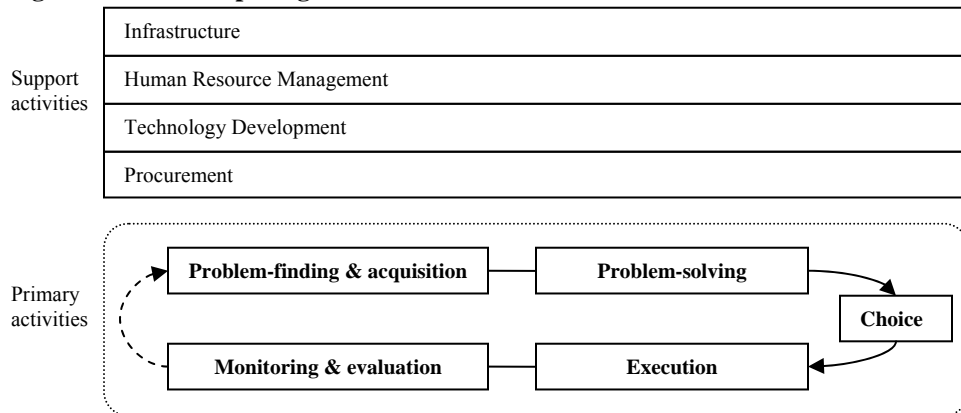
Source: Stabell and Fjeldstad (1998)

It is argued by Stabell and Fjeldstad (1998) that many support activities like human resource management, are already co-performed by primary activities and might therefore not necessarily be included into the diagram. However, the importance of supportive activities should not be neglected, as they are essential for the competitive advantages of professional service firms. Hence, it is evident that with increasing success, originating from the firms competitive advantage, the professional service firm can recruit, retain and develop higher-quality personnel. (Stabell & Fjeldstad 1998) In addition, technology developments are also perceived as an important supportive activity due to intensive technology used in the value creation process of professional service firms (Thompson 1967; Stabell & Fjeldstad 1998). The primary activities are dependent on the industry and firm strategy of the professional service firm whereby the primary activities are sequenced based on the uniqueness of the firm. (Stabell & Fjeldstad 1998)

Problem-finding & acquisition. In this step, activities regarding the problem identification are conducted. Furthermore, the problem which has to be solved is formulated and the overall solving attempt is chosen.

Problem-solving. In order to solve the problem, alternative solutions of the problem solving processes are developed and evaluated.

Choice. The choice is among the developed and evaluated problem solving processes.

Execution. The execution stage is associated with activities of communication, organization, implementation of chosen solutions.

Monitoring & evaluation. In this stage the measurement and evaluation to what extent execution solved the problem is conducted. This step can also lead to a continuation of the cycle processes within the Value Shop.

In conclusion, the value creation logic in the Value Shop model is originating from successful problem solving attempts, performed by the professional service firm. Thereby, the service provider has to utilize its expertise in all primary activities, where it co-performs as well as coordinates its resources derived from supportive activities.

Drivers for Value Creation

It has been argued that value drivers in the Value Shop are more important than cost drivers, which is due to the focus on problem solving and uncertainty reduction of the services provided. Hence, low cost strategies pursued by the service provider are thereby not seen as a good attribute as it is expected that such knowledge intensive and strategic important services, provided by experts, should be costly. (Stabell & Fjeldstad 1998)

In addition, due to limited scale advantages in the Value Shop, location advantages are of importance as they are beneficial for the access to clients, knowledgeable expertise and community networks. However, a large number of small Value Shops in a variety of locations also imply the cost of coordination of a large amount of experts and requires communication as well as the transfer of knowledge between locations. (Stabell & Fieldstad 1998; Porter 1990) Furthermore, Stabell and Fjeldstad (1998) identified three important drivers for the service provider concerning their own value creation in Value Shops: success, linkages and learning.

3.3 Knowledge – A Competitive Resource

Academic discussion concerning knowledge has in general outlined two major typologies of knowledge, namely explicit and tacit knowledge (Nonaka 1991; Nonaka et al. 2000; Løwendhal et al. 2001; Grant 1996; Szulanksi 1996). Nonaka (1991) has defined explicit knowledge to be easy to articulate and can thereby be expressed in words and numbers, leading to an uncomplicated transfer of the knowledge dimension. In addition, Polanyi (1967, pp. 4) explained the concept of tacit by stating "we know more than we can tell", meaning that there is always a tacit dimension to individual knowledge. Thus, tacit knowledge can be explained as highly personalized and therefore hard to formalize as well as articulate. (Nonaka 1991; Nonaka et al. 2000) Donaldson (2001) emphasized in line with this discussion the difficulties to codify tacit knowledge as it is learnt through experiences, which impedes the possibility for another person to acquire the knowledge.

Furthermore, based on the embeddedness in contexts and actions tacit knowledge is hindered to be transfered between persons. (Nonaka 1991; Nonaka et al. 2000)
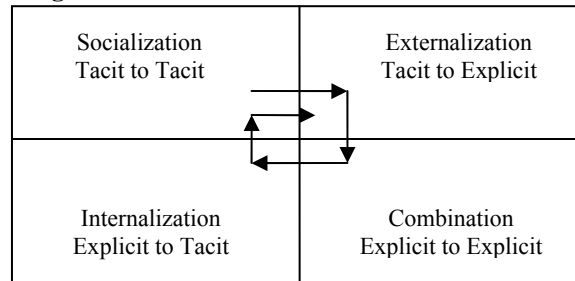
In regards to knowledge in an organization, it has been discussed that three layers based on individual, group and organizational knowledge exist (Abou-Zeid 2002). All layers consist of both tacit and explicit dimensions, as discussed by Cook and Brown (1999) as well as Abou-Zeid (2002). Thereby, organizational based knowledge is composed of tacit dimensions in terms of unwritten rules and values which facilitates the interpretation of knowledge. In comparison to this dimension, explicit knowledge consists of written rules, policies and articulated best practices. (Abou-Zeid 2002)

When looking upon knowledge from a resource-based perspective, knowledge can be claimed to be the primary source of sustainable competitive advantages. (Grant 1996; Empson 2001; Beaverstock 2004) Hence, knowledge has the potential to be unique, scarce, path dependent, hard to imitate and to substitute by competitors. (Matzler et al. 2008) Furthermore, Løwendahl et al. (2001) capitalized on the aspect of knowledge application as the authors' discussed that the utilization of knowledge is more important than the absolute knowledge stock within an organization. Thereby, Soo et al. (2002) has contributed to this discussion by claiming that, knowledge based competitive advantages are built upon organizations' ability to create, integrate, exploit and transfer knowledge assets.

The transfer of knowledge can be defined as the communication of knowledge from a source in order for the recipient to learn and apply it (Ko et al. 2005). Hence, according to Lin et al. (2005) a transfer of knowledge from a sender to a receiver can be referred to as a knowledge market, where the good [knowledge] is bought and sold between actors. Furthermore, the view of a knowledge market is highly applicable to the outsourcing industry as the senders are knowledge sellers and the receivers are knowledge buyers (Gottschalk 2006). Hence, the receiver expects to derive added value form the knowledge acquired and the actual value of the transferred knowledge will be comprehended once the client has adopted the transferred knowledge into its own business processes (Lin et al. 2005).

3.3.1 Knowledge Creation Model
In order to explain the creation of knowledge within an organization, Nonaka et al. (2000) developed the well known SECI model (see Figure 2). The model consists of four stages, which are termed to be conversations of socialization, externalization, internalization and combination. Løwendahl et al. (2001) has elaborated on Nonaka's model and argues that the aspect of knowledge transfers can also be analyzed by the usage of the SECI model.

Figure 2: SECI Model

Socialization Tacit to Tacit	Externalization Tacit to Explicit
Internalization Explicit to Tacit	Combination Explicit to Explicit

Source: Nonaka et al. (2000)

Socialization

Through means of socialization individuals within an organization are able to transfer tacit knowledge, both internally and externally (Nonaka 1991; Nonaka et al. 2000). Thereby, Hansen (1999) has elaborated on a learning process in order to facilitate the transfer of tacit knowledge, which enhances linkages as well as relationships between senders and receivers. In addition to this notion, the transfer of tacit knowledge is dependent on co-performance and co-location between the two parties (Roberts 2000).

In regards to the cultural dimension when transferring tacit knowledge, Roberts (2000) has clearly stated that a diverse background in terms of cultural and linguistic aspects can impede the transfer of tacit knowledge, especially in the initiation of the relationship between two parties.

When looking upon the drawbacks of socialization and the transfer of tacit knowledge, difficulties to leverage tacit knowledge into the organization are evident, due to the fact that the knowledge has not become explicit yet (Soo et al. 2001). Furthermore, Teece (1981) argued that the main drawbacks with tacit knowledge transfers are the aspects of time and cost. Although, there are challenges with transferring tacit knowledge within an organization, the socialization phase between business actors and colleagues is by far the most important channel of knowledge transfer for professional service firms (Beaverstock 2001; Roberts 2006).

Externalization

Furthermore, in order to translate and transform tacit knowledge into explicit knowledge, the actor needs to go through the externalization phase, whereby the main objective for this phase is to articulate the tacit knowledge. Hence, once the articulation takes place, the tacit knowledge will be converted in an explicit form, which is more easily accessible and understandable to others. (Nonaka 1991; Nonaka et al. 2000) The knowledge transfer from tacit to explicit can according to Hansen et al. (1999) be described as a codification process, which enables the transfer and storage of knowledge. However, this process and its challenges are dependent on the tacit dimensions of the knowledge (Balconi et al. 2007).

Tacit Dimensions. A variety of knowledge categories exist, implying diverse degrees and forms of tacitness, which are able or not fully able to be articulated. Thus, it is argued by Balconi et al. (2007) that there are tacit knowledge dimensions, which are inherently uncodifiable and hence, not able to transfer which goes in line with Bowman and Swatz (2008). The implication of this aspect is a concept, referred to as knowledge destruction, which implied that some dimensions of the tacit knowledge is being lost in the codification process (Bowman & Swatz 2008).

In regards to individual knowledge, Cowan et al. (2000) elaborated on the fact that there are two types of tacit knowledge, which need to be separately acknowledged in the codification process. Hence, declaration proposition based knowledge (know-why and know-what) has to be separated from procedural knowledge (know-how) (Cowan et al. 2000). While know-what refers to knowledge about facts and is relatively easy to codify, know-why refers to principles established in the human mind, society and nature and are already thought of as being codified, which reduces the need for a codification process. Know-how refers to skills as well as abilities and is the base for the individual's expertise. This type of knowledge has also been referred to as embodied knowledge, due to difficulties when articulating it. (Abou-Zeid 2002; Johnson et al. 2002)

Furthermore, know-how knowledge is the base for organizational knowledge (Johnson et al. 2002) and hence an important source for especially knowledge intensive service firms (Morris 2001). Moreover, organizational knowledge also includes know-why and know-what dimensions, whereby 'shared information databases' (know-what) can extend the organizations tacit pool by spreading knowledge about facts and figures while know-why knowledge refers to 'shared models of interpretation' (Johnson et al. 2002). In line with Johnson et al. (2002) aspects of encultured knowledge can also commonly be found within an organization, as this type of knowledge refers to a common understanding and shared values, discussed by Abou-Zeid (2002). In addition, embedded tacit knowledge in an organizational context refers to invisible relationships between various organizational functions, which complicate the transfer of tacit knowledge. (Abou-Zeid 2002)

Incompleteness and Intersubjectivity. The codification process can imply challenges and difficulties, whereof Balconi et al. (2007) particularly outlined aspects concerning the completeness and the intersubjectivity of the codification process. It is argued by the authors that the codification of tacit knowledge is very much dependent on the individual's ability to articulate it, which can lead to incompleteness. Furthermore, the understanding of the codified knowledge is dependent on culture as well as linguistic specification and might only be shared by a limited number of people. It is outlined that the greater the cultural distance, including linguistic diversity, between the sender and receiver, the less intersubjectivity is involved in the codification process. (Balconi et al. 2007) In regards to organization language, Soo et al. (2001) and Grant (1996) have both stressed the importance of a common executive language as it facilitates the codification.

In order to reduce the mentioned difficulties concerning the codification process Hansen et al. (1999), elaborated on the aspect of relationships, as the sender is expected to spend more time on the codification process.

In addition, Johnson et al. (2002) elaborated on the aspect that codified knowledge can occur in verbal, formal and non-verbal dimensions. A non-verbal language consists of images or gestures and implies a high density of information. However, due to the restrictions implied with a non-verbal language, it is argued that this language can only function as complementary to verbal and formal languages. (Johnson et al. 2002) If the tacit knowledge is codified and able to be formalized, it can be either unstandardized or standardized inscripted and transferred, through the means of documents or databases (Hansen 1999; Balconi et al. 2007). In line with this aspect, Balconi et al. (2007) outlined that the codified knowledge can be inscripted in artifacts like machines and computers leading to the development of new and specific software, which might be able to automatically perform what was traditionally carried out by individuals.

Combination
Nonaka et al.'s (2000) combination stage involves the combination and transfer of solely explicit knowledge, which can contribute to an organization's knowledge creation. (Nonaka 1991; Nonaka et al. 2000) This stage most commonly involves a technological based system that allows individuals within the organization to transfer knowledge across units and borders. (Soo et al 2001; Roberts 2006) Thereby the knowledge transfer is not dependent on distance or proximity between the sender and the receiver (Park 2006). Furthermore, Cavusgil et al. (2003) have stressed the easiness of transferring explicit knowledge.

Internalization
According to Nonaka (1991), the internalization stage allows explicit knowledge to be internalized by individuals and thereby become tacit. The transformation from explicit to tacit occurs when individuals process explicit knowledge in order to extend, reframe and comprehend it. This transformation is dependent on the individuals own tacit knowledge, which originates from experiences as well as heritage. The final outcome is new tacit knowledge, which could lead to knowledge creation for the organization as a whole. (Nonaka 1991; Nonaka et al. 2002; Nonaka & Toyama 2007) A good relationship between the two actors as well as frequent communication is facilitating if problems occur within the internalization process, due to the possibility to receive further information. (Hansen 1999)

In conclusion, it has to be acknowledged that all four stages need to be managed in a dynamic manner in order to facilitate the knowledge transfer (Soo et al. 2001).

3.3.2   Knowledge Transfer and its Challenges

The inherent complexity and challenges involved when transferring knowledge have been outlined to be 'sticky' (Szulanski 1996). Thereby, it has to be stresses that there is a necessity to distinguish between the transferability of tacit and explicit knowledge, which is also influencing the choice of a suitable transfer mechanisms, enabling the transfer across individuals, space and time (Grant 1996). The knowledge transfer is also influenced by the dependency level the knowledge implies on systems and functions; hence, when there is a high dependency involved the difficulties with executing the transfer increases (Hansen 1999).

Furthermore, Szulanski (1996) has outlined various factors which might impede the knowledge transfer, based on the characteristics of the knowledge, the source, the recipient and the context where the transfer occurs. In regards to the characteristics of the transferred knowledge, causal ambiguity and its irreducible uncertainty demonstrates one of the major obstacles as a large amount of ambiguity can be found in tacit knowledge (Szulanski 1996). This obstacle can be overcome by creating a trustworthy relationship which reduces the level of ambiguity involved in the transfer (Tsai & Ghoshal 1998; Roberts 2000). Furthermore, apart from tacit knowledge, Reed and Defillippi (1990) outlined two further dimensions, which individually or combined can generate casual ambiguity, complexity and specificity. Complexity is the outcome of a large number of interdependent skills and assets the recipient incorporated along the way and specificity refers to transaction specific skills as well as assets, which are necessary to utilize the transferred knowledge (ibid.).

Moreover, it is outlined by Szulanksi (1996) that a knowledge transfer is dependent on the transfer path as a proven record and its usefulness is beneficial. Hence, if the knowledge is unproven, it is more difficult to persuade the potential recipient to engage into the transfer (ibid.). Thereby, trust can be considered as important aspect as the recipient will be more open and receptive to the source if it is trustworthy (Szulanski et al. 2004). In line with this aspect, Szulanski (1996) discussed the dimension of arduous relationships, which impede a successful knowledge transfer as the relationship between sender and receiver is hindering the ease of communication.

In regards to the characteristics of the knowledge source, a lack of motivation to transfer knowledge can be identified as knowledge is perceived as a competitive advantage (Szulanski 1996 Morris 2001). In order to reduce the lack of motivation not to share the knowledge, incentives are an important aspect involved in this process (Argote 1999; Morris 2001). Furthermore, Morris (2001) emphasized that a well established corporate culture is also reducing the lack of motivation to share knowledge, which is particularly of importance in professional service firms.

Another factor, which has a distinctive negative impact on the transfer of knowledge, is the lack of absorptive capacity, whereby the receiver lacks the ability to value and apply the new knowledge successfully (Grant 1996; Szulanski 1996). According to Van den Bosch et al. (2003) absorptive capacity can be enhanced through socialization, based on the aspect that a shared ideology and collective interpretation enables the process of absorbing the knowledge. Hence, according to Jones and Craven (2001) the path dependency of the transferred knowledge, particularly across company borders leads to the possibility for dynamic processes between feedback and incorporation, which also enhances absorptive capacity. Furthermore, it is elaborated by the authors that coordination capabilities are enhancing absorptive capacity of firms, which also goes in line with Van den Bosch et al. (1999). Once the knowledge could be absorbed, a challenge might occur concerning the lack of abilities to institutionalize and utilize the transferred knowledge within an organization (Szulanski 1996).
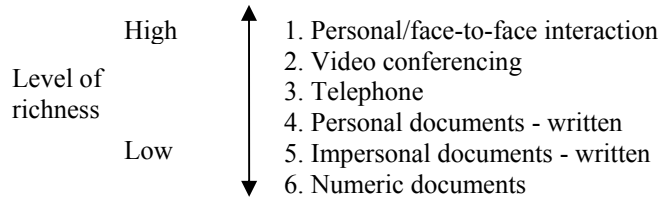
3.3.3 Knowledge Transfer Mechanisms

When looking at the mechanisms available to facilitate the transfer of knowledge, a higher or lower level of richness becomes evident (see Figure 3). The concept of richness concerns the mechanisms' ability to reduce ambiguity, give immediate feedback and transfer non-verbal cues (Daft & Lengel 1986). Hence, mechanisms with a high level of richness capitalize on personal communication, which facilitates the process to overcome ambiguous issues by providing the possibility of immediate feedback as well as cues that can be transferred via body language and the tone of voice. (Daft & Lengel 1986) Thereby, according to Murray and Peyrefitte (2007), mechanisms with a high level of richness are the most suitable means when transferring tacit knowledge. In line with this discussion, video conferencing is referred to as a mechanism implying a high level of richness, as it allows for personal interactions, which facilitates the transfer of complex knowledge (Murray & Peyrefitte 2007). In addition, telephone conferencing involves less richness than personal interactions or video conferencing as the sender and receiver cannot transfer cues based on body language and facial expressions (Purdy et al. 2000).

In contradiction, mechanisms involving a low level of richness cannot efficiently provide the dimensions of ambiguity reduction, instant feedback and non-verbal cues, as the knowledge transferred occurs in explicit form. Hence, these mechanisms most commonly rely upon written forms of communication and are based on rules and routines. (Daft & Lengel 1986; Murray & Peyrefitte 2007) Furthermore, it needs to be acknowledged that low richness mechanisms are efficient when processing well understood and articulated standardized messages (Daft & Lengel 1986).

In line with this discussion, Lovelock (1999) outlined that due to the overall technology development the transfer of information-based services has been facilitated by the usage of databases. Hence, the need for geographical proximity and personal interactions is

reduced and in extreme cases the local presence requirements can be limited to only telephone or written interactions between sender and receiver. (Lovelock 1999)

Figure 3: Knowledge Transfer Mechanisms

	High	1. Personal/face-to-face interaction
Level of richness		2. Video conferencing
		3. Telephone
		4. Personal documents - written
	Low	5. Impersonal documents - written
		6. Numeric documents

Source: Daft and Lengel (1986); Murray and Peyrefitte (2007)

In general, Murray & Peyrefitte (2007) outlined the problems that can occur when using inappropriate mechanisms to transfer knowledge. It could be summarized that the higher amount of tacitness included in a knowledge transfer, the richer the mechanism should be (Chai et al. 2003). Thereby, Argote (1999) outlined that the knowledge transfer can benefit from using a combination of mechanisms involving both tacit and explicit aspects, rather than being dependent on one single dimension. However, there are further characteristics which have to be considered when choosing the right transfer mechanism, as the capacity and the richness of communication as well as the formalities influencing the knowledge type are of importance. (Chai et al. 2003)

Furthermore, it is elaborated by Kogut and Zander (2003) that the cost aspect plays another role when choosing the right knowledge transfer mechanism, particularly when considering that the transfer of tacit knowledge generates increasing costs and slower speed compared to other mechanisms. In line with these factors, it is outlined that the cost as well as efficiency of the used knowledge transfer mechanism is dependent on the users prior experience (ibid.). Thereby, it needs to be acknowledged that the proximity between the users can have an impact on the selection on suitable mechanisms for the transfer (Argote 1999; Jasimuddin 2007).

4 Conceptual Model

The purpose of this chapter is to combine the theories provided in the previous chapter in order to construct a conceptual model which will be challenged by a confrontation with empirical findings.

4.1 Background

The previous chapter discussed various theoretical streams, concerning the KPO industry, professional service firms as well as the transfer of knowledge. Thereby, similarities between the KPO industry and professional service firms became evident, due to the highly knowledge intensive service operations, executed by knowledgeable expertise, as outlined by Løwendahl (2005) as well as Sen and Shiel (2006). Based on the previous discussion, we argue that KPO service provider can be termed as professional service firms, which is supported by the aspect that both, the KPO service provider and professional service firms, offer value creation by solving unique cases with frequent personal interactions as discussed by various researchers (cf. Maister 1993; Løwendahl 2005; Currie et al. 2008). Furthermore, the services provided by the KPO industry imply a non-standardized execution process and it can be argued that expertise's judgment as well as professional assessment is necessary, which is also evident in execution processes of professional service firms (Løwendahl et al. 2001; Sen & Shiel 2006). As a final point, the general aim of the professional service firm is to provide solutions to problems and reduce uncertainties for its clients, which goes in line with the aim of the KPO service provider (Wittreich 1966; Løwendahl 2005; Sen & Shiel 2006).

Based on this discussion, it can be expected that KPO service providers can be modeled as Value Shops, which leads to the notion that the value creation logic of KPO service providers is applicable to the outlined model. However, the Value Shop is very simplified in its layout and thereby we have identified that Stabell and Fjeldstad (1998) neglected the dimension of knowledge transfers conducted within the primary activities. It has to be acknowledged that particularly the KPO industry, is dependent on intensive knowledge transfer, involving tacit and explicit dimensions, due to the characteristics of the provided services (Sen and Shiel 2006).

Therefore, we developed a conceptual model (see Figure 4) based on the Value Shop framework and knowledge transfer related theories, in order to outline how value can be created by the KPO industry when transferring knowledge across country and company borders. Moreover, by adding the aspect of knowledge transfers into the Value Shop framework, we hope to highlight the aspect that the utilization of knowledge through the right transfer mechanism is more important than the absolute knowledge stock within an organization as discussed by Løwendahl et al. (2001).

Figure 4: Conceptual Model
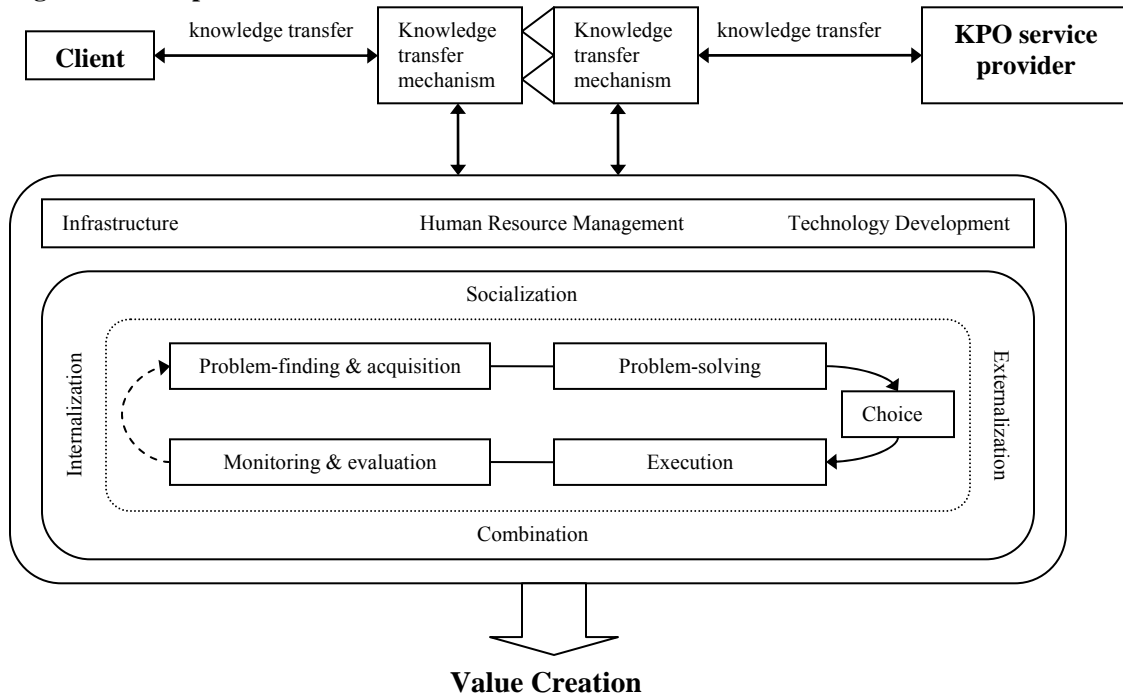
Source: authors' own based on Stabell and Fjeldstad (1998)

Overall, the foundation of the conceptual model is built upon the reasoning behind a knowledge market discussed by Lin et al. (2005), whereby the KPO industry is dependent on selling its knowledge to clients, a notion which requires knowledge transfer activities. Based on the aspect that the sender and receiver are not located in proximity to each other, it is believed that the transfer of intrinsically tacit knowledge is challenging for the KPO industry.

4.2 Client

Once the client is outsourcing a complex and strategically important business operation, the value creation process is initiated. The driving force behind knowledge intensive outsourcing decisions can be based on the client's intention to reduce cost and focus on its core competences as discussed by Kakabadse and Kakabadse (2000). Thereby, the KPO service provider becomes a support system of the client and offers reduced costs as well as increase speed, quality and reliability of the services provided. (Norman & Ramirez 1994).

4.3 KPO service provider

The KPO service provider can be perceived as a Value Shop and its value creation logic is dependent on methods applied to solve the outsourced problem or reduce uncertainty for its client (Stabell & Fjeldstad 1998). Hence, the nine key characteristics outlined

within Stabell and Fjeldstad's (1998) Value Shop model should be applicable to the KPO industry. Five characteristics are elaborated particularly in this conceptual model.

First, the information-asymmetry between the client and the service provider is of importance for firms that can be termed as Value Shops, as its domain expertise is the base for value creation (Løwendahl 2005; Sheehan 2002; Sen & Sheil 2006). Second, the ability to deal with unique cases is a very important characteristic, especially when considering the KPO industry where standardized service execution, routinization and generalization do not occur (Stabell & Fjeldstad 1998; Løwendahl et al. 2001; Løwendahl 2005; Sen & Shiel 2006). The aspect of customization is therefore important to outline, which indicates the need for a strong client interaction in the execution process (Maister 1993; Løwendahl et al. 2001; Løwendahl 2005).

Furthermore, the aspect concerning the leverage of expertise in the Value Shop is a significant characteristic for the value creation logic, due to the dependency on the utilization of the expert's knowledge pool (Løwendahl 2005; Sen & Shiel 2006). However, it has to acknowledged, that Stabell and Fjeldstad (1998) argued, a low-cost strategy cannot be applied in the Value Shop framework as it is expected that expertise is priced at a premium level. Nevertheless, the KPO industry originating from emerging market economies contradicts this aspect as it capitalizes on low-cost expertise (Raman et al. 2007).

The fourth characteristic goes in line with this discussion as the co-performance of supportive and primary activities, including the aspect of Human Resource Management, are necessary for the KPO provider's value creation logic. Another supportive activity in the Value Shop worth mentioning is the technology development, as the KPO industry is using intensive technology when executing its services (Thompson 1967; Sen & Shiel 2006). Due to the lack of relevance in applying the procurement aspect of the supportive activities in the Value Shop framework, we argue that this aspect can be ignored in our research concerning the KPO industry.

The last characteristic specifically outlined in our conceptual model is the aspect of reputation in the value creation process, which has been highlighted by Stabell and Fjeldstad (1998) as well as Sheehan (2002). Especially the KPO industry faces a major challenge with reputation, as the outsourced services are strategically important, which enhances the need for trust between actors (Kreps 1996; Barney & Hansen 1994; Sen & Shiel 2006). However, it has to be acknowledged that due to the lack of information of the KPO industry, we were not able to find theoretical support for the remaining four characteristics.

4.4 Value Shop

Based on the aspect that the KPO service provider can be termed as a Value Shop it is expected that all primary activities of Stabell and Fjeldstad's (1998) model are applicable for the value creation logic of the KPO industry. Hence, when solving the client's problem, the KPO service provider has to perform all steps, which requires the transfer of knowledge especially when considering that the service provider and the client are not located in proximity as discussed by Sen and Shiel (2006). When conducting these knowledge transfers, it is expected that the KPO service provider needs to cope with the three layers of knowledge, concerning individual, group and organizational dimensions as discussed by Abou-Zeid (2002) as well as Cook and Brown (1999). Furthermore, the KPO service provider also needs to acknowledge the stickiness of information as discussed by Szulanski (1996).

Nonaka et al.'s (2000) SECI model is thereby the frame for external and internal knowledge transfer and socialization is expected to be of major importance as the KPO industry emphasizes the aspect of personal interaction while solving the client's unique problems (Stabell & Fjeldstad 1998; Løwendahl 2005; Sen & Shiel 2006; Currie et al. 2008). In addition, externalization and internalization are of interest, as it requires the KPO service provider to efficiently codify and decodify intrinsically tacit knowledge without destroying its value as discussed by Bowman and Swatz (2008). Thereby particularly the knowledge types of know-why, know-what and know-how discussed by Cowan et al. (2000) and Johnson et al. (2002) are of importance. In line with this discussion Morris et al. (2001) outlined the dimension of know-how knowledge, as a key source for the KPO industry, is complicated to codify as it appears to be embodied within the organization (Abou-Zeid 2002; Johnson et al. 2002). Furthermore, it is expected that the KPO industry has to cope with challenges concerning the aspects of completeness and intersubjectivity as well as a common language while codifying tacit knowledge as discussed by Balconi et al. (2007), Johnson et al. (2002) and Grant (1996).

4.5 Knowledge Transfer Mechanisms

As the KPO industry involves the transfer of knowledge, a suitable level of richness attached to the transfer mechanism is required as discussed by Murray and Peyrefitte (2007) as well as Daft and Lengel (1986). It is outlined, that the combination of mechanism is beneficial, especially when considering the cost and efficiency issues involved when utilizing the mechanism (Argote 1999; Kogut & Zander 2003; Chai et al. 2003).

Based on the aspect that the Value Shop is dependent on personal interactions (Stabell & Fjeldstad 1998) the KPO industry is expected to have a strong reliance on transfer mechanisms with a high level of richness. Nevertheless, it is expected that challenges occur when utilizing these mechanisms as the KPO service provider from emerging

market economies and the client are not located in proximity (Sen & Shiel 2006). Lovelock (1999) contradicted this notion, as it is claimed that due to the usage of databases, the knowledge transfer can in extreme cases be limited to solely telephone calls and written interactions, reducing the need for proximity between the KPO service provider and its client.

4.6 Value Creation

The value creation logic of the KPO industry is based on the service provider's efficiency in the uncertainty reduction and problem solving process as discussed by Stabell and Fjeldstad (1998). Once the problems are solved, the client expects to derive added value from acquiring the solutions (Lin et al. 2005). Hence, the client gains value through cost reductions and the right access to talent in order to reduce information asymmetries as well as to enhance efficiency (Kakabadse & Kakabadse 2000; Fjeldstad & Andersen 2003; Kobayashi-Hillary 2005).

Although it is assumed that the client is the main driver for a Value Shop, the service provider also has the possibility to gain value out of the process, in form of success, linkages and learning as discussed by Stabell and Fjeldstad (1998).

5 Empirical Evidence

The overall aim of this chapter is to provide the reader with a description of the empirical findings, collected mainly through primary data. These findings will outline how knowledge can be transferred across borders and thereby create value in the KPO sphere.

In order to get a clear understanding of the KPO industry, we discuss the empirical evidence in line with our conceptual model. Hence, we structured our findings according to the steps in the Value Shop model and elaborate thereby specifically on internal and external knowledge transfers.

5.1 Support activities

Infrastructure. In the case of Evalueserve's infrastructure, a network of research centers across the globe is evident. Next to the Indian base, research centers in China, Chile and Rumania support the company's activities (Evalueserve 2009). One of the reasons for this global set up is the time zone aspect, which allows the service provider to capitalize on the benefits of providing services 24 hours per day seven days a week. Further reasons for this set up are the possibility to locate research centers close to the delivery location and in proximity to markets, especially in terms of language proficiencies as well as to compile with legal restrictions. Thereby, factors influencing the location decision are access to talent and cost efficient labor. Moreover, onsite representatives across the world are working actively with Evalueserve's sales and are located in proximity to the client. (COO, Evalueserve, Evalueserve 2009) TCS's infrastructure is similar in terms of global research locations as the company has 80 – 90 research centers across the globe whereof some are IT specialized and others BPO/KPO research centers. (TCS 2009a)

Human Resource Management. Both companies require an academic background when working within the field of KPO and it is outlined that in order to provide high-end services domain experts are essential. Thereby, the companies emphasize the importance of knowledge sharing which is expected to be reached through incentives and a beneficial corporate culture. Furthermore, it is stressed that the companies are not paying premium wages in any of their research locations and thereby employees located in India are earning lower wages than peers with similar tasks in mature market economies (Evalueserve 2005; Raman et al. 2007) It has to be acknowledged that also internal wage distribution in TCS and Evalueserve varies across globally located research centers, which obviously has an impact on charge rates for the services. In Evalueserve *for a standard piece of work in China and Chile you would have to put 1.3 and 1.5 times the rate of an India charge rate"* (VP Business Research, Evalueserve).

Technology Development. In general, both companies are heavily dependent on IT systems, as Evalueserve recalls: *"without IT you would not be able to run a KPO, BPO*

or any company" (CIO/CISO, Evalueserve). Especially, the reliance on email based communication is evident in the case of Evalueserve, which has a system based on a CC (carbon copy) practice to *"keep people in the loop"* (CIO/CISO, Evalueserve). Furthermore, telephone discussions to communicate within teams or with clients are a common used tool of both companies in comparison to video conferencing where Evalueserve and TCS have a differentiated approach. While TCS is using video conferences regularly based on the aspects that a *"video conference allows you for a better interpersonal connection and has a more focused engagement"* (Lead BFSI BPO, TCS), Evalueserve outlines that *"we [Evalueserve] do not have video conferencing between our locations"* (CIO/CISO, Evalueserve). This communication tool is only offered in rare cases to clients, due to the notion that *"in India video conferencing is an expensive set up"* (CIO/CISO, Evalueserve).

In regards to knowledge management systems, Evalueserve's Gyaan Paatra platform is the base of internal knowledge sharing in which non-confidential project summaries are accessible. Another operation mode is based on the technology system of the client as in Outsourcing Research Centers (ORC) (Evalueserve 2009) the service provider is getting access to the client's server in order to execute and deliver the services. In comparison, TCS applied next to KnowlMax, a similar system to Evalueserve's Gyaan Paatra, an additional system, SIPOC, which enables the company to map and benchmark projects in order to assure quality.

5.2 Primary activities

In order to elaborate on the knowledge transfer in the primary activities of the Value Shop model, the transfers of knowledge has been divided into external and internal activities of the KPO service provider, when it was required. Furthermore, KPO services can be divided into two generic approaches, the research approach and the analysis approach. In the research approach the client requires market/economy reports consisting of public accessible data, which indicates low confidentiality comparably to the analyst approach which requires information and data provided from the client in order to execute the analysis services, implying a high amount of confidentiality.

5.2.1 Problem-finding and acquisition

External activities. In general there are three initiation approaches: the client approaches the service provider, the service provider approaches the client and a referral system is in place. If the service provider approaches the client, the function of onsite representatives to initiate the step is essential as *"their [onsite representatives] function is to open up clients and to build a business to develop"* (COO, Evalueserve). The onsite person builds up a relationship through a personal interaction and is the connection point throughout the project between the two parties. Furthermore, *"the point is that they [onsite representatives] know the local market, they know the people and they speak their*

language" (VP Business Research, Evalueserve) which is facilitating the initiation of the engagement. Another advantage which can be utilized through the onsite representative is that he/she can *"observe the clients processes in order to gain a deeper understanding"* (VP Business Research, Evalueserve) of the client's context. It has to be acknowledged that both initiation attempts, the service providers approaches the client and vice versa, can be either a new interaction or be dependent on previous projects whereby a relationship was built up, which amounts to 70 percent of the outsourced services. This approach occurs *"specifically once the customer has developed a confidence and thereby worked with a couple of cases than they obviously want to outsource all kinds of activities"* (Head of Nordics, TCS). However, before the relationship is built up, it is outlined that *"in general customers are very skeptical, if a particular project will work and we [TCS] are asked to prove ourselves"* (Lead S & M, TCS).

Client perspective. The client strengthens the perception of the service provider regarding the relationship issue in stating *"we came in contact with the service provider through another project whereby that project manager recommended the company"* (Director C & S, Company X), a notion also supported by Novo Nordisk. Moreover, in the initiation of the relationship, Company X emphasizes the dependency on the onsite representative, as main point of contact in the relationship; *"I have really appreciated the Swedish representative due to the fact that he is here and the India team is so far away, however he is very keen in creating new business."* (Director C & S, Company X). In line with this aspect, it is also elaborated that *"face-to-face interaction is extremely important in the initiation of the contact"* (Co-Founder, BombayWorks).

When looking upon the stakeholders in the different organizations, it becomes evident that their opinions varied widely. While, in Company X the stakeholders had a positive view towards the initiation of the outsourcing business, based on the aspect that the engagement was quite small and it only involved outsourcing of some projects to another location, *"in order for us to focus on our core business, and if someone can do it cheaper and better it is good, then we could free resources for other tasks"* (Director C & S, Company X). In Novo Nordisk the stakeholders were more skeptical about the quality, as they had *"previously seen if you outsource things than you just get crappy things back and you have to redo everything"* (Outsourcing Coordinator, Novo Nordisk).

5.2.2 Problem-solving

After the initiation phase, the gained information from the problem-finding and acquisition step is communicated to the offshore KPO research centre, by either the onsite representative or the client directly. The communication is based on telephone and email interactions.

Internal activities. At the KPO research centre, a responsible manager is allocated to the task, which has the required domain related knowledge; *"when you talk to pharma*

clients, you need to speak their language. If you don't know their language you cannot define your processes" (VP Quality, TCS). In order to frame and understand the requests of the project, a consultancy approach is applied. Thereby, TCS elaborates on *"the thumb rule is that the business case definition and planning is very important. So we [TCS] will engage with the clients to analyze the processes and come out with a priority area. We will also give a risk mitigation plan and built two or three scenarios whereof we recommend one"* (Head Pre-Sales & Solutions, TCS). TCS has developed several core and standardized process within their SIPOC system to outline these tasks *"without going through the framing process again"* (VP Quality, TCS) Evalueserve on the other hand emphasises that such a standardization approach cannot be applied to highly knowledge intensive services. It is estimated by Evalueserve that approximately 15 percent of the total project time is spent to comprehend and frame the task in order *"to really understand the entire thing, because while you understand the task you are also solving it"* (VP Business Research, Evalueserve).

In order to manage the project it is necessary to set up a time plan, identify the required technologies and staff the team efficiently. In general, there are two ways to allocate employees to the research, whereby the companies use internal systems to identify the most applicable employees to the project set up. However, it is emphasized by both companies that the client has the possibility to influence the staffing of its project and *"the client can interview the staff and thereby decide whether the person is capable of working with this project"* (CIO/CISO, Evalueserve). Furthermore, dependent on the requirements of the project in terms of language proficiency or area of expertise, the teams are established in one location or across locations.

External activities. Based on the importance to frame the task right, client involvement and feedback in the initial identification phase is very critical. Evalueserve outlines thereby that there is a *"need to think align with the client and this is something in which we [Evalueserve] train our people. Independent thinking putting yourself in client shoes that is the big differentiator in the industry."* (VP Business Research, Evalueserve). In order to gain an understanding of the requirements, the two actors are communicating via telephone discussions and emails, however, the chosen mode for communication is dependent on the relationship; *"if you know the client you know their expectation so you can work on email. But if it is happening for the first time, you need to communicate via telephone with the client"* (CIO/CISO, Evalueserve). Evalueserve emphasises thereby, *"for every set project or every piece of work you have to do an understanding call"* (VP Business Research, Evalueserve), which is summarized by a follow-up email sent to the client and the entire team involved. Consequently, it is outlined by Evalueserve that VP Business Research receives 700 mails per day.

In addition, in certain cases project members are travelling to the onsite location of the client in order to understand the requirements and context specific factors however, *"it depends on the project. If the project is small in nature, both from the client side and our side, it does not make sense to send people there or ask them to come here meaning that we don't see the clients face and they don't see ours"* (CIO/CISO, Evalueserve). The amount of involvement from the client side in this step is thereby dependent on the outsourced task. If the client required a research approach, a medium amount of involvement is evident as only basic information about the company in order to identify the problem is necessary.

However, if an analysis approach is required, the client needs to provide the service provider with data to analyze through the access to the company server; *"we [TCS] are working on the client's server due to the hypersensitive data"* (Lead S & M, TCS). This approach involves a frequent interaction with the client particularly at the beginning of the generally long-term relationship in order to build up trust; *"the client needs to trust you, you need to understand the client's processes before you actually go on. We meet with the client so we can spend time with them"* (AVP Investment Research, Evalueserve). Hence, the service provider has *"a lot of requirements form the client perspective, with security and a lot of training on the client specific IT system, how to access and how to work"* (CIO/CISO, Evalueserve) which is also referred to as the trainer concept. The client provides this training to selected employees of the service provider at the client location or sends trainers to the service provider; *"it is not feasible to bring over the whole team when you can have a trainer concept, as once we been trained they [the client] expect us to train the entire team in order to be able to deliver"* (CIO/CISO, Evalueserve)

Client perspective. In line with the training concept, Novo Nordisk stresses the aspect that *"parts of the training would be to learn the Novo way"* (Lead Programmer, Novo Nordisk) in order to analyze the data in the right manner. Furthermore, the client companies outline the communication and cultural differences in the problem-solving step as Novo Nordisk discusses the difficulties to proactively construct correct specifications, especially as their service provider is following the specifications too literally; *"when making specifications it is sometimes very hard to foresee everything, and sometimes the specifications we make might not make sense. However, the service provider is just blindly doing everything in the specification, even though it does not make sense. The challenge is to make them be more proactive and to speak up"*. (Outsourcing Coordinator, Novo Nordisk) Moreover, this way of acting is stated by Novo Nordisk to occur due to the cultural differences; *"in terms of communication they are not so direct so we do not get the message that they see a problem"* (Outsourcing Coordinator, Novo Nordisk). In line with this aspect, Company X elaborates on additional aspects which can affect the framing phase, as *"in India you really, really,*

really want to have everything confirmed, so they ask and ask and ask if they have understood everything correctly, they also repeat everything that is being discussed a couple of times. This makes the process quite lengthy and it makes the situation to be under time pressure by default" (Director C & S, Company X). Furthermore, Company X emphasizes that *"the distance can be a tricky thing, as there are challenges in doing phone conferences with the Chinese research center, due to bad land lines and the fact that they do not really speak the best of English. Sometimes, you get into intensive discussions but you cannot really hear what they are saying"* (Director C & S, Company X).

5.2.3 Choice

The choice of which process is used to execute the problem is decided either by the service provider or the client. If the service provider is responsible for the choice of execution, the client is solely interested in the outcome of the project and not in what way the task is solved, which is illustrated in a research approach. However, if the client composes the choice in order to keep a certain amount of control, the staffing, the location and the way of execution is influenced, which is especially evident in the analysis approach.

5.2.4 Execution - Research Approach

Internal activities. The first execution step in the research approach is based on secondary data gathered on public web pages and databases. If the gathered data is not satisfactory and insights in certain aspects or trends are required, primary research is conducted, through interviewing external experts. The execution process in TCS is standardized based on playbooks for best practices, e.g. the KnowlMax, which *"have been developed in order to know what to do with this particular type of research; that is why we have a playbook which tells us step by step what to do."* (Manager Retail, TCS). Controversial, Evalueserve emphasizes the fact that no standardized process is applied when solving projects due to the uniqueness of the cases; *"quite often we reinvent the wheel"* (VP Business Research, Evalueserve). In terms of the quality assurance in the execution process, both companies emphasize the importance of well established technological systems, in order to avoid the dependency on single employees.

If the research teams are situated in one location, it is argued by TCS that a better *"unity and uniformity"* (Manager Retail, TCS) of the result could be reached as a personal relationship is improving the understanding of the transferred knowledge between team members. Hence, TCS outlines that even though email and telephone calls are a major communication mean, personal interaction is beneficial if further clarification is needed. However, if teams are set up across locations, a strong reliance on knowledge transfer is stressed as it is emphasized that knowledge concerning the project is transferred on a daily base to secure that all team members are updated constantly. This transfer is

conducted either by email or the technical systems in place and is supported by a follow-up call if required.

Furthermore, the transfer includes a project progress as well as unfinished tasks and is conducted in the overlapping working time between the groups in their various locations. Emails, followed by a telephone call and follow-up summaries, distributed to the entire team are the most common used communication means; *"telephone is a very powerful communicator"* (VP Business Research, Evalueserve) It is worth mentioning that even in the case of cross border knowledge transfers in Evalueserve, it is a high possibility that both manager, sender and receiver, are of Indian origin. However, it is also elaborated in the case of cross origin communication that *"because of culture you see a communication level difference between India and Chile"* (AVP Investment Research, Evalueserve) which is seen as a challenge; *"it is a big challenge when communicating with different people; you need to ensure that it is done with the right message, so that people understand where we are reaching."* (CIO/CISO, Evalueserve). In order to reduce the cultural differences, Evalueserve emphasizes the corporate culture and the regular updates across each location and team (CIO/CISO, Evalueserve).

External activities. In the execution phase, the team members are eligible to contact the client and thereby address questions directly. This set up is also evident when cross location teams communicate with clients, however, *"there are differences, India as fare as the communication goes is not very proactive, even if they are not agreeing with the client they are somehow hesitantly to say it"* (AVP Investment Research, Evalueserve). In addition, the client has the possibility to contact the team in order to control the execution process and gets updated regularly; *"the key here is that every week the client gets a status update and an interim delivery. It might be only 20 percent completed with the title and the skeleton but the client can give constant feedback so they try to have a weekly call with the client"* (VP Business Research, Evalueserve).

It is outlined, by both companies that the final delivery is presented in form of either a written report or a PowerPoint presentation. These deliveries are transferred through the means of email followed by telephone calls or by visits from the service provider. Furthermore, in terms of delivery quality it is emphasized that *"there are a lot of follow up questions about things we need to change in the work we have done. We will have a call or we send a mail to send the work back, but it is a two way communication. It depends on the experience of the person if somebody joined recently these mails could be more frequent but once you understood the clients requirements these are reduced"* (AVP Investment Research, Evalueserve). It is also emphasized that the delivery is dependent on the project needs of the client. However, *"when you do a report, maybe less than 60 percent is put into the report and the rest 40 percent is in the head of the analyst."* (Managing Director Nordics, Evalueserve).

Client perspective. Concerning the communication, the clients support the importance of a direct contact to the service executor as without this possibility *"a lot of information could get slathered when it starts with the client and finally reaches the developers"* (Co-Founder, BombayWorks). In line with this aspect, the Director C & S of Company X outlines that the communication concerning the company project is critical as it is conducted through a switchboard in India; *"trying to set up meetings by using a link between us things got much more complicated"* (Director C & S, Company X).

Another issue, which was outlined by the client, concerns the irregular allocation of meetings with the sales representative in Sweden, as *"the feeling that I had lately is that when there are lot of project running it is quiet from the service providers side but when we do not have any business they are banging our door more or less. I would like to see a balance there and when we are running projects they should actually knock on the door to see how it is going, that signals a lot and is a little bit funny because this is actually when the interaction should be more intensive"* (Director C & S, Company X)

5.2.5 *Execution - Analysis Approach*
In the analysis approach the service provider analyze data provided by the client company. This service is either executed on the client server, where the data is accessed, or is provided by the client through other means, resulting in deliveries emailed or presented to the client in form of reports and PowerPoint presentation.

Internal activities. If the services are executed on the client's server, both companies outline that *"we [TCS] work on their server so we have complete access to their database"* (Lead S & M, TCS) in order to collect the required data. Furthermore, *"with these kind of cases we [Evalueserve] also have a lot of requirements from the clients perspective, with security and a lot of training on client specific IT systems, how to access and how to work and that kind of things"* (CIO/CISO Evalueserve). The internal knowledge transfer in the analysis approach is dependent on the project and consists of communication in form of email and telephone contact.

External activities. In the beginning of a relationship, the interactions with the client are more on a frequent base in the execution phase; compared to once a commitment has been in place over a period of time. Furthermore, due to the higher confidentiality issue based on the access to the client server, frequent visits by the client are conducted to control if the required security is in place. In the analysis approach the delivery can occur continuously as the service provider works on the client's server; *"the client might not even know that it [the service] has been done in India, because we [TSC] are entering their system and they just see the solutions in their own system"* (VP Quality, TCS) In such a delivery approach, no further contact between the service provider and the client is required.

Client perspective. The advantage of setting up long term engagements is emphasized by Novo Nordisk in stating that *"we have a constant flow of tasks and thereby we have a more solid and personal relationship. We have managed to build up knowledge so that we do not have to start training processes and we can continue the relationship instead of starting all over each time"* (Outsourcing Coordinator, Novo Nordisk). Furthermore, the company outlines the transparency when operating within this mode as *"on the server we work simultaneously and it is fully transparent"* (Lead Programmer, Novo Nordisk). Hence, it is stressed that the company can see the KPO service provider's activities simultaneously and vice versa. Furthermore, Novo Nordisk outlines the importance of personal interactions in the execution process, hence *"it is very important that the project managers know each other and have a good understanding and you get that when you meet people face-to-face"* (Outsourcing Coordinator, Novo Nordisk). Furthermore, if issues are related to tasks on an individual level, the employees both at the service provider's and client's site can communicate directly via email or phone. Moreover, Novo Nordisk elaborates about the importance of personal interactions and relationships across locations and between team members; *"therefore it is much easier when you have met the person and it also makes the communication easier. If you receive an email and you know the person behind it than you do not get upset if something is critical in the email"* (Outsourcing Coordinator, Novo Nordisk). In critical assignments, Novo Nordisk prefers to have onsite visits, as it facilitates the execution process. However, the approach of 'everybody knows everybody' is not systematically applied, thus *"we can not provide this as that would be too expensive"* (Outsourcing Coordinator, Novo Nordisk). In addition, Novo Nordisk outlines that similar tasks to the outsourced analysis services are still done in-house in order to reduce the dependency on one outsourcing vendor.

5.2.6 Monitoring & Evaluation

After the services are executed and delivered, the service provider has the possibility to monitor and evaluate the results which might lead to new opportunities, as the service provider can approach the client and offer new variations of services. In terms of a long-term engagement between the service provider and the client, regular revision sessions are initiated in order to secure the overall quality of the services. In these sessions the client can provide information about the satisfaction of the projects via telephone/video conferences or personal interactions. Furthermore, in order to measure the overall satisfaction of clients, both companies conduct regular surveys.

Client perspective. Regarding this surveys Company X elaborates, *"the service provider is very keen and good at evaluating the projects and generally I'm quite happy. One time when there was an issue, due to communication problems, we were not totally satisfied with the outcome so we gave them 3 out of 5 on some parameters."* (Director C & S, Company X). What happened later on was that company representatives started calling

the client in order to get feedback and evaluate what the issues were. Hence, *"if one person is contacting you to get feedback that is fine, it takes some time but it is still ok. However, when four people are calling you about the same thing it took a lot of time"* (Director C & S, Company X) The result of this is that the client states *"today I always give them a four even if I would like to give them a three"* (Ibid.).

5.3 Value Creation

Service Provider Perspective. Both case companies emphasize that, the value creation possibility for clients are based on the low-cost aspect of the service provided. Furthermore, TCS outlines that the *"client does not just switch from a high cost to a low cost service; the client also gains a better productivity."* (VP Quality, TCS). Thereby, it is outlined that, *"if we [TCS] cannot bring any difference at all we are probably not a good partner to the client."* (Head Pre-Sales & Solutions, TCS)

Client Perspective. The clients emphasize the fact that the service providers offer low cost solutions, *"price is one advantage, you get a lower price working with an Indian company and it is a major difference which is on the plus side of course. But I guess there is a flip side of the coin and to be frank you just get what you pay for."* (Director C & S, Company X). However, *"it is value for money, they are very good at collecting and consolidating raw data into reports, that is what we buy! We do not buy much of, even though they might disagree, analysis that is not their strength"* (Director C & S, Company X) In contrast, Novo Nordisk states that *"it is a low cost area, but that is not the most important thing, the service provider creates value because it has a very flexible pool of employees"* (Outsourcing Coordinator, Novo Nordisk).

5.4 Abridgment

In order to summarize the most important dimensions occurring in each step of the Value Shop's primary activities we complemented the traditional problem solving cycle with industry specific characteristics and activities (see Figure 5).

Figure 5: Empirical Evidence Abridgement

Source: authors' own (2009)
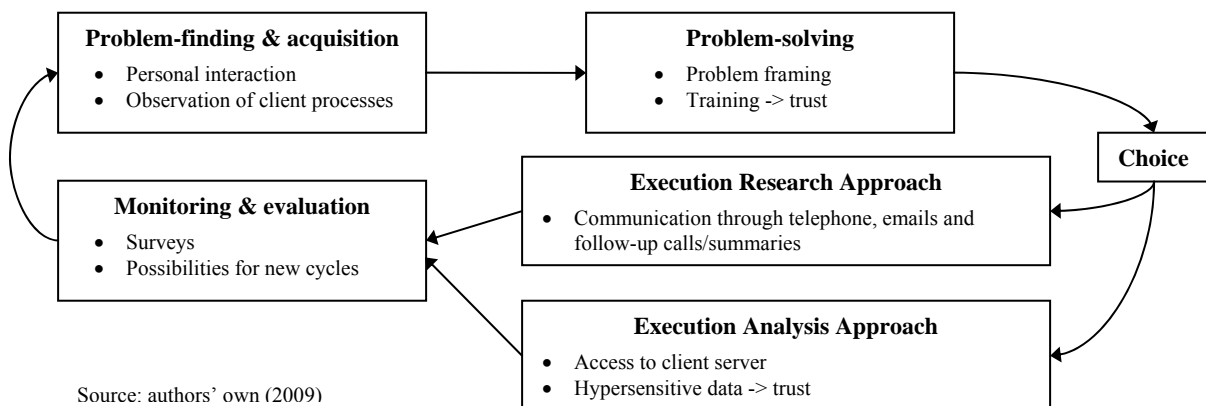
6 Analysis

This chapter provides the reader with a detailed analysis of the critical dimensions KPO service providers are facing when creating value through transferring intrinsically tacit knowledge across country and company borders. Thereby, an analysis of the value creation logic is provided as well as a detailed examination of the challenges concerning the transfer of knowledge.

6.1 Analytical Elaborations of the Conceptual Model

In order to analyze the challenges that can occur when creating value through transferring intrinsically tacit knowledge across borders in the KPO industry; we see the necessity to initiate the analysis with a discussion concerning the possibilities of value creation. It is expected, if the Value Shop is applicable to the KPO industry, value can be created. Hence, we discuss the characteristics of the Value Shop model in regards to the KPO industry and analyze their applicability. Furthermore, the knowledge transfer within the primary activities of the Value Shop are analyzed in order to elaborate on the challenges, the KPO service provider has to cope with in order to create value.

6.1.1 KPO – To be or not to be a Value Shop?

As can be analyzed in the empirical findings, the operations of the KPO industry follow the primary activities in the conceptual model. Nevertheless, in order to understand the KPO service provider's value creation logic, the Value Shop characteristics discussed in the conceptual model need to be elaborated and analyzed.

Hence, as discussed in the Value Shop model, reputation and relationship are important aspects for professional service firm's value creation (Stabell & Fjeldstad 1998; Sheehan 2002). It is indicated from the empirical findings that the aspect of reputation is strengthened, as all clients got in contact with their KPO service provider through either previous engagements or based on recommendations, which illustrates Sen and Shiel's (2006) theory of reputation in the KPO space. In line with this aspect, it was outlined by the companies that 70 percent of the tasks given came from existing clients, which implicates that clients capitalize on a well-established reputation and thereby reduce risks as well as searching costs as discussed by Podolny (1993). Furthermore, it is evident that due to the returning clients, a spiraling activity cycle is apparent as the service provider can continue the cycle with a new round of problem solving activities.

In regards to the KPO service providers operations, it can be analyzed that a co-performance of primary and supportive activities within the problem solving process is evident as discussed by Stabell and Fjeldstad (1998). The CIO/CISO of Evalueserve outlined the necessity to use technology when executing the services in stating: *"without IT you would not be able to run a KPO"*, which goes in line with Thompson's (1967) discussions about intensive technology usage.

When looking upon the characteristics of problem-independent information acquisition as well as the interdependency of activities, it can be analyzed that the importance to frame the project in a correct manner is evident in the KPO industry as well as in the Value Shop (Stabell & Fjeldstad 1998). Furthermore, the empirics outlined that the framing process particularly in TCS was conducted in a standardized way, which goes in line with Stabell and Fjeldstad's (1998) model.

Moreover, cyclical and interruptable activities closely related to Stabell and Fjeldstad's (1998) Value Shop characteristics are apparent in the value creation process of KPO service providers. The client is regularly status updated and an interim delivery is provided, as the VP Business Research of Evalueserve recalled; *"the key here is that every week the client gets a status update and an interim delivery. It might be only 20 percent completed […] but the client can give constant feedback so we try to have a weekly call with the client"*. Hence, it can be analyzed that the feedback of the client can interrupt the Value Shop cycle, which leads to a reframing of the initial problem and a constant modification of the process.

In addition, concerning the aspect of standardization, diverse perspectives of theories and empirics generated a clash, which is important to outline. While it was argued by Sen and Shiel (2006) as well as Løwendhal et al. (2001) that the KPO service provider solves unique problems whereby standardization is very difficult to implement, Stabell and Fjeldstad (1998) claimed that a more or less standardized execution process can be applied to the Value Shop. In line with this discussion, the empirics also illustrate a diverse approach as Evalueserve claimed that *"we quite often reinvent the wheel"* (VP Business Research, Evalueserve) while executing the services, which is in contrast to TCS's execution approach; *"...we have a playbook which tells us step by step what to do"* (Lead S & M, TCS). It can be analyzed that this diversity is dependent on the services which are offered, as the degree of customization and hence the level of standardization varies for each service, an aspect discussed by Løwendahl et al. (2001). Thus, next to the company specific operation modes, the required services influence significantly the standardization level of the KPO services.

The aspect of information-asymmetry within the Value Shop (Stabell & Fjeldstad 1998) can be identified as challenged by various KPO services. It was elaborated by clients, that cost reduction is the main driver to outsource to Indian KPO service provider, not the information asymmetry, which goes in line with Kakabadse and Kakabadse's (2000) discussions. Novo Nordisk outlined thereby that some of the services are still done in-house, which indicates that there is no information-asymmetry as the company itself is able to execute the services. Furthermore, Company X emphasized the fact that only research is outsourced as analysis is not perceived as the strength of the service provider and the client prefers to perform the analysis function internally. Thus, it can be analyzed

that rather than discussing the dimension of information-asymmetry, the aspect of cost-asymmetry is evident in the KPO industry from emerging market economies.

In line with the cost-asymmetry discussion, it is illustrated by the empirics that the KPO industry capitalizes on the benefits provided by a low-cost labor strategy, as Raman et al. (2007) claims that graduates in India are willing to work for 80 percent lower wage compared to European peers, which globally signifies a low-cost strategy. This notion indicates a contradiction to the Value Shop framework as Stabell and Fjeldstad (1998) argued that expertise has to be priced at a premium level in order to be perceived as reliable and knowledgeable. In line with this aspect, the Director C & S of Company X outlined that *"price is one advantage, you get a lower price working with an Indian company, and it is a major difference which is on the plus side of course. But I guess there is a flip side of the coin and to be frank you just get what you pay for"*. Although this quote indicates a critical dimension of the KPO service providers value creation logic, it has to be acknowledged, that the same client outlined that *"it is value for money; they [the KPO service provider] are good in collecting and consolidating raw data into reports. That is what we buy"*.

Concerning the leverage of expertise, it could be analyzed while Stabell and Fjeldstad's (1998) Value Shop model focuses on the internal allocation of expertise, the empirics illustrate the necessity to leverage the expertise externally according to the client's requirements. Thereby, the client is able to influence the allocation process as outlined by the CIO/CISO of Evalueserve; *"the client can interview the staff and thereby decide weather the person is capable of working with this project"* in order to secure the right expertise, an aspect discussed by Løwendahl (2005) as well as Sen and Shiel (2006). Furthermore, in line with these aspects, it can be analyzed that the allocation of expertise across locations in order to capitalize on time zone advantages, language proficiencies and proximity to the client is enhancing the KPO service provider's ability to leverage its expertise. However, if a cross location team was set up, the KPO service provider had to cope with challenges concerning external and internal transfers of knowledge.

6.1.2 Knowledge Transfer Challenges

In order to elaborate on the challenges regarding the knowledge transfer, Nonaka et al.'s (2000) SECI model is used as an orientation. After analyzing the challenges concerning the transfer of solely tacit knowledge (socialization), the explicit level is incorporated. Furthermore, externalization as well as internalization related challenges regarding the knowledge transfers conducted by the KPO industry are analyzed as well as the solely explicit dimension, termed as combination.

6.1.2.1 Socialization

The Challenge of Managing the Distance

It can be analyzed that the offshored and outsourced KPO services imply a vast tacit dimension due to their embeddedness within the client company, an aspect also discussed by Nonaka and Tomaya (2007) as well as Abou-Zeid (2002). This tacit dimension is particularly challenged in an outsourcing context as the service provider and the client are not located in proximity, leading to difficulties concerning socialization attempts. Hence, according to Roberts (2000) and Nonaka (2000) this challenge can only be overcome by co-location and co-presence of the two parties, an aspect which is strengthened by the Co-Founder of BombayWorks, who stated that *"face-to-face interaction is extremely important in the initiation of the contact"* between the service provider and the client.

From the empirical findings it can be analyzed that the KPO industry has tried to overcome the issue of co-location by using onsite representatives, which are located in proximity to the client. In that way, it can be elaborated based on Nonaka's socialization theory that the KPO service provider managed to provide an arena where tacit knowledge can move between the two parties. Hence, this set up allows for ambiguity reduction and instant feedback, which can be analyzed to enhance the onsite representative's ability to comprehend the tacit dimensions involved in the service execution process, an aspect also discussed by Daft and Lengel (1986). Furthermore, the statement *"I have really appreciated the Swedish representative due to the fact that he is here and the India team is so far away"* from the Director C & S of Company X is illustrating the importance of the onsite representatives socialization possibilities.

In addition, with the usage of socialization attempts by the onsite representative, it becomes possible for the service provider to *"observe the clients processes in order to gain a deeper understanding"* (VP Business Research, Evalueserve). Consequently, it can be analyzed that the onsite person can capitalize on benefits provided from the tacit dimensions of non-verbal cues gained through observations, also discussed by Johnson et al. (2002).

The Challenge of Socializing to Overcome Unprovenness

The aspect of unprovenness has been discussed by Szulanksi (1996) as the author emphasized that unproved knowledge can impede its transfer, a dimension which also can be analyzed in the empirics, as illustrated by the Lead S & M of TCS when stating that *"in general customers are very skeptical if a particular project would work and we [TCS] are asked to prove ourselves"*. This skepticism, originating from the unproveness aspect, is strengthened by the Outsourcing Coordinator of Novo Nordisk when elaborating on the stakeholders' attitude towards outsourcing to an Indian KPO service provider; *"if you outsource things than you just get crappy things back and you have to redo everything"*. Thus, it is indicated that the aspect of unprovenness constitutes a

critical challenge for the initiation of an engagement, as without the possibility to show proof of the source expertise the client will not outsource the strategically important service to the KPO service provider. In order to overcome this challenge, it can be analyzed that building a trustworthy relationship based on personal interactions between the KPO service provider and its client is essential, a notion also supported by Sen and Shiel (2006), Currie et al. (2008) as well as the empirics, as it is stated that *"specifically once the customer has developed a confidence […] they obviously want to outsource all kinds of activities"* (Head of Nordics, TCS).

In order to develop this trust, it can be analyzed that the KPO industry capitalizes on either the onsite representative's ability to socialize with the client, or the abilities of a representative form the execution team, who travels to the client's location in order to indulge the relationship. Consequently, the socialization process enables the service provider to improve reliability and show a good record, also discussed by Szulanski et al. (2004). However, it has to be acknowledged that the ability to prove a record is impeded by the confidentiality issues within the industry, as previous projects and clients are not to be disclosed. Hence, it can be perceived that a successful record illustrates the KPO service provider's capability to apply the right skills, knowledge and technology in order to manage the outsourced processes efficiently, which can be associated with Sheehan's (2002) discussion about reputation.

In addition, it became evident from the empirics that the client company was able to influence the selection of sources to leverage expertise. Hence, it can be argued that if the client is able to influence the selection of expertise involved in its problem solving process, the unprovenness of sources could be diminished, as it is expected that the client trusts its selected expertise's abilities and skills.

The Challenge of Utilizing the Onsite Representative
It can be analyzed that by using means of socializations the KPO service provider's onsite representative can *"open up clients and [...] build a business to develop"* (COO, Evalueserve). Thus, the onsite person could build trust and stronger relationships to the client, which is expected to facilitate the transfer of tacit knowledge between the two parties as discussed by Nonaka (2000). This aspect goes in line with Beaverstock (2001), who argued that tacit knowledge is considered to be the most important knowledge for professional service firms.

In addition, it was outlined by Roberts (2000) as well as the empirics that the aspect of culture and linguistic plays an important role when socializing between the onsite representative and the client, as the VP Business Research of Evalueserve outlined; *"the point is that they [onsite representatives] know the local market, they know the people and they speak their language"*. The onsite representative enables the transfer of tacit knowledge as both parties can be aligned through their encultured knowledge as

discussed by Abou-Zeid (2002). This encultured dimension would be increasingly challenging to develop between the client and the Indian KPO service provider due to the distance and their diverse cultural backgrounds.

However, it can be analyzed that in some cases the onsite person is not used as a mean for leveraging the tacit knowledge across borders to the place of execution. Rather, the onsite person is present in the relationship with the purpose to sell, whereby the function of transferring tacit knowledge from the client's site to the execution team located in India is not utilized properly. This reasoning is strengthened by a statement provided from the Director C & S of Company X; *"the feeling that I had lately is that when there are lot of project running it is quiet from the service provider's side, but when we do not have any business they are banging on our door more or less. I would like to see a balance there and when we are running projects they should actually knock on the door to see how it is going. That signals a lot"*.

The quote illustrates an additional important activity of the onsite representative, as he/she should serve as a point of contact in the entire project process. Consequently, it can be analyzed that by building up a stronger relationship through socialization, which not solely implies the sale aspect, a more efficient way to utilize the onsite representative could be achieved. This discussion is strengthened by Hansen's (1999) theory, claiming that a good relationship can facilitate the transfer of tacit knowledge.

The Challenge of Knowledge Sharing Across Borders
In addition to the socialization attempt of the onsite representative, it can be analyzed from the empirics that the aspect of leveraging tacit knowledge can be enhanced, if employees from India travel to the client's location in order to participate in the engagement process. Hence, the acquired tacit knowledge can be transferred over to the execution location, which implies a minimal loss of knowledge as a codification process is not required, an aspect discussed by Bowman and Swatz (2008). However, the high costs involved when utilizing such a rich mechanism by sending employees from India must be acknowledged, an issue discussed by Kogut and Zander (2003).

In line with the cost discussion, the Lead BFSI BPO of TCS elaborated on the possibility to use video conferences instead of transferring employees to capitalize on the tacitness of knowledge*; "video conference allows you for a better interpersonal connection and has a more focused engagement"*. This reasoning is supported by Murray and Peyrefitte (2007) as it is claimed that video conferencing facilitates the transfer of tacit knowledge. Nevertheless, it became evident that the usage of this mechanism's potential seems to be neglected, as it is claimed that *"in India video conferencing is an expensive set up"* (CIO/CISO Evalueserve). It can be seen that the challenges concerning the transfer of tacit knowledge are vast and significantly of importance for the KPO industry, an aspect.

Another challenge concerning the internal socialization attempts of the KPO industry becomes evident when analyzing the infrastructure of the service provider; where cross location team set ups are apparent. This set up impedes the transfer of tacit knowledge as it was outlined that particularly Evalueserve does *"not have video conferencing between […] locations"* (CIO/CISO Evalueserve). In order to cope with this challenge, TCS elaborated on the aspect that it is more beneficial to set up teams in one location as personal interactions and team meetings are easier to conduct, which facilitates the transfer of tacit knowledge. In line with this discussion, it can also be analyzed that these meetings reduce the lack of motivation to share knowledge, as arduous relationships can be conquered, an aspect discussed by Szulanski (1996). It can be perceived that the lack of motivation to share knowledge is of importance for the KPO industry as the services are highly dependent on expertise and their ability to leverage the knowledge. As a result, the KPO industry tries to reduce the lack of motivation by the usage of incentives as well as a well established corporate culture, which goes line with discussions provided by Argote (1999) and Morris (2001).

6.1.2.2 Externalization

The Challenge of Codification

As outlined in the empirics, several steps of the Value Shop require codification of tacit knowledge, in order to transfer it across company and country borders. Thereby, the critical challenges of articulation and codification need to be acknowledged, as especially codifying know-how knowledge, due to context dependency and the challenges in articulating its tacitness are demanding, a notion discussed by Johnson et al. (2007). As an illustration of this elaboration, the Outsourcing Coordinator of Novo Nordisk outlined challenges occurring when articulating the requirements for the outsourced processes; *"when making specifications it is sometimes very hard to foresee everything, and sometimes the specifications we make might not make sense"*. Therefore, it can be analyzed that one challenge of codification lay within the client's ability to articulate the know-how dimension of the outsourced processes.

In addition to the articulation challenges, it can be analyzed that the codification process is also hindered by cultural diversity, which enhances intersubjectivity as discussed by Balconi et al. (2007). This aspect is supported by the empirics as both the KPO service provider and the client acknowledged the impact of the Indian culture for the codification process; *"Indian as far as communication goes is not very proactive"* (AVP Investment Banking, Evalueserve) and *"the service provider is just blindly doing everything in the specification even though it does not make sense. The challenge is to make them more proactive"* (Outsourcing Coordinator, Novo Nordisk). Hence, it could be evaluated that based on the lack of proactive initiatives of the Indian expert, the codification is expected to be less efficient due to misunderstandings which are not clarified once the codified knowledge is transferred.

In line with the cultural issues, it could be analyzed that problems can occur based on the expert's know-how dimension as he/she might not be able to comprehend the codified knowledge efficiently, which can lead to misinterpretations, an aspect discussed by Hansen (1999). In order to reduce this challenge, it became evident that Indian KPO service providers try to establish an efficient relationship which is expected to facilitate the codification process as the sender is most likely spending more time in the articulation activity, assisting the KPO service provider in the comprehension of the knowledge.

The Challenge of a Common Language

Furthermore, when codifying and thereby articulating the knowledge, the notion of having a common language is of importance as emphasized by Grant (1996) and Soo et al. (2001). This aspect constitutes a challenge for the KPO industry as it was outlined by the Director C & S of Company X in regards to a Chinese research centre; *"the distance can be a tricky thing, as […] the fact that they do not really speak the best of English"* is impeding the codification of knowledge. Hence, in order for the KPO service provider to overcome this challenge, a system was developed, which is built upon the foundation of having *"everything confirmed, so they ask and ask and ask if they have understood everything correctly, they also repeat everything that is being discussed a couple of times"* (Director C & S, Company X). It is questionable if this approach can be perceived as the best practice, especially as the Director C & S of Company X outlined that *"it makes the process quite lengthy and it makes the situation to be under time pressure by default"*. Consequently, it can be argue that socialization would reduce this challenge as personal interaction implies a higher degree of tacit knowledge transfer, which enhances the understanding between the two parties as non-verbal cues can complement the verbal language, also discussed by Daft and Lengel (1986) as well as Johnson et al. (2002).

Next to a common country language, a common industry language is of major importance for the KPO industry as elaborated by the VP Quality of TCS; *"when you talk to pharma clients, you need to speak their language. If you don't know their language you cannot define your processes"*. Hence, it can be analyzed, if the KPO service provider lacks the ability to define and thereby codify the client's process, due to deficiency in a common industry language, aspects of incompleteness and intersubjectivity hinder the codification process as discussed by Balconi et al. (2007).

The Challenge of Knowledge Destruction

As elaborated by Bowman and Swart (2008) as well as Balconi et al. (2007), tacit knowledge of know-how characteristics can never be completely codified as there is always a loss of knowledge when articulating it. It appeared that this aspect is very challenging for the KPO industry, due to the high dependence on transferring codified knowledge across borders, in order for the service provider to capitalize on location

benefits. The aspect of knowledge destruction became evident as the Co-Founder of BombayWorks elaborated on the long chain of command; *"a lot of information could get slaughtered, when it starts with the client and finally reaches the developers"*. It could be analyzed that a long chain of command leads to knowledge destruction as codification and decodification results into a loss of tacit knowledge, which goes in line with Bowman and Swart (2008). On the other hand it became evident in the empirics that in order to reduce the loss of knowledge the service providers have developed the possibility for the client to be in direct contact with the service executor and vice versa.

Another aspect concerning the destruction of knowledge was highlighted by the Managing Director Nordics of Evalueserve; *"when you do a report, maybe less than 60 percent is put into the report and the rest 40 percent is in the head of the analyst"*. In order to minimize the loss of knowledge, the empirics illustrate that a variety of knowledge transfer mechanisms are used by the KPO industry. Thus, it can be analyzed that depending on the complexity of the codified knowledge, the selection of a suitable transfer mechanism is vital. Consequently, there is a trade-off between ambiguity reduction and cost efficiency in the KPO service provider's selection of the chosen transfer mechanism.

6.1.2.3 Internalization

The Challenge of Delivering Successfully

In line with the aspect of knowledge destruction in regards to codification, also the decodification process implies problems for the KPO industry. It can be analyzed that these challenges occurred particularly in the delivery step of the service execution as the client needs to extend, comprehend and reframe the knowledge delivered from the KPO service provider, also discussed by Nonaka (1991). However, the empirics illustrates that the service provider receives *"a lot of follow up questions about things we need to change in the work we have done. […] It depends on the experience of the person if somebody joined recently these mails could be more frequent but once you understood the clients requirements these are reduced"* (AVP Investment Research, Evalueserve). Hence, it can be analyzed that an accurate codification process is required in order for the client to decodify and absorb the transferred knowledge.

Thereby, the client's absorptive capacity becomes an issue, which goes in line with Szulanski's (1996) and Grant's (1996) theories. Consequently, the challenge for the KPO service provider is to present the findings efficiently and reduce the follow-up activities, in combining several mechanisms implying different level of richness as evident in the empirics. This aspect goes in line with Argote's (1999) as well as Daft and Lengel's (1986) discussion about deploying a diversity of knowledge transfer mechanisms.

Furthermore, the final delivery of the service execution is transferred to the client via email or is uploaded on special technological systems. However, it is believed that this

setting makes the internalization of knowledge increasingly difficult, as it takes a longer time for the receiver to comprehend and internalize the knowledge, which is transferred through mechanisms implying a low level of richness, a discussion which goes in line with Daft and Lengel (1986) as well as Murray and Peyrefitte (2007). In order to offset this notion, it can be analyzed that in certain instances, it is required that the service provider presents the findings through personal interaction. Hence, either the onsite representative or a service executor is traveling to the client's location, as through the socialization sessions, the client's absorptive capacity is enhanced, allowing internalization of the findings leading to value creation for the receiver, also discussed by Van den Bosch et al. (2003) as well as Lin et al. (2005).

6.1.2.4 Combination

The Challenge of Unsuccessful Technical Support

The challenges concerning the transfer of explicit knowledge are partly dependent on the successful use of the technical systems, which is particularly of importance when considering that the KPO industry is implying intensive technologies as outlined by Thompson (1967) as well as Stabell and Fjeldstad (1998). In line with this aspect, the empirics illustrate that the KPO industry has to cope with obstacles concerning the insufficient usage of technology, which is especially challenging due to the distances involved in the service execution. It can be analyzed that problems occurred while using medium rich knowledge transfer mechanisms as outlined by the Director C & S of Company X *"there are challenges in doing phone conferences […] due to the bad land lines […]. Sometimes, you get into intensive discussion but you cannot really hear what they are saying"*. The quote shows that once problems occur, it severely impedes the knowledge transfer between the actors as transfer mechanisms are dependent on technology. In order to prevent misunderstandings and incompleteness, Evalueserve emphasized that every telephone discussion is followed by a call summary to confirm the communication. This summary is distributed to the entire team in order to inform everyone about the progress of the project which is referred to as a CC approach in the empirics. However, the efficiency of this attempt can be questioned as the VP of Business Research in Evalueserve receives around 700 emails per day.

Outsourcing Research Centers – A Significant Challenge

Due the *"hypersensitive data"* (Lead S & M, TCS) outsourced in the analysis-approach, it can be analyzed that the operations conducted through the ORC mode, are of significant importance as the KPO service provider receives access to the client's server. However, with this system in place, various challenges are evident, particularly at the initiation of the process, as the establishment of a trustworthy relationship is vital, also discussed by Sen and Shiel (2006) as well as the AVP Investment Research of Evalueserve; *"the client needs to trust you, you need to understand the client's processes*

before you actually go on". In order for the KPO service provider to be trusted, certain requirements from the client's side have to be fulfilled, which were outlined by the CIO/CISO of Evalueserve; *"with these kind of cases we also have a lot of requirements from the clients perspective, with security and a lot of training on client specific IT systems, how to access and how to work and that kind of things"*. As a result of these challenges, it can be analyzed that the KPO industry deployed the 'trainer approach', which is believed to enable the service provider to gain an understanding of the client's server as well as its processes in a cost efficient manner.

Furthermore, the Outsourcing Coordinator of Novo Nordisk outlined that in this stage a personal interaction is vital for the cooperation and she emphasized that the project managers should be familiar with each other in order to react on misunderstandings easier, which goes in line with Hansen's (1999) theories. However, this illustration contradicts Lovelock's (1999) theory, claiming that recent technological developments have diminished the service provider's local presence requirements as communication can be limited to solely telephone or written interactions, an aspect also supported by Park (2006).

6.2   Revised Conceptual Model

After confronting the conceptual model with empirics, it could be analyzed that some aspects were strengthened by the initial model while others implied challenges concerning their applicability. Therefore, we believe that it is necessary to elaborate on the findings and revise the conceptual model accordingly (see Figure 6).

When looking upon the Value Shop's characteristics, it became evident that all nine aspects could more or less be applied to the KPO service provider's operations. Thereby, the notion of information-asymmetry was challenged by the cost-asymmetry aspects of the KPO industry, located in emerging market economies. In addition, it was outlined by the empirics that the KPO service provider executes its services from a variety of different locations and thereby capitalized on time zone, proximity and language advantages in the service execution process. Consequently, cross location teams were established, which enhanced the need for internal as well as external knowledge transfers across country and company borders. The revised conceptual model illustrates this phenomenon by the usage of dotted lines, as this set up only occurs in certain cases.

Figure 6: Revised Conceptual Model
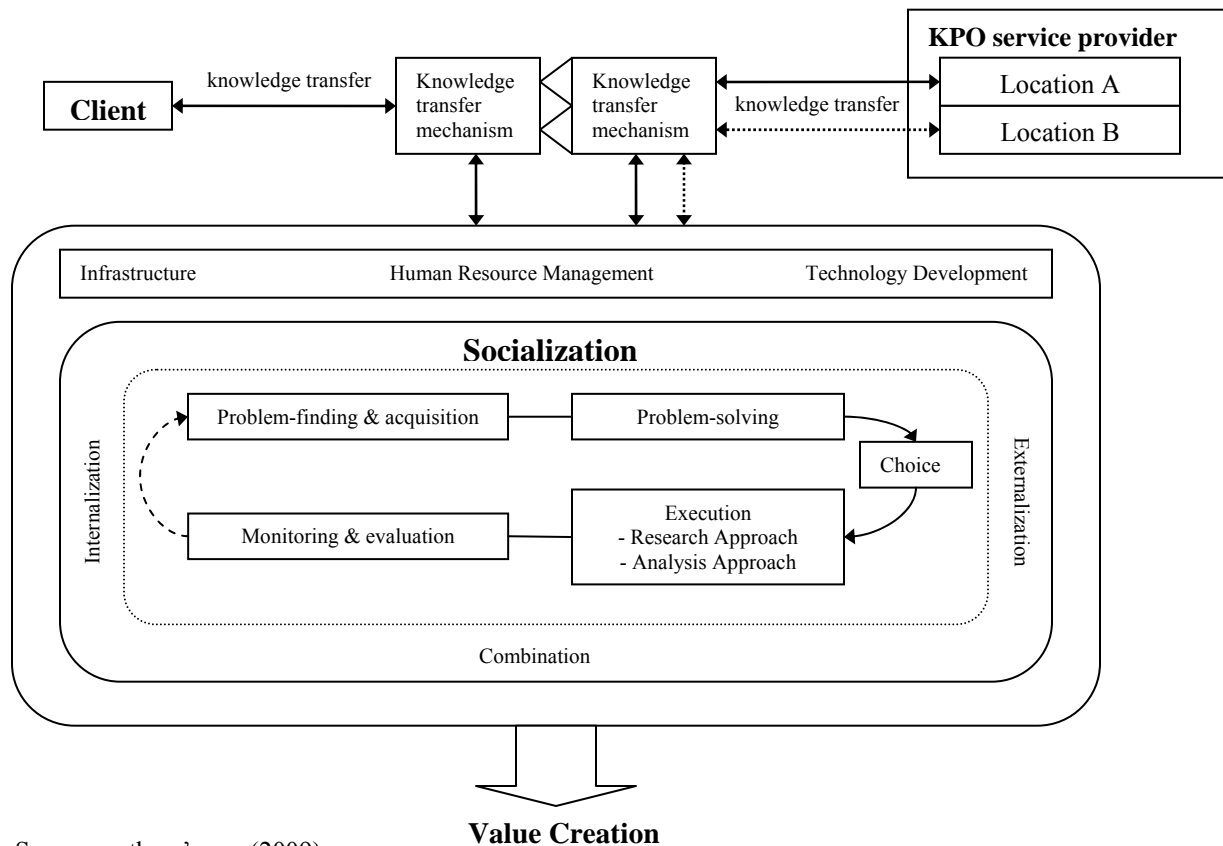
Source: authors' own (2009)

Value Creation

Furthermore, it became evident that the KPO service provider followed all primary steps of the Value Shop framework in its problem solving process, in order to enable value creation. However, it has to be acknowledged that differentiated execution processes, based on the diversity of services offered, were required to successfully solve the client's problem. In these processes, the KPO industry showed a strong dependency on the transfer of knowledge especially in terms of socialization attempts. Though, the distance between the client and the service provider as well as the service provider's research location impedes the transfer of tacit knowledge, due to the requirements of co-location and co-performance. These challenges were of major importance for the KPO industry and had to be specifically outlined in the revised conceptual model.

In regards to the knowledge transfer mechanisms utilized by the KPO industry, it could be summarized that a variety of mechanism were used in order to facilitate the transfer of intrinsically tacit knowledge across borders (see Table 3). Thereby, the level of client involvement required by the mechanisms became an additional aspect, which has to be acknowledged in the selection process. As it is costly and time consuming to transfer tacit knowledge across a distance, it could be perceived that the KPO industry prefers to utilize mechanisms with a low level of richness. Hence, a potential trade-off between the

mechanisms and the costs involved to enable the knowledge transfer occurred, which spurs challenges in the KPO sphere.

Table 3: Knowledge Transfer Mechanism - Matrix

		Value creation with client involvement	Value creation without client involvement
Knowledge transfer mechanism	**High level of richness**	Personal interaction Video conferences	Observations – N/A
	Low level of richness	Telephone Emails Documents	Client/Server approach

Source: authors' own (2009)

In addition, when looking upon the observation mode, a paradox of transferring rich mechanisms without any involvement from the client side became evident, a relatively impossible enigma to solve. The reason for this statement is based on the notion that mechanisms with a high level of richness require involvement from both the sender and receiver. Hence, we argue that observations might be applied to this setting, as the viewer could gain an understanding of tacit dimensions. However a pure observing mode, without any involvement or interaction with the client has so far not occurred in the KPO industry. Furthermore, the client/server approach illustrates a mechanism which is solely dependent on the KPO service provider's ability to work on the client's server and was referred to as an ORC set up in the empirics. This approach intrigued our interest particularly and is therefore elaborated in the following part of the chapter.

6.3 *Extended Conceptual Model*

After the analysis of the initial conceptual model, it became evident that one service approach, namely the ORC set up, needed additional elaborations as intriguing aspects occurred subsequent to the initiation phase of this operation set up. It could be analyzed that in this phase the services are solely executed in a pure explicit manner through the usage of the client's server, whereby access to hypersensitive data is given. In order for the KPO service provider to enable this operational set up, challenges concerning the initiation phase the reduction of tacit dimensions and trust related issues have to be acknowledged.

To elaborate on the ORCs, additional theories had to be researched and incorporated as no applicable information about the related phenomenon was outlined beforehand. Hence, theories related to apprenticeship (cf. Johnsson 1967; Wolek & Klinger 1998; Nonaka 2000; Clark 2007) and interconnected IT set ups (cf. Lindberg 1993; McKie 1997) were investigated.

6.3.1 Outsourcing Research Centers

As perceived in both theory and empirics, the transfer of tacit knowledge is a major concern for the KPO industry. Especially the aspects of high costs and reduced speed when transferring intrinsically tacit knowledge compose a critical dimension for KPO service providers and it could be argued that reducing the dependency on tacit knowledge would be beneficial for the KPO industry. In line with this aspect, the analysis of ORC approaches outlined that a reduced dependency on tacitness as well as client involvement by the usage of explicit mechanisms could be achieved as it became evident that the transfer of knowledge was limited to direct operations conducted on the client's server, which is aligned with Lovelock's (1999) discussion about information-based services.

When analyzing the ORC operations it needs to be acknowledged that this approach is perceived as a long-term commitment, which capitalizes on the cyclical form of Stabell and Fjeldstad's (1998) Value Shop. Thus, in the initiation of the engagement the service provider co-performs the primary activities of the Value Shop with the client. Especially the first two steps are thereby of importance, based on frequent interactions between the actors in order to frame the long-term engagement and secure a safe access to the client server. It could be analyzed that these steps are of significance as the KPO service provider is given access to hypersensitive data.

After the initiation cycle, the following cycles' applicability to the Value Shop framework can be challenged, as it became evident that the client is not involved in the problem solving process any longer. Hence, the service provider conducts the different primary activities internally, without the clients input. This approach implies that the service provider has the full access to the required data of the client's server as illustrated by the Lead S & M of TCS; *"we [TCS] work on the their [client] server, so we have complete access to their database"*. Consequently, the service provider is able to identify the requirements of the client by accessing the server without the client's involvement.

Therefore, we saw the necessity to extend the conceptual model, in order to outline significant characteristics of the ORC. Consequently, the initial structure of the conceptual model, based on the Value Shop framework, had to be redeveloped in order to visualize the involved knowledge dimensions in the transfer mechanisms (see Figure 7).

Figure 7: Extended Conceptual Model
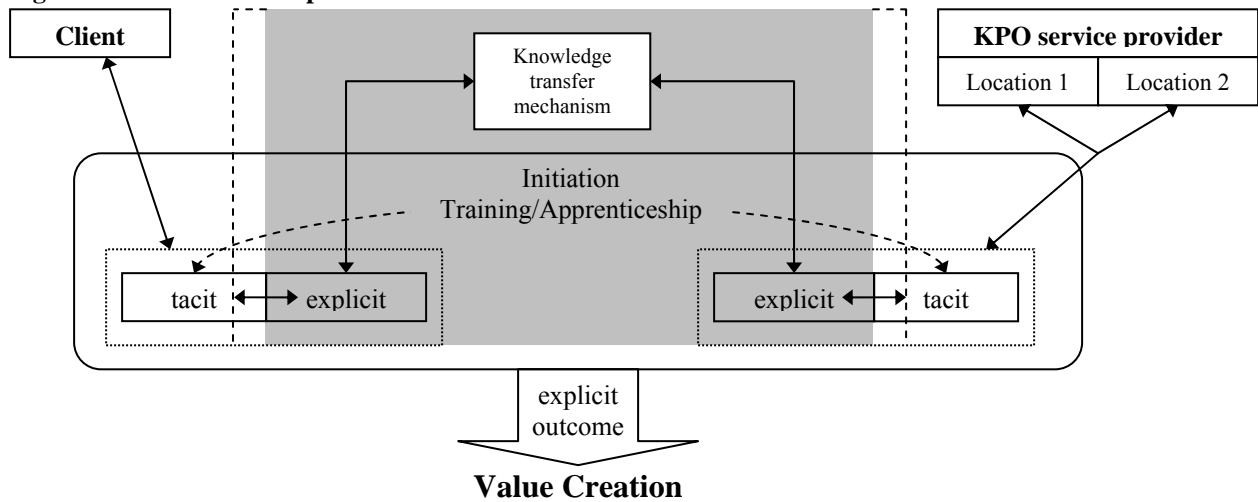
Source: authors' own (2009)

6.3.2 Training/Apprenticeship

The initiation stage in the extended conceptual model incorporates the problem-finding and acquisition as well as the problem-solving stage in the Value Shop activities. It could be analyzed in the empirics that the transfer of tacit knowledge through a training and apprenticeship mechanism is vital for the ORC set up, in order for the service provider to receive access to the client server. Hence, an intensive transfer of tacit knowledge between the KPO service provider and the client, based on training and apprenticeship, is required.

In order to enable this set up, training on the client server is essential for a successful operation in which the executing employees are prepared to perform defined functions in a predictable situation as Johnsson (1967) defined training. However, as elaborated by Clark (2007) a training approach based on class room teaching is not an efficient method to train technical dimension, leading to the necessity to incorporate practical training methods into the approach (Clark 2007). In line with this aspect, Nonaka et al. (2000) outlined that the allotment of tacit knowledge is enhanced when using apprenticeship methods. Hence, skills are gained through observation, imitation and practice (Collin et al. 1991; Nonaka et al. 2000) of the server functions as well as the company context, also discussed by Wolek and Klingler (1998) which elaborated on the aspect that transfer of know-how knowledge is based on apprenticeship methods in form of imitating and observing.

It could be analyzed, based on the notion that know-how knowledge is difficult to codify as it is embodied into the client context, with the usage of an apprenticeship concept the KPO service provider can overcome the difficulties of codification, as socialization is implied. Furthermore, it became evident that the KPO service provider can capitalize on

the benefits of cost reductions while transferring tacit knowledge through apprenticeship outlined by the CIO/CISO of Evalueserve; *"it is not feasible to bring over the whole team when you can have a trainer concept, as once we been trained they [the client] expect us to train the entire team in order to be able to deliver"*. Consequently, the usage of a trainer concept and apprentice methods help the KPO service provider to transfer tacit dimensions in a cost efficient manner and thereby it is possible to avoid the dependency on codification.

6.3.3 Knowledge Dimensions

Once tacit know-how knowledge has been successfully transferred through the means of training/apprenticeship, it is expected that the service provider has absorbed the embodied company context as illustrated by the Lead Programmer of Novo Nordisk; *"parts of the training would be to learn the Novo way"*. The gained knowledge is utilized to execute the services in a solely explicit manner through the access to the server, which is illustrated by the grey zone in the extended conceptual model.

Furthermore, the training/apprenticeship also enhances the clients trust towards the KPO service provider's skills and abilities. However, it could be argued that the KPO's onsite representative can build up enough trust in order to reduce the necessity for socialization between the service provider and the client. Thereby, a possibility exist that particular the apprenticeship can be provided without the aspect of co-location between the two parties by creating a set up consisting of multiple video cameras. With this approach, the service provider can remotely observe the client's employees without his/her involvement. A similar set up can be applied to the training approach, whereby video conferencing could be perceived as a way to substitute personal interactions, as discussed by Murray and Peyrefitte (2007). If both systems could be applied successfully, it is argued that the local presence requirements of the KPO service provider diminish, as tacitness would be transferred through technological systems.

6.3.4 Knowledge Transfer Mechanism - Embrainment

In order to clarify the phenomenon of ORCs, we have chosen to elaborate on this set up by referring to it as an 'embrainment' operation. Thereby, the access the service provider receives to enter the client's server, which can be referred to as the brain of the company, provides the foundation of the concept. The notion of embrainment is borrowed from the medical literature as according to Sirios et al. (2007) embrainment can be referred to be the action of merging functional areas of the brain which coexist within a context of multiple connections and functions. This discussion is strengthened by the VP Quality of TCS when stating that *"the client might not even know that it has been done in India, because I'm [TCS] entering their system, and they just see the solutions in their own systems"*. Hence, it could be analyzed that the client's involvement is significantly

reduced, as the KPO service provider can operate the primary activities of the Value Shop internally without the client's input.

In line with this operational mode, McKie (1997) has elaborated on a technical concept of client/server applications and discussed the aspect that the users of these systems can be either locally or remotely located. This notion goes in line with the KPO industry's operations and it can be argued that due to the possibility of working remotely on the client's server the KPO service provider can leverage its expertise, which provides the client with even more cost efficient and competitive solutions. Furthermore, it became evident that in this embrainment set up, the KPO service provider and the client can work simultaneously on the server as elaborated by the Lead Programmer of Novo Nordisk; *"on the server we work simultaneously and it is fully transparent"*. Thereby, both parties have access to the required databases and can share organizational know-why knowledge as discussed by Johnson et al. (2006). It could be analyzed that the access to the server/databases, can enable the KPO service provider to gain tacit dimensions of organizational know-why knowledge without the necessity to socialize with the client. Consequently, by accessing the server the KPO service provider can visualize the embeddedness of the client's context and thereby gain tacit dimensions from pure explicit information, as the images provided from accessing the server can transfer tacit knowledge through a non-verbal language as discussed by Johnson et al. (2002). This aspect is incorporated in the extended conceptual model as an expansion of the grey zone.

In addition, major challenges with the embrainment set up are security issues due to the hypersensitive data involved in the service execution. The threat of having unauthorized employees getting access to the critical information as well as authorized employees leaking the information to unauthorized outsiders, which is discussed by Lindberg (1993), can be analyzed to compose a challenging dimension for the set up. This aspect goes in line with elaborations concerning the importance of a trustworthy relationship and it could be argued that by implying a good reputation, trust is easier established, two aspects discussed by Sen and Shiel (2006) as well as Sheehan (2002).

6.3.5 Value Creation

It can be perceived that the long term engagement generates benefits of a solid relationship between the KPO service provider and the client as continuing engagements reduce the need of training, which is illustrated by the Outsourcing Coordinator of Novo Nordisk; *"we have a constant flow of tasks and thereby we have a more solid and personal relationship. We have managed to build up knowledge so that we do not have to start training processes and we can continue the relationship instead of starting all over each time"*.

The outcome of the embrainment approach can be analyzed within an explicit execution process which generates value creation for the client in terms of data analysis provided

directly on the server. It has to be acknowledged that the KPO service provider is able to capture the tacit dimensions in the embrainment set up at a lower cost compared to the socialization attempt. Consequently, by reducing the necessity for personal interactions the local presence requirements are diminishing, which can be identified as extremely beneficial for KPO service providers located in emerging market economies.

7 Conclusion

In order to conclude this research concerning the challenges KPO service providers face when creating value through transferring intrinsically tacit knowledge across country and company borders, the final results will be discussed.

After analyzing the KPO industry in regards to its value creation logic, it became evident that the outlined Value Shop characteristics are applicable to the KPO service provider's value creation process. In line with this reasoning we argue that the KPO service provider can be termed as Value Shop and thereby creates value through solving the client's problem. However, it has to be acknowledged that the characteristic of information-asymmetry needs to be replaced by the aspect of cost-asymmetry, which is provided by the utilization of low-cost labor. Although, these notions can be perceived as contradiction to the Value Shop, we argue that the value creation logic of the model is applicable to the KPO industry. This argumentation is based on the perception that the low-cost expertise related to the cost-asymmetry aspect is successfully replacing the information-asymmetry provided by expensive knowledgeable expertise and thereby an equal substitution contributes to the service provider's value creation possibilities. Hence, it can be argued that the driving force for outsourcing and offshoring knowledge intensive services to the KPO industry is based on cost-asymmetry rather than information-asymmetry.

In order to utilize the low-cost aspect of the KPO industry, it became evident that the service provider executes its services remotely from the client's location, which implies an intensive knowledge transfer between the two parties. This set up spurs significant challenges as the provided high-end services are complex and embedded, due to the intrinsically tacit dimensions involved in the KPO sphere. Hence, in order to create value, the KPO industry has to cope with the challenges concerning the transfer of tacit knowledge whereby co-location and co-performance become major issues based on the distance between the service provider and the client. Although, there are possibilities to cope with the challenges of co-location by utilizing socialization attempts, it needs to be acknowledged that providing an arena for socialization is costly, which contradicts the low-cost strategy pursued by KPO service providers.

With the intention to reduce the necessity of socialization, it became evident that the KPO industry capitalizes on codification, which generates the possibility to partly transfer intrinsically tacit knowledge across borders in a cost efficient manner. However, the codification process implies several obstacles whereby particularly the aspect of knowledge destruction needs to be emphasized. In order to reduce the loss of valuable knowledge, it became evident that the KPO industry combines various knowledge transfer mechanisms with the aspect of a personal relationship between the sender and receiver. Thereby, the relationship is complementing the transfer of explicit knowledge as

it enhances the receiver's ability to comprehend and extend the result of the transfer process. However, it can be argued that a beneficial relationship is built upon trust which is created through socialization attempts between the two parties, showing once again the dependency on tacit dimensions in the KPO sphere.

This dependency on trust can also be analyzed in the embrainment set up, where the KPO service provider tries to reduce the reliance on tacit dimensions through accessing the client's server and operating within an explicit approach. When accessing the server, the KPO service provider can visualize the embeddedness of the client's context and gain tacit dimensions from pure explicit information, as it is argued that images provided from this set up can transfer tacit knowledge through a non-verbal language. Thus, we argue that the aim of the embrainment set up is to reduce the dependency and necessity of tacit dimension through solely using mechanism implying a low level of richness. The implications of this approach enable the service provider to remotely execute knowledge intensive services without involving a client based personal interaction. Hence, we argue that by reducing the dependency of tacitness the local presence requirements of the KPO service provider can be diminished which is extremely beneficial for the KPO industry of emerging market economies, as it facilitates the value creation process by utilizing low-cost labor.

In conclusion, the challenges for Knowledge Process Outsourcing service providers when creating value through transfer intrinsically tacit knowledge are outlined to originate from socialization attempts, which are significantly difficult to create due to the distance between the service provider and the client. Consequently, based on the restrictions within this approach, an efficient codification process is required in order to transform fundamentally tacit dimensions into explicit formats and thereby enable the transfer across country and company borders, without destroying the value of the knowledge.

7.1   Concluding Remarks

When looking upon the results of this research, contributions to both the academic as well as the managerial sphere are evident. The purpose of these contributions is to encourage further research which eventually will guide scholars and manager particularly in regards to the outlined challenges within the transfer of intrinsically tacit knowledge.

7.1.1   Contribution to Academia

As already elaborated, the KPO industry is a relatively recent development which is to the best of our knowledge comparably unexplored. Hence, this research contributes to a better understanding of the challenges the KPO industry has to cope with when creating value for its clients, especially as we outline the KPO service provider's operation process in which the industry is dependent on the transfer of intrinsically tacit knowledge. Thereby, we contribute specifically to the dimension of knowledge transfer, which

implies challenges when transferring intrinsically tacit knowledge across country and company borders.

Furthermore, when analyzing the KPO industry as a representative of the professional service firm, we contribute to the value creation possibilities of the industry by discussing the Value Shops applicability. Thereby, it has to be acknowledged that the KPO service provider executes the services from a distance to its client, an approach which has, to the best of our knowledge, so far not been considered in the Value Shop framework.

In addition, we would like to emphasize the contribution of the embrainment model, as it allows the reduction of socialization to a minimum particularly when considering that tacit knowledge can still be gained through the access to the client server. However, we did not have the possibility to test the model with new empirical findings and thereby we want to encourage further research concerning possible ways to overcome the challenges the transfer of intrinsically tacit knowledge imply on the value creation process in the professional service industry.

7.1.2 *Managerial Implications*

This thesis should provide the manager of the KPO industry with insights of the complexity concerning the transfer of intrinsically tacit knowledge in order for the industry to acknowledge and reduce the outlined challenges. Consequently, we confront the industry's knowledge transfer mechanisms as it seems that the trade-off between rich and low mechanisms might not always be applied in the most efficient manner, which can enhance the knowledge destruction within the industry.

By acknowledging the embrainment model the KPO service provider can capitalize on the benefits by reducing the challenging dimensions of tacit knowledge as well as diminishing the local presence requirements, which enables the service provider to execute highly knowledge intensive services remotely from the client.

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Appendix 1

Introduction questions:

As a starting point, could you explain your position and give us a description of your daily duties?

Could you briefly outline your background (education and previous work experience)?

What was your intention and expectation when joining ....?

Knowledge transfer related questions:

Please explain the knowledge transfer from a foreign subsidiary to a research center.

What technologies are used in the transfer process as well as for the codification?

Are personal interactions involved and what is the relationship between the sender and receiver?

What problems can occur in the knowledge transfer process?

How would you solve these problems?

Are special skills for the codification/decodification required?

What is the strength of knowledge transfer?

Appendix 2

Introduction questions:

As a starting point, could you explain your position and give us a description of your daily duties?

Could you briefly outline your background (education and previous work experience)?

What was your intention and expectations when joining ....?

Knowledge transfer related questions:

Who is taking care of the task sent from the foreign subsidiary?

Please explain the process after you received the task from the foreign subsidiary.

Are there new teams set up for every task or are researcher working for multiple team solving various tasks?

On what bases are research teams set together?

Are there cross divisional and cross boarder teams (e.g. staff from research center in India is working together with staff from research center in Rumania)?

How does the communication within teams, especially if cross border, function?

What kind of problems could occur with these processes?

Please explain the codification process of the research results in order to transfer it back to the foreign subsidiary.

Who is responsible for this task?

What kind of problems could occur with these processes?

What is the strength of ....research teams?

Appendix 3
Introduction questions:

As a starting point, could you explain your position and give us a description of your daily duties?

Could you briefly outline your background (education and previous work experience)?

What was your intention and expectation when joining ....?

Employee related questions:

Domestic employees working as researcher:

Please explain what backgrounds and qualifications your researchers in India have.

In which areas are they educated?

What are the selection criteria when hiring new employees?

On average how much are newly graduated employees earning as researchers?

On average how much are experienced (> 5 years) researchers earning?

On average how long are these researchers staying with ....?

Are you providing international experience to your researchers?

Foreign employees:

What are the criteria when hiring representatives for foreign offices?

How many foreigners are working for .... abroad in your representative offices?

What relationship do these foreign employees have with the HQ and research centers?

How would you describe the atmosphere in ....?

Appendix 4

Introduction questions:

As a starting point, could you explain your position and give us a description of your daily duties?

Could you briefly outline your background (education and previous work experience)?

What was your intention and expectation when joining ....?

Business related questions:

Could you explain the reasoning to establish representative offices in Europe?

Did you face any problems when establishing in Europe/Sweden?
If yes could you explain the problems and how you solved them?

What was the reason to establish research centers in Rumania/China/Chile?

How are these research centers diversified from one another?

What service solutions are the research centers (including India) providing to Europe?

In general, how would you describe an average client of ....? (Small, Medium sized, Large / International / Domestic)

What services are offered and which one are the most used one in Europe?

Which company is your biggest competitor on the European market?

Compared to this company in what areas is .... more efficient?

What is the foundation for .... success?

Appendix 5

How long have you been working with ……….?

How was the connection initiated?

What kind of services do you outsource?

Did you do the service internally before?
- Why did you outsource the task?
- Why did you outsource it to a low cost country?
- Why …….? (Where there other companies competing for this contract?)
- What did the stakeholders say?

How long has this specific project been running?

How does the process of execution work?
- Do ….. work on your server? If yes, why?
- How does the communication work out?
- Are you the only employee that has contact with …………?
- How many points of contact in India do you have?

Do you feel that a face-to-face interaction is important?
- If yes, how do you create this set up?
- Do you do video conferencing?
- Is this equivalent to face-to-face interactions?

If you are not satisfied with the result, what happens?

Have there been any challenges in the relationship with …….?
- Were there more in the beginning than at the present stage?

How do you look upon the proximity aspect?
- Have you ever experienced any cultural clashes?

Has the task that you outsource developed in terms of complexity?

Have you outsources similar projects to western companies, and what would you say that the difference is?

What have been the most critical dimensions in the cooperation with……….?

What kind of overall improvements in the relationship can be done?