

Dimensions for describing and explaining the successful outcome of the IS outsourcing process – emphasising the relationship perspective

Linda Bergkvist*

Department of Information Systems
Karlstad University
Karlstad, Sweden

Linda.Bergkvist@kau.se

Abstract

Outsourcing of Information Systems (IS) is today a commonly accepted and growing practice that is continually evolving. As the IS outsourcing market has matured, IS outsourcing is perceived as one way to increase business operations. Despite, few firms report success. The critical role of an effective client–IS supplier relationship has been argued as a precondition to reach a successful outcome of IS outsourcing. Even though the importance of the IS outsourcing relationship has been highlighted by both practitioners and researchers, paradoxically few studies have applied the relationship as the unit of analysis. This research study contributes to the identified knowledge gap by studying the success of the post-contract stage of the IS outsourcing process from a relationship perspective. The purpose of the paper is to identify dimensions for describing and explaining the successful outcome of the IS outsourcing process.

As the combination of several theories increases the possibility to obtain a better understanding of the dimensions by which the IS outsourcing process evolves, the success of the IS outsourcing process is studied with an emphasis on three different domains of knowledge: the IS life cycle model, the interaction approach and the framework of the IS outsourcing relationship. Through the application of several theories, a more compelling description of what contributes to the successful outcome of the IS outsourcing process is reached. Furthermore, the application of several theories entailed the possibility to compensate for weaknesses of one theory through the strengths of another theory.

Through the review of three different theoretical fields dimensions have been identified for describing and explaining the successful outcome of the IS outsourcing process. The dimensions identified are the activity-related dimension, the atmosphere dimension, the contract dimension, the efficiency outcome dimension, the environment dimension, the interaction dimension, the management dimension and the structure dimension.

Besides the contributed dimensions, a modified version of the interaction approach is proposed. The modified version is adjusted to the IS outsourcing relationship and includes, besides its original parts, a time-line, additional dimensions and the specification of the involved firms as composed of three different interacting areas.

Keywords: IS outsourcing process, IS outsourcing relationship, relationship perspective, literature review

* Address: Universitetsgatan 2, S-651 88 Karlstad, Sweden

Dimensions for describing and explaining the successful outcome of the IS outsourcing process – emphasising the relationship perspective

Abstract

Outsourcing of Information Systems (IS) is today a commonly accepted and growing practice that is continually evolving. As the IS outsourcing market has matured, IS outsourcing is perceived as one way to increase business operations. Despite, few firms report success. The critical role of an effective client–IS supplier relationship has been argued as a precondition to reach a successful outcome of IS outsourcing. Even though the importance of the IS outsourcing relationship has been highlighted by both practitioners and researchers, paradoxically few studies have applied the relationship as the unit of analysis. This research study contributes to the identified knowledge gap by studying the success of the post-contract stage of the IS outsourcing process from a relationship perspective. The purpose of the paper is to identify dimensions for describing and explaining the successful outcome of the IS outsourcing process.

As the combination of several theories increases the possibility to obtain a better understanding of the dimensions by which the IS outsourcing process evolves, the success of the IS outsourcing process is studied with an emphasis on three different domains of knowledge: the IS life cycle model, the interaction approach and the framework of the IS outsourcing relationship. Through the application of several theories, a more compelling description of what contributes to the successful outcome of the IS outsourcing process is reached. Furthermore, the application of several theories entailed the possibility to compensate for weaknesses of one theory through the strengths of another theory.

Through the review of three different theoretical fields dimensions have been identified for describing and explaining the successful outcome of the IS outsourcing process. The dimensions identified are the activity-related dimension, the atmosphere dimension, the contract dimension, the efficiency outcome dimension, the environment dimension, the interaction dimension, the management dimension and the structure dimension.

Besides the contributed dimensions, a modified version of the interaction approach is proposed. The modified version is adjusted to the IS outsourcing relationship and includes, besides its original parts, a time-line, additional dimensions and the specification of the involved firms as composed of three different interacting areas.

Keywords: IS outsourcing process, IS outsourcing relationship, relationship perspective, literature review

Introduction

Outsourcing of Information Systems (IS) is today a commonly accepted and growing practice that is continually evolving (Hirschheim, 2006). The desire to reduce costs is often an initial driver for IS outsourcing, but during the IS outsourcing process increased quality and shorter development times are perceived as important (Davis et al., 2006). As the IS outsourcing market has matured, IS outsourcing has become perceived as one way to improve business operations. Despite, few firms report IS outsourcing success (Han, Lee, & Seo, 2008). An explanatory reason could be the heterogeneous nature of IS, meaning that the IS influences, in some way, almost all of a firm's business processes (Dibbern et al., 2004).

The critical role of an effective client–IS supplier relationship has been argued as a precondition to reach successful outcomes of IS outsourcing (e.g. Lacity & Willcocks, 2000; Pei, Zhen-Xiang, & Chun-Ping, 2007). Additionally, empirical studies on IS outsourcing demonstrate practitioners' acknowledgement of the importance of the relationship (Kern & Willcocks, 2002). Despite the importance of the IS outsourcing relationship, highlighted by both practitioners and researchers, paradoxically few studies on IS outsourcing have focused the relationship as the unit of analysis (Kern & Willcocks, 2001). Furthermore, several literature reviews indicate the lack of research conducted on the IS outsourcing relationship (Klepper, 1995; Kern, 1997; Kern & Willcocks, 2001; Gurung & Prater, 2006).

This research study contributes to the identified knowledge gap by studying the IS outsourcing process from a relationship perspective. Relationship perspective is in the paper referring to the client firm and the IS supplier firm and the key actors working in these both firms (cf. Lacity & Willcocks, 2000). To exemplify, key actors involve senior business managers, senior IT managers and IT staff. Earlier research reports the significance of the relationship perspective when studying the IS outsourcing process, and in particular when studying the successfulness of this process (Lacity & Willcocks, 2000; Koh, Ang, & Straub, 2004). Furthermore, the IS outsourcing process, and in particular what contributes to its successfulness, has been given scant attention and is therefore a justified phenomenon to study (Cullen, Seddon, & Willcocks, 2005a).

The IS outsourcing process is constituted of different phases (Lacity & Willcocks, 2000). Specific activities, key actors and expected outcomes characterize each phase. This research study is delimited to only include the stage of the IS outsourcing process referred to as the post-contract stage (Lacity & Willcocks, 2000). The post-contract stage is sometimes also referred to as the implementation stage of the IS outsourcing process (Pei, Zhen-Xiang, & Chun-Ping, 2007). The post-contract stage of the IS outsourcing process is focused in this research study since it is during this stage the IS outsourcing relationship evolves and takes shape (Willcocks & Kern, 1998). Since the IS outsourcing process will be studied from a relationship perspective the focus on the post-contract stage seems reasonable. Although the focus on the post-contract stage, the process will be referred to as the IS outsourcing process in the paper.

Purpose and outline of the paper

This research study contributes to the explanation of the successful outcome of the post-contract stage of the IS outsourcing process by using a relationship perspective. The research follows the conclusion provided by Klepper (1995), who found that IS outsourcing advantageously should be studied through a combination of theoretical fields. The combination of several theories increases the possibility to obtain a better understanding of the dimensions by which the IS outsourcing process evolves. The successful outcome of the IS outsourcing process is therefore studied with an emphasis on three different theoretical fields: Information Systems, industrial marketing and IS outsourcing. The domains of knowledge are in particular the IS life cycle model (Andersen, 1994), the interaction

approach (Håkansson, 1982) and the comprehensive framework of the IS outsourcing relationship (Kern & Willcocks, 2001).

As a result of emphasising the IS outsourcing process the outsourced activities of interest are IS activities, such as for example systems analysis and systems design, construction and implementation. Consequently, it becomes important to incorporate theories of the IS life cycle for the purpose of studying IS outsourcing processes. The result of an introductory review of possible relationship theories for studying the IS outsourcing relationship is the decision to apply the interaction approach. The motivation for including the theoretical field of industrial marketing for studying the client–IS supplier relationship is the absence of relationship theories within the field of IS (e.g. Kern, 1999). Theories of IS work, that is development and maintenance of IS (Nilsson, 1995), are above all emphasising the actor perspective. The interaction approach is described as a flexible and general approach for studying interorganisational relationships (Kern & Willcocks, 2002). Furthermore, the interaction approach emphasises both the organisational and individual level for describing and explaining the exchanges between involved key actors, which has been found valuable when studying the IS outsourcing relationship (Kern & Willcocks, 2001). To ensure that the research is accumulative, prior research on IS outsourcing is moreover included in the research study. The primary reason for including prior IS outsourcing research concerns the identification of determinants for reaching a high degree of IS outsourcing success. In turn the identification of determinants of success contributes to the understanding of the successful outcome of the IS outsourcing process.

Through the application of several theories, a more compelling description of what contributes to the successful outcome of the post-contract stage of the IS outsourcing process can be reached (Kern, 1999). *The purpose of the paper is to identify dimensions for describing and explaining the successful outcome of the IS outsourcing process.*

This first section of the paper introduced the research study and the purpose of the paper. The next section will provide a presentation of key terms used and definitions. Thereafter the methodology and the research process are discussed, followed by a more throughout presentation of the IS outsourcing relationship perspective used in the paper. The three different knowledge domains, derived from different theoretical fields, are presented with an emphasis on dimensions for describing and explaining the successful outcome of the IS outsourcing process. The identified dimensions are thereafter summarized and presented. A modified version of the interaction approach, adjusted to the IS outsourcing relationship, is proposed as part of the contributions of the paper. Finally, reflections on future research are provided.

Key terms and IS outsourcing relationship perspective

This section gives an overview of key terms and their definitions used in the paper. The terms presented are *IS outsourcing process*, *IS outsourcing relationship* and *successful outcome*. The *IS outsourcing relationship perspective* applied in this research study is also presented and discussed in this section.

IS outsourcing process

The phenomenon of interest in the paper is the IS outsourcing process. The term emanates from the term IS outsourcing and consequently both IS outsourcing and IS outsourcing process are presented with a definition below.

IS outsourcing is mainly used as a generic term, that is the term does not specify where the IS supplier is graphically located in relation to the client (e.g. Gonzales, Gasco, & Llopis, 2006a). The definition of IS outsourcing used in the paper is (Bergkvist & Fredriksson, 2008): *IS outsourcing is a joint decision to sign a contract which stipulates that the IS supplier should perform IS activities for the client over an agreed time period, irrespective of where the IS supplier is located.*

A process is a structured, measured set of activities designed to produce a specified output (Mårtensson & Steneskog, 1996). From a business view, the process represents how a firm does its work: “the set of activities it pursues to accomplish a particular objective for a particular customer, either internal or external” (Davenport, 2005, p. 102).

Drawing on the definition of a process given by Davenport (2005), the IS outsourcing process is in this paper defined as: *The set of IS activities to be performed to reach a particular outcome for both the client and the IS supplier.*

IS outsourcing relationship

The definition of IS outsourcing makes it clear that IS outsourcing is realized through an interorganisational relationship. This since the relationship includes at least two separate and distinct firms: the client and the IS supplier. According to Håkansson and Snehota (1997) it is difficult to define what really constitutes a relationship. They provide however a definition of the relationship viewed as a “mutually oriented interaction between two reciprocally committed parties” (Håkansson & Snehota, 1997, p. 25).

Goles and Chin (2005, p. 49) provide a descriptive definition of the IS outsourcing relationship that highlight the contractual agreement and the interdependence between the client and the IS supplier: “An ongoing, long-term linkage between an outsourcing vendor and customer arising from a contractual agreement to provide one or more comprehensive IS activities, processes, or services with the understanding that the benefits attained by each firm are at least in part dependent on the other.”

Drawing on the definitions provided by Håkansson and Snehota (1997) and Goles and Chin (2005) the IS outsourcing relationship is in the paper defined as: *An ongoing commitment between a client and an IS supplier, building upon a contractual agreement, with the aim to establish exchanges of IS activities, which will benefit both the client and the IS supplier through mutually dependent interactions.*

Successful outcome

The successful outcome of the IS outsourcing process is in this research paper studied from a relationship perspective. The client–IS supplier relationship is preferable a cooperative relationship involving different areas of the firms, such as the IT department and different business groups. A cooperative relationship increases mutual understanding of business goals and facilitates information sharing (Han, Lee, & Seo, 2008). Consequently, the definition of the term successful outcome has to regard key actors working at different areas in the firm. The importance of involving different key actors is a result of that key actors may regard the successful outcome differently dependent on their daily work activities and when during the IS outsourcing process they are asked (cf. Markus et al., 2000). Lee and Kim (1999) developed an indicator of IS outsourcing success based on participants’ perceptions of whether the outcome of their IS outsourcing decisions met their expectations.

From the description above the following dimensions describe how the term successful outcome is assessed in this research study:

- key actors’ degree of satisfaction with the performance of the IS outsourcing process
- to what degree key actors’ expectations of the quality of the outsourced IS activity are met
- key actors’ degree of satisfaction with the IS outsourcing relationship
- to what degree key actors’ expectations of business performance improvement are met

These dimensions are broad ranging but found as sufficient for guiding the identification of dimensions for describing and explaining the successful outcome of the IS outsourcing process.

IS outsourcing relationship perspective

During the performance of the IS outsourcing process different key actors are involved. The key actors are part of the client and the IS supplier firms, which in the paper are represented by three different areas: strategic area, process area and IS area (see Figure 1) (Österle, 1995). Firms that continually focus and improve the interactions between these three areas establish a bound, which may result in the acquiring of distinctive and competitive competence (Nilsson, 2001). The importance of including different business areas is particularly due to that IS activities are intertwined in more or less all of a firm's business processes (Feeny & Willcocks, 1998; Dibbern et al., 2004). Furthermore, through interactions that involve key actors from the three areas the expectation is to reach mutual understanding about IS outsourcing (cf. Kwon & Zmud, 1987).

Through the discussion above, it becomes motivated to view the firm as constituted of three different areas, as illustrated in Figure 1, when studying the client firm and the IS supplier firm and their interactions. The two-way arrows in Figure 1 illustrate possible intra-firm and inter-firm interactions in the client–IS supplier relationship.

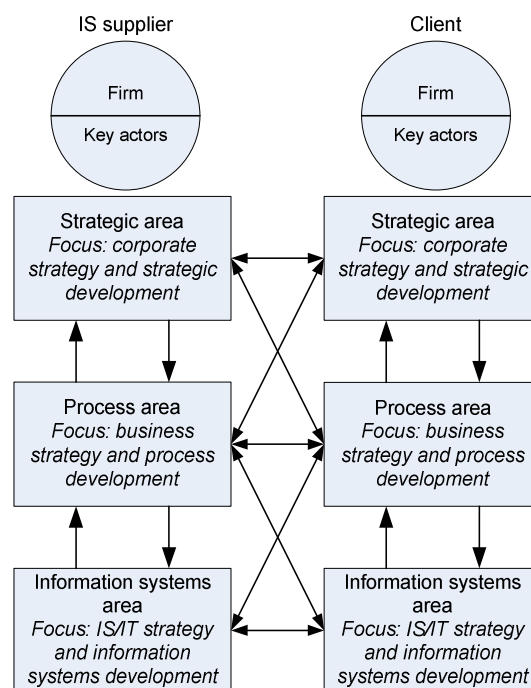


Figure 1: Firm areas and key actors' possible interactions (adaptation of Österle, 1995, p. 30; Tolis & Nilsson, 1996, p. 4)

The *strategic* area of the firm concerns the firm's position in the market and its key decisions (Österle, 1995). The corporate strategy and strategic development focus the firm's relations with different actors, such as for example customers, clients, suppliers and business partners, in the market environment. The aim with strategic development is to focus on corporate strategies to improve the relations (Henderson & Venkatraman, 1992; Tolis & Nilsson, 1996). The *process* area concerns the implementation of the corporate strategy by specifying the firm structure and deriving outputs, flows, computer support and management tools (Österle, 1995). The business strategy and process development is about designing new and better workflow between different business processes in the firm. The goal is to achieve more firm-specific comparative advantages and efficient business processes (Henderson & Venkatraman, 1992). The *Information Systems* area concerns the implementation of the process design. This is partly conducted by delivering guidelines with

emphasis on information, data and IS (Österle, 1995). The IS/IT strategy and Information Systems Development (ISD) focus on efficient allocation of resources and enablers to achieve professional business processes.

The IS outsourcing relationship perspective in this research study can be summarized as including:

- the client firm and the IS supplier firm
- key actors working at the strategic, process and IS area of the client firm and the IS supplier firm
- possible intra-firm and inter-firm interactions between the key actors

Methodology and research process

The realization of this research study builds upon a literature review study of prior research. The literature review creates a firm foundation for advancing knowledge within the area of IS outsourcing and uncovers the knowledge gap where research is needed. Literature reviews are primarily intended for researchers within a particular field but may also be of interest for practitioners and researchers in other fields (Chen & Hirschheim, 2004). It has been argued that literature reviews should be concentrating on a specific topic rather than on a small sample of journals, specific research methods, geographic regions or researchers (Webster & Watson, 2002). The literature review in this paper follows this recommendation and has been guided by the parameters describing the research study rather than focusing on a sample of journals (see Figure 2).

Phenomenon studied:	The IS outsourcing process		
Theoretical fields:	Information Systems	Industrial marketing	IS outsourcing
Level of analysis:	The client firm and its key actors	The IS supplier firm and its key actors	
Unit of analysis:	The client–IS supplier relationship		
Dependent variable:	Successful outcome from a relationship perspective		
Independent variable:	Dimensions for describing and explaining the successful outcome of the IS outsourcing process		

Figure 2: Research parameters of guidance of the literature review

Motivation of the use of the theoretical field of IS

The *IS* in IS outsourcing entails that the outsourced activities of interest are IS activities. IS activities concern activities belonging to the phases of the IS life cycle model (Andersen, 1994; the author's translation): change analysis, business and systems analysis, systems design, construction, implementation, operation and maintenance management. As a result of the delimitation to IS outsourcing it becomes important to incorporate IS theories to identify dimensions for describing and explaining the successful outcome of the IS outsourcing process.

Motivation of the use of the theoretical field of industrial marketing

Several theories have been used to study IS outsourcing and some of the more popular ones are transaction cost theory (TC theory) (e.g. Cheon, Grover, & Teng, 1995; Dibbern, 2004), agency theory (e.g. Cheon, Grover, & Teng, 1995) and resource-based theory (e.g. Grover, Cheon, & Teng, 1994; Goles, 2006). The theories include both strengths and weaknesses for describing and explaining the successful outcome of the IS outsourcing process. However from the client–IS supplier relationship perspective, they are perceived as too weak to constitute the theoretical frame. The TC theory uses the firm and the exchange of transactions as the units of analysis, whereas this

research focuses the interorganisational relationship between the client and the IS supplier. The TC theory has furthermore been well used in IS outsourcing research to explain the decision of IS outsourcing, which also is the case of agency theory and resource-based theory. Since this research study builds upon the desire to contribute to the knowledge gap in IS outsourcing research, that is the use of the relationship perspective to study the successful outcome of the IS outsourcing process, other theories have been found more applicable. Theories, such as relationship exchange theory (RET) and psychological contract theory, which are using the relationship as the unit of analysis, provide more valuable insight for studying the IS outsourcing relationship (Koh, Ang, & Straub, 2004; Goles & Chin, 2005). Moreover, industrial marketing theories focus, in primary, the interorganisational relationship (Dwyer, Schurr, & Oh, 1987). To exemplify, the interaction approach includes several contributions for describing the IS outsourcing relationship (Kern & Willcocks, 2002). The strength of RET is its focus on the interorganisational relationship and the exchanges that constitute this relationship. One of its weaknesses is that the theory does not highlight the environment or the context in which the relationship takes place. The environment, embracing both internal firm characteristics and external market characteristics, has been shown important to be able to describe and explain the successful outcome of the IS outsourcing relationship (Kern & Willcocks, 2001). Psychological contract theory emphasises the individuals' beliefs, expectations and mutual obligations in contractual relationships (Koh, Ang, & Straub, 2004). The theory has been questioned according to its suitability to describe and explain IS outsourcing. The underlying motive is that psychological contract theory uses the level of individuals as analysis, whereas IS outsourcing is an organisational level phenomenon (Koh, Ang, & Straub, 2004). My belief is that both organisational and individual dimensions need to be regarded to increase the understanding of what influences the successful outcome of the IS outsourcing process.

The result of the review of possible theories for describing and explaining the IS outsourcing relationship is the decision to apply the interaction approach. The interaction approach is a rather flexible and general approach for studying interorganisational relationships (Kern & Willcocks, 2002). With flexible is meant that it incorporates several conditions for describing and explaining interorganisational relationships. Furthermore, the interaction approach emphasises both the organisational and individual level for describing and explaining the exchanges between involved key actors, which has been found valuable when studying IS outsourcing relationships (Kern & Willcocks, 2001). When comparing the general description of the interaction approach with the definition of the IS outsourcing relationship used in this paper, similarities are found. Both the interaction approach and the definition used highlight the linkage between the involved key actors through an agreement that primarily concerns the exchange of, for example, products, activities or services. The agreement is, from an IS outsourcing point of view, described as a contractual agreement, whereas industrial relationship theories use the term commitment to describe the linkage between the involved parties (Dwyer, Schurr, & Oh, 1987). When complementary goals exist, the more anxious the key actors are to invest in the relationship, which in turn leads to a higher degree of commitment (Dwyer, Schurr, & Oh, 1987; Lacity & Willcocks, 2000). The interaction approach is found to provide valuable contributions for incorporating the relationship perspective in the description and explanation of the successful outcome of the IS outsourcing process.

Motivation of the use of the theoretical field of IS outsourcing

To make sure that the research is accumulative, a review of prior research focusing the success of IS outsourcing from a relationship perspective has been conducted. The review has emphasised the identification of dimensions for describing and explaining the successful outcome of the IS outsourcing process. The reason for this is twofold. Firstly, prior research on IS outsourcing contributes with findings concerning the performance of the IS outsourcing process and determinants for its success. Secondly, by reviewing empirical case study research on IS outsourcing, secondary empirical data is regarded in the paper. This is perceived as valuable since the research study do not contribute with any empirical data of its own.

The performance of the literature review study

The theoretical data sources used to capture literature are scientific publications, digital libraries, articles, popular science articles, books and doctoral dissertations. The digital libraries used were chosen according to earlier user experiences and in relation to IS and interorganisational relationships. The digital libraries selected are Inspec, Science Direct, Business Source Premier, Emerald and Libris.

The literature review study has focused the purpose of the paper and in particular the dependent variable: successful outcome from a relationship perspective.

The selection of theoretical data within the theoretical field of IS

To identify dimensions for describing and explaining the successful outcome of the IS outsourcing process I have chosen to delimit the IS literature regarded in the paper. The IS literature included concerns models and methodologies of the IS life cycle. This is a natural choice since the paper is delimited to only include outsourcing of IS activities. A preliminary selection was done by using the digital library Libris, however the literature included is also a result of recommendations from research colleagues. The literature chosen is well used in different contexts, such as academic programs, and is written by prominent persons within the IS discipline (cf. e.g. Gonzales, Gasco, & Llopis, 2006b).

The selection of theoretical data for describing the interorganisational relationship

Interorganisational relationship theories have primarily been collected from the research conducted by the Industrial Marketing and Purchasing (IMP) Group. The research publication edited by Håkansson (1982), which develops and presents the interaction approach, has been used as the scientific base for describing the interorganisational relationship. Furthermore, scientific articles have been collected from www.impgroup.org and the IMP journal (www.impjournal.org). The collection of articles was conducted through a search process that included search commands such as IS outsourcing, relationships, interaction approach, dyadic relationships, interorganisational relationships and successful relationships. Furthermore, articles relevant to the purpose of the paper were identified by reviewing references in the captured articles.

The selection of theoretical data for describing Information Systems outsourcing

Literature on IS outsourcing and IS outsourcing relationship frameworks have been collected through digital library searches, but also through recommendations from colleagues and by reviewing references in articles. The emphasis on frameworks is a result of their ability to communicate research contributions comprehensively and sometimes also graphically.

Firstly, an exploratory search was conducted to discern the patterns of publications on IS outsourcing frameworks. This search revealed that one of the first IS outsourcing decisions was made in the beginning of 1960 (Gonzales, Gasco, & Llopis, 2005). This resulted in that the searches conducted by the use of digital libraries were limited to show scientific work published between 1960 (when applicable, for example searches in Inspec are restricted to searches from 1969 until present) and 2007. The review unfolded that most literature on IS outsourcing has been published after the Kodak decision, that is after 1989, which probably is a consequence of that the decision has been regarded as the wake-up call for IS outsourcing.

The searches were inspired by the search conducted by Loh and Venkatraman (1992) and the following search commands were used:

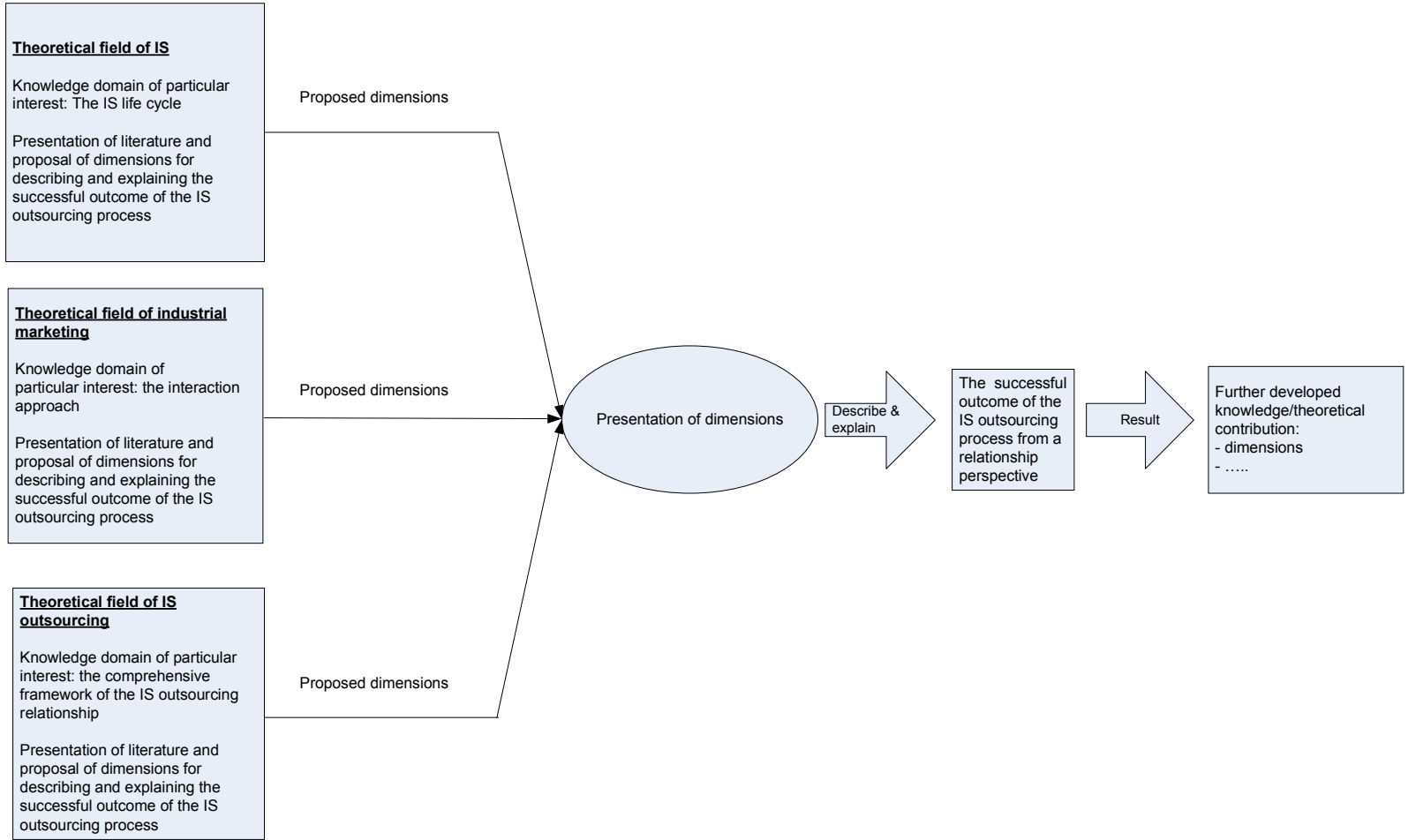
outsourcing AND (information OR systems OR development) AND xxx within (wn)
Subject/Title/Abstract

where I respectively used activity/activities, cooperation, dimension(s), framework(s), process, relationship(s), relationship perspective, success, successful, successful relationships for xxx.

To exemplify, the search on **outsourcing AND (information OR systems OR development) AND relationship** resulted in 239 and 57 hits in Inspec and Science Direct respectively, out of which 231 hits were journal articles. When going through the literature it was found that some articles did not fit into the purpose of the paper. Of the remaining literature, the majority of hits were reviewed.

The research process of the paper is summarized in Figure 3. The three boxes in the left of Figure 3 represent the three theoretical fields included in the literature review study for the identification of dimensions. Each literature review has contributed with proposed dimensions for describing and explaining the successful outcome of the IS outsourcing process. The proposed dimensions have been reviewed according to their identified overlaps. As a result of reducing the identified overlaps, dimensions are presented for describing and explaining the successful outcome of the IS outsourcing process from a relationship perspective. These dimensions are part of the theoretical contributions of the research study.

Figure 3: Graphical description of the research process



Presentation of the theoretical frame and proposed dimensions

The presentation of the reviewed literature will focus the three theoretical fields and the domains of knowledge interpreted as providing valuable dimensions for describing and explaining the successful outcome of the IS outsourcing process. The dimensions presented are referred to as proposed dimensions and will in the next section of the paper be compared, resulting in the presentation of identified dimensions for describing and explaining the successful outcome of the IS outsourcing process.

The IS life cycle model

The theoretical field of IS is in the paper represented through the IS life cycle model (Andersen, 1994). The reason for choosing the life cycle model is that it is found to be a generic model that incorporates several steps to be addressed to reach a high degree of IS use. Furthermore, the choice of the IS life cycle model builds upon a review of several models and methodologies of the IS life cycle, such as the ISAC model, the RUP methodology and prototyping. The models and methodologies have been reviewed according to their appropriateness for describing and explaining the successful outcome of the IS outsourcing process.

Andersen (1994) provides the IS life cycle model which consists of phases/areas of problems (see Figure 4). The phases of Business and systems analysis, Systems design, Construction and Implementation constitute ISD.

--Information Systems Development--									
--Systems engineering--									
IS phase	Change Analysis	Business and systems analysis		Systems design		Construction	Implementation	Operation & Maintenance management	Phasing out
		Business analysis	Systems analysis	Design of technical solution	Design of adjustment of technical solution				
Problem	Problems and opportunities of firm	IS support to firm	Content of IS	Choice of technical solution	Adjust technical solution to existing	Coding of IS	Start using IS	Maintenance and improvements of IS	Phasing out of IS
Activities to be performed	describe present and desired situation need for changes alternative solutions decide upon further development work	business analyse examine how the IS can facilitate firm work	judge and decide upon the content of the IS	judge and decide upon technical solution	choose equipment and judge and decide upon practical solution	develop software programs and new manual routines	start using new programs and manual routines	perform adjustments judge the need of improvements operation	secure information
Output	chosen actions for development	specification of requirements		practicable IS		finished IS	implemented IS	Operated and maintained IS	Expired IS

Figure 4: The main parts of the IS life cycle model (adaptation of Andersen, 1994, pp. 41-47)

Two circumstances are worth highlighting. The first circumstance is about the IS life cycle model and its ability to comprehensively describe the life of an IS, which is evaluated as positively contributing to the purpose of the paper. Consequently, I have chosen to include the life cycle model because it provides a comprehensive view of the life of an IS and highlight different conditions interpreted as important to consider during outsourcing of different IS activities. The second circumstance unfolded was that the IS life cycle model has been developed using an actor perspective. The IS activities and problems addressed in the model are above all emphasising the client and the role it plays during the IS life cycle. This is considered as a negative circumstance in comparison with the purpose, which emphasises the use of the relationship perspective to describe and explain the successful outcome of the IS outsourcing process.

To compensate for the actor perspective, I have chosen to include the method-in-action framework, which main philosophy is that the use of a formalised methodology depends on the development context, the developers, the type of IS and the roles of methodology (Fitzgerald, Russo, & Stolterman, 2002). In comparison with other models and methodologies of the IS life cycle, the

method-in-action framework is believed to provide dimensions that are considered to be important, both during the IS outsourcing process and for the successful outcome of the IS outsourcing process, from a relationship perspective. To exemplify, the significance of the development context becomes, in particular, manifested during the IS outsourcing process. With development context is meant both the place where the developed IS will be implemented and used and the environment within which the development process will take place (Fitzgerald, Russo, & Stolterman, 2002). The development context is of most interest since the developers will be working in different geographical locations. Whether the development occurs domestically or globally different cultures follow that need to be considered. A culture influences what is and what is not possible to do in a specific context and need to be understood to be able to be successful in IS outsourcing (Fitzgerald, Russo, & Stolterman, 2002).

From the presentation above, it becomes obvious that conditions concerning the IS activity are significant to consider in the IS outsourcing process. The nature of the IS activity, that is its degree of structuredness, influences the performance of the IS outsourcing process and the need for structured guidelines, such as the use of an IS methodology (Prikladnicki, Audy, & Evaristo, 2003). The more unstructured and complex IS activity, such as for example requirement analysis and IS interface design, the more management is required. Furthermore, environmental conditions, such as the development context, becomes important to regard during the IS outsourcing process from an IS life cycle perspective.

The following dimensions are proposed for describing and explaining the successful outcome of the IS outsourcing process:

- The activity-related dimension
- The environment dimension
- The management dimension

The interaction approach

The interaction approach has been applied to a wide range of different interorganisational exchange relationships and has enriched the industrial marketing and business literature with useful insights (Ford, 1990). The interaction approach has for example been used for exploring interorganisational relationships in IT environments (e.g. Leek, Turnbull, & Naude, 2000). Furthermore, Kern and Willcocks (2002) used it as a guiding approach to describe the client–IS supplier relationship in IS outsourcing.

The interactions between the client and the IS supplier are of great importance during the IS outsourcing process. Interaction is a term used to illustrate that the business is carried out as a two-way communication between firms and in that way influence each other (Håkansson, 1982). Four main groups of variables describe and influence the interaction:

- the elements of the interaction process
- the parties involved (both organisations and individuals)
- the environment within which the interaction takes place
- the atmosphere affecting and affected by the interaction

The interaction process is constituted of four exchange episodes: product and/or service exchange, information exchange, financial exchange, and social exchange. The product/service exchange is often the core of the exchange. Consequently, the product or service involved is likely to have a significant influence on the relationship as a whole. In similarity, the IS activity included in the contractual agreement between client and IS supplier has been found to influence the IS outsourcing relationship (Hirschheim, 2006). The tendency is that structured IS activities, often in form of software maintenance, coding and testing, are to a high degree contracted with both domestically and

globally located IS-suppliers whilst knowledge intensive work is kept in-house (Hirschheim, 2006). The degree of structuredness of the IS activity determines the suitability for outsourcing and furthermore outlines how the client–IS-supplier relationship and the IS outsourcing process have to be managed (Cullen, Seddon, & Willcocks, 2005b).

Of the four exchange episodes, social exchange episodes are the ones that are critical to build up a long-term relationship (Håkansson, 1982). Social exchanges help to reduce the uncertainties between the parties, particularly when there exist spatial or cultural distance. Through social exchanges trust, understanding, flexibility and integrity of the long-term relationship are achieved (Håkansson, 1982; Kern & Willcocks, 2002). Through routinization of the social exchange episodes, expectations of each party become clear and eventually institutionalised. *Institutionalisation* of exchange episodes entails that the expectations are not questioned by either party, and contact patterns arise, that is people are filling different roles by nature (Håkansson, 1982). Moving quickly to the institutionalisation of operations and processes has been found important in the IS outsourcing relationship (Kern & Willcocks, 2002). In the IS outsourcing relationship institutionalisation concerns cultural closeness, shared ways of problem solving, similar values and close personal chemistry. Another aspect of the long-term relationship is the *adaptations*, for example, in product, financial arrangements, information routines and social relations (Håkansson, 1982). The more institutionalised the exchange episodes become and the higher degree of relationship adaptation, the more likely it would be that the IS outsourcing process involves more complex and knowledge-demanded IS activities.

The firm strategies of the interacting parties are of most importance. IS outsourcing should be part of an overall strategic solution that includes business, process and IS objectives. The corporate strategy, the business strategy and the IT/IS strategy need to be aligned, which in turn stimulates interactions between key actors at different areas of the firms (Henderson & Venkatraman, 1999). To benefit from IS outsourcing, there need to be continuous interactions between the three different strategy areas of the firm. The interaction approach describes the individuals of the interacting firms as bringing varied personalities, experience and motivations. Consequently, these individual characteristics will influence the social exchanges and are therefore suggested to be further described in the interaction approach to be able to focus on the management capabilities that need to present (Kern & Willcocks, 2002).

In similarity with theories in the field of IS and IS outsourcing (Kern & Willcocks, 2001; Fitzgerald, Russo, & Stolterman, 2002), the interaction approach highlights the need to consider the environment surrounding the interorganisational relationship. The interaction process cannot be analysed in isolation but has to be considered in a wider context, including several *environmental* aspects, such as the market structure. Environmental aspects have also been found relevant in the exploration of the IS outsourcing relationship (Kern & Willcocks, 2001). Examples of environmental aspects in IS outsourcing are legislative, competitive, technological, market dynamism and economical. These aspects have been found to influence business operations, the involved firms and the IS outsourcing process. The IS outsourcing process is furthermore influenced by other environmental aspects, such as the technical infrastructure.

Finally, the working *atmosphere* influences the interorganisational relationship. The atmosphere can be described in terms of the power-dependence relationship between the involved firms, the state of conflict or co-operation and overall closeness or distance of the relationship, as well as by the firms' mutual expectations. The atmosphere is considered as a group of intervening variables, which is a product of the specific relationship (Håkansson, 1982). The atmosphere evolves through specific exchange episodes and long-term exchange experiences with a partner. The conditions dependence, power, conflict and cooperation are in IS outsourcing research referred to as behavioural conditions (Kern & Willcocks, 2001). The dependency condition means to which degree participants depend on

each other to achieve own objectives. The more cooperative the relationship becomes (that is high degree of trust and commitment) the more mutually dependent the key actors become (Morgan & Hunt, 1994). The condition of power represents the perceived degree of control and influence, while conflict is about negative perceptions about the exchange relationship. Effective communication and exchanges, leading to satisfactory outcomes, are together with the undertaking of complementary activities forming the cooperation element.

In exchange relationships, trust and commitment are two key conditions (Morgan & Hunt, 1994). The conditions are expressed as mutually related to each other, that is commitment builds trust and vice versa. Trust is the belief that a party's word or promise is reliable and that a party will fulfil its obligations in an exchange relationship (Dwyer, Schurr, & Oh, 1987). The perceived outcomes of trust include the belief that the other part of the exchange relationship will perform actions that will result in positive outcomes for the firm as well as not performing unexpected actions that will result in negative outcomes (Morgan & Hunt, 1994). Trust and its importance is also stressed in the IS outsourcing literature and is found to depend on the chemistry between the key actors constituting the interface between the client and IS supplier (Willcocks & Kern, 1998).

Commitment concerns the parties' shared values and governance structures, and their joint investments in the interorganisational relationship. The more committed the parties are to each other the higher is the degree of interdependence (Dwyer, Schurr, & Oh, 1987). When both commitment and trust are present, the exchange relationship becomes cooperative, which promotes efficiency, productivity and effectiveness (Morgan & Hunt, 1994). Cooperative relationships refer to situations in which the parties work together to achieve mutual goals, which has been found to promote the success of the interorganisational relationship. To be successful, both the client and the IS supplier need to invest time, knowledge and resources in the relationship (Willcocks & Kern, 1998). In a recent study, information sharing, communication quality and collaborative participation were found to be significantly related to trust and commitment (Han, Lee, & Seo, 2008). Trust and commitment were, in turn, shown as positively influencing IS outsourcing success.

The interaction approach highlights the importance of the interaction process in interorganisational relationships. From the perspective of IS outsourcing exchanges, the promoting of quick institutionalisation and adaptation of processes become significant. Furthermore, conditions such as trust and commitment have been found positively influencing the successful outcome of IS outsourcing. Environmental aspects as well as the atmosphere of the IS outsourcing relationship are found valuable for describing and explaining the successful outcome of the IS outsourcing process.

The following dimensions are proposed for describing and explaining the successful outcome of the IS outsourcing process:

- The atmosphere dimension
- The environment dimension
- The interaction dimension

A comprehensive framework of the IS outsourcing relationship

Several conditions in the IS outsourcing literature are found to influence the successful outcome of the IS outsourcing process, such as the management structure and communication richness (Cullen, Seddon, & Willcocks, 2005a; Gonzales, Gasco, & Llopis, 2005). However, the theoretical field of IS outsourcing has been delimited to include research conducted by Thomas Kern and Leslie P. Willcocks. Their contributed research is found to provide insights and meaningful dimensions in relation to the IS outsourcing relationship. Furthermore, their comprehensive framework of the IS outsourcing relationship provides dimensions that can be used to complement the description of the interorganisational relationship presented through the interaction approach (Kern & Willcocks,

2001). As a result, dimensions specific for the IS outsourcing relationship become regarded from both an industrial marketing and IS outsourcing perspective.

Their conceptual framework incorporates the significance of studying relationships longitudinally by integrating the effect of time (Kern & Willcocks, 2001). The effect of time is perceived as essential to imply mutual value maximisation of the relationship. In addition, a time-line allows an analysis from the origin of the IS outsourcing process to its operationalisation. Through a focus on time, the possibility to study the institutionalisation of the relationship increases. Further, Kern and Willcocks (2001) express that time, process, changing contexts, intents, relationship dimensions and key actors are vital elements in the IS outsourcing process, and require to be studied longitudinally.

The framework represents six different dimensions for comprehensively describing and explaining the IS outsourcing relationship: behaviour, contract, efficiency outcome, intent, interactions and structure. By including these dimensions they address two of their found weaknesses of the interaction approach (Kern & Willcocks, 2002): the criticality of the contract and the management structure. The *behaviour* dimension is more or less corresponding with the atmosphere dimension in the interaction approach (Kern & Willcocks, 2001).

The *contract* is often expressed as the foundation of IS outsourcing (Kern, 1999). The contract stipulates, for example, service levels, financial exchanges and control mechanisms and is often regarded as fundamental to reach a successful outcome of the IS outsourcing process (Kern & Willcocks, 2000; Goles & Chin, 2005). Consequently, it has been stipulated that any IS outsourcing relationship framework needs to regard the relevance of the contract (Kern, 1999).

Efficiency outcomes is perceived as the performance of the IS outsourcing relationship. Transaction costs, uncertainty reduction, customisation and satisfaction are element in the efficiency outcomes dimension (Kern & Willcocks, 2001). Transactions costs are dealing with the costs of setting up and managing the IS outsourcing relationship. The client's perception about change and ambiguity in the environment, the execution of tasks and the relationship with the IS supplier constitute the uncertainty element. The degree of customisation is about the degree services, applications, organisational structures and process are made specific for the client. Finally, satisfaction is about the degree of satisfaction with the relationship and the IS outsourcing performance.

The *intent* dimension constitutes the input to the IS outsourcing process and is a result of the IS outsourcing decision. Since this research study is focusing the post-contract stage of the IS outsourcing process, the intent dimension will not be proposed as a dimension for describing and explaining the successful outcome of the IS outsourcing process. Although the delimitation of not including the intent dimension, I am aware of that activities conducted during this stage of the IS outsourcing process may bring consequences, both positive and negative, for subsequent parts of the IS outsourcing process.

In similarity with the interaction approach, exchanges and interactions are argued to be the focal events in an IS outsourcing relationship (Kern & Willcocks, 2000). The *interaction* dimension is consequently a crucial dimension that needs to be considered for describing and explaining the successful outcome of the IS outsourcing process.

The *structure* dimension refers the specific IS outsourcing relationship and can be compared with the interacting parties' organisational size and structure in the interaction approach. The structure dimension includes conditions such as firm size, complexity of exchanges, management structure and stability (Kern & Willcocks, 2001). The management structure of the IS outsourcing relationship is vital. To be able to manage the IS outsourcing relationship support is needed from senior business management. The support should be expressed through the initiation of change, explanation of

reasons for IS outsourcing and the promotion of appropriate management structures and resources. Management structure refers to the way a team or a firm is organised and how management is perceived, whether it is decentralized or centralized and whether it emphasises line or staff. The management structure needs to be adjusted to suit the requirements of the actual case of IS outsourcing. To be able to this, the engagement of both the client and the IS supplier is significant.

Most of the dimensions included in the comprehensive framework of the IS outsourcing relationship are also found to be valuable for describing and explaining the successful outcome of the IS outsourcing process. Furthermore, overlaps and completions in relation to the interaction approach are emphasised, resulting in a more all-embracing frame for describing the relationship perspective in this research study.

The following dimensions are proposed for describing and explaining the successful outcome of the IS outsourcing process from a relationship perspective:

- The contract dimension
- The efficiency outcome dimension
- The interaction dimension
- The structure dimension

Presentation of identified dimension

Through the review of three different theoretical fields, dimensions have been proposed for describing and explaining the successful outcome of the IS outsourcing process. From the theoretical field of IS the activity-related dimension, the environment dimension and the management dimension were proposed. The review of the interaction approach contributed with the atmosphere dimension, the environment dimension and the interaction dimension. Finally, the comprehensive framework of the IS outsourcing relationship revealed the dimensions of contract, efficiency outcome, interaction and structure as important to integrate in the description and explanation of the successful outcome of the IS outsourcing process.

The inclusion of several theories entailed the possibility to compensate for weaknesses of one theory through the strengths of another theory. The comprehensive framework of the IS outsourcing relationship made it possible to incorporate what has been found as a shortage of the interaction approach: the contract (Kern & Willcocks, 2002). IS theories contributed on the other hand with the management dimension, which also has been found to be lacking in the interaction approach (Kern & Willcocks, 2002; Han, Lee, & Seo, 2008). The use of three distinct theories has however limited the amount of possibilities for studying the IS outsourcing process (Walsham, 1993). By limiting the theoretical frame to IS, industrial marketing and IS outsourcing the provided dimensions are restricted to these theories. The involvement of other theories could perhaps have resulted in other dimensions for describing and explaining the successful outcome of the IS outsourcing process.

There exist some overlaps between the proposed dimensions from the three theoretical fields. The environment dimension was, for example, proposed as describing and explaining the successful outcome of the IS outsourcing process in two of the reviewed theoretical fields.

When reducing the overlap the following dimensions have been identified for describing and explaining the successful outcome of the IS outsourcing process:

- the activity-related dimension
- the atmosphere dimension
- the contract dimension
- the efficiency outcome dimension
- the environment dimension

- the interaction dimension
- the management dimension
- the structure dimension

Concluding discussion and contributions

Although the interaction approach is found to be a valuable approach to describe the relationship perspective in IS outsourcing, it is significant to underline some of its limitations and how they have been addressed in this research study. The interaction approach views the client and the IS supplier firms as a whole and does not describe in detail interactions between different areas of these firms. Kern and Willcocks (2002) emphasis the importance of viewing the involved firms as constituting of different areas to be able to focus on the management capabilities that need to present during the IS outsourcing process. This weakness has been addressed in this research study by viewing the client and the IS supplier firms as constituted of three areas as presented in Figure 1. Furthermore, the interaction approach is describing the interorganisational relationship in general and the approach has to be adjusted for the specific case of IS outsourcing. For example, the condition of time, which indicates that long-term institutionalisation and adaptations create long-term relationships, is perceived as important for studying the IS outsourcing relationship (Kern & Willcocks, 2002). The time line provides the opportunity to study the IS outsourcing process and the interorganisational relationship over time. Finally, the management of the interaction process needs to be further emphasised in the interaction approach (Han, Lee, & Seo, 2008). Although the contract specifies regular control meetings, the need for managerial inputs during the IS outsourcing process are crucial.

The exchanges of information and social exchanges of the interaction approach have been commented by Axelsson et al. (2000). They use the term communication and/or communicative acts to denote the exchanges of information and social exchanges. Axelsson et al. (2000) state that a 'piece of information' always is part of a communicative act that brings commitments, responsibilities and purposes. Communication includes in that way both transfer of information and establishment of social relationships. Thus, information exchanges involve social exchanges and vice versa. Consequently, the information and social exchanges are not separated from each other, which is the impression given by the interaction approach.

As a result of the identified limitations of the interaction approach for describing the IS outsourcing relationship and its evolvment, this research study presents a modified version of the interaction approach. The modified version is adjusted according to the presented limitations of the interaction approach and the findings from this research study. The modified version of the interaction approach according to the IS outsourcing relationship is presented in Figure 5. The modifications are constituted of the addition of a time-line, the contract dimension, the efficiency outcome dimension, the management dimension and the view of the client and the supplier firm as being composed of three areas. Bold lines in Figure 5 illustrate the adjustments.

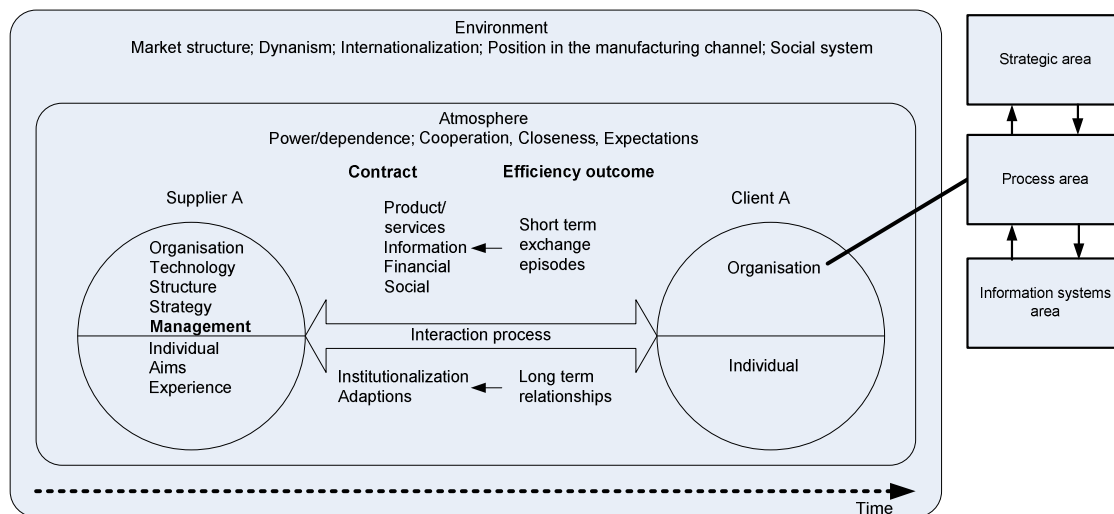


Figure 5: A modified version of the interaction approach adjusted to the IS outsourcing relationship (adaptation of Håkansson, 1982, p. 24)

The dotted bold arrow in Figure 5, which aims to illustrate that the different parts of the interaction approach are not related to time, illustrates the time-line. The time aspect makes it possible to explore how different variables influence or appear at different phases during the evolvement of the interorganisational relationship. Through this, my belief is that a greater understanding of the interorganisational relationship will be achieved. The relation between time and the different parts of the interaction approach will not be further discussed in this research study but is a suggested subject for future research.

My belief is that it is important to split the involved firms into different areas (in Figure 1 referred to as strategic, process and IS). Partly, to emphasis the different key actors working in the firm and partly to emphasis how the key actors are related to the successful outcome of the IS outsourcing process. Firms that continually focus and improve the interactions between the different areas of the firm establish a bound between them, which may result in the acquiring of distinctive and competitive competence. A goal should thereby be to create a good balance between these three firm areas.

The incorporation of the management dimension in Figure 5 is due to the importance of the management of the interorganisational relationship, from the moment it arises and thereafter continually during the interaction process (Kern & Willcocks, 2001; Han, Lee, & Seo, 2008). As a result of the identified dimension of this research study the interaction approach is moreover complemented with the dimension of the contract and the efficiency outcome.

The purpose of the paper is to identify dimensions for describing and explaining the successful outcome of the IS outsourcing process. Through the combination of three different theoretical fields the contribution is eight different dimensions for describing and explaining the successful outcome of the IS outsourcing process from a client–IS supplier relationship perspective. The application of several theoretical fields contributed with the identification of dimensions that together provide a more comprehensive frame for studying the successful outcome of the IS outsourcing process. The reached comprehensiveness would not have been possible if only one or two of the three theoretical fields had been regarded during the literature review study.

The identified dimensions are referred to as activity-related, atmosphere, contract, efficiency outcome, environment, interaction, management and structure. Since the purpose of the paper emphasises the identification of dimensions, but not their relation, the dimensions have not been presented according to a specific structure. One possible way of structuring the dimensions is from an 'outside inside' perspective. According to this perspective the contextual dimensions, which includes the atmosphere and environment, represent the outside perspective of the relationship. The other dimensions are representing the inside perspective, which concerns the specific client–IS supplier relationship.

The eight dimensions contribute with a frame for further exploration of what contributes to the successful outcome of the IS outsourcing process. The dimensions will be used in further research for the categorisation of conditions influencing the successful outcome of the IS outsourcing process. The literature review revealed some of the conditions that are related to the identified dimensions. To exemplify, conditions such as IS activity, standardisation and development context are related to the activity-related dimension. The identification of conditions and their categorisation into dimensions extend the research on the description and explanation of the successful outcome of the IS outsourcing process.

By addressing the purpose, the paper contributes with knowledge that from an academic point of view can be used for the identification of conditions that influence the success of the IS outsourcing process. From a practitioner's point of view the dimensions provide a frame of what needs to be regarded during the IS outsourcing process. The modified version of the interaction approach presented in Figure 5 is moreover believed to be applicable to other IS contexts than IS outsourcing. To exemplify, the ISD process, which involves several different key actors, is believed to benefit from applying the fundamentals of the modified version of the interaction approach (see Figure 5). The new knowledge provided through the research study will furthermore contribute to the possibility of comprehensively describe and explain the successful outcome of the IS outsourcing process.

The view of the client and IS supplier as one entity, as in the interaction approach, is found insufficient. Instead, different key actors are involved in the interaction process, which entail the need for regarding the involved firms as composed of several business areas. The importance of the client and the IS supplier firm and the key actors will be given attention in further research as my belief is that research on the IS outsourcing relationship will provide valuable insights to the explanation of the successful outcome of the IS outsourcing process.

References

- Andersen, E.S. (1994), **Systemutveckling: principer, metoder och tekniker**. Studentlitteratur, Lund (in Swedish).
- Axelsson, K., Goldkuhl, G. and Melin, U. (2000), *Using Business Action Theory for Dyadic Analysis*, presented at the 10th Workshop on Nordic Interorganisational Research, August 18-20, Norwegian University of Science and Technology, Trondheim, Norge.
- Bergkvist, L. and Fredriksson, O. (2008), "Outsourcing Terms - A Literature Review from an ISD Perspective", in: *Proceedings of the 16th European Conference on Information Systems (ECIS 2008)*, (Golden, W., Acton, T., Conboy, K., van der Heijden, H. and Tuunainen, V.K.; Eds.), June 9th-11th, Galway, Ireland, (compact disc), ISBN13: 978-0-9553159-2-3
- Chen, M.J. and Hirschheim, R. (2004), "A Paradigmatic and Methodological Examination of Information Systems Research from 1991 to 2001", **Information Systems Journal**, Vol 14, No 3, 197-235.

- Cheon, M.J., Grover, V. and Teng, J.T.C. (1995), "Theoretical Perspectives on the Outsourcing of Information Systems", **Journal of Information Technology**, Vol 10, No 4, 209-219.
- Cullen, S., Seddon, P.B. and Willcocks, L. (2005a), "Managing Outsourcing: the Lifecycle Imperative", **MIS Quarterly Executive**, Vol 4, No 1, 229-246.
- Cullen, S., Seddon, P.B. and Willcocks, L.P. (2005b), "Information Technology Outsourcing Configuration: Research Into Defining and Designing Outsourcing Arrangements", **Journal of Strategic Information Systems**, Vol 14, No 4, 357-387.
- Davenport, T. (2005), "The Coming Commoditization of Processes", **Harvard Business Review**, Vol 83, No 6, 100-108.
- Davis, G.B., Ein-Dor, P., King, W.R. and Torkezadeh, R. (2006), "IT Offshoring: History, Prospects and Challenges", **Journal of the Association for Information Systems**, Vol 7, No 11, 770-795.
- Dibbern, J. (2004), **Information Age Economy - The Sourcing of Application Software Services**. Physica-Verlag, Heidelberg.
- Dibbern, J., Goles, T., Hirschheim, R. and Jayatilaka, B. (2004), "Information Systems Outsourcing: A Survey and Analysis of the Literature." **The DATA BASE for Advances in Information Systems**, Vol 35, No 4, 6-102.
- Dwyer, F.R., Schurr, P.H. and Oh, S. (1987), "Developing Buyer-Seller Relationships", **Journal of Marketing**, Vol 51, No 2, 11-27.
- Feeny, D. and Willcocks, L.P. (1998), "Core IS Capabilities for Exploiting Information Technology", **Sloan Management Review**, Vol 39, No 3, 9-21.
- Fitzgerald, B., Russo, N.L. and Stolterman, E. (2002), **Information Systems Development: Methods in Action**. McGraw-Hill, London.
- Ford, D. (Ed.) (1990), **Understanding Business Markets: Interaction, Relationships, Networks**. Academic Press, London.
- Goles, T. (2006), "Capabilities for Information Systems Outsourcing Success: Insights from the Resource-based View of the Firm", in Hirschheim, R., Heinzl, A. and Dibbern, J. (Eds.), **Information Systems Outsourcing: Enduring Themes, New Perspectives and Global Challenges**, 2 ed., Springer, Berlin, pp. 347-378.
- Goles, T. and Chin, W.W. (2005), "Information Systems Outsourcing Relationship Factors: Detailed Conceptualization and Initial Evidence", **The DATA BASE for Advances in Information Systems**, Vol 36, No 4, 47-67.
- Gonzales, R., Gasco, J. and Llopis, J. (2005), "Information Systems Outsourcing Success Factors: A Review and Some Results", **Information Management & Computer Security**, Vol 13, No 5, 399-418.
- Gonzales, R., Gasco, J. and Llopis, J. (2006a), "Information Systems Offshore Outsourcing: A Descriptive Analysis", **Industrial Management & Data Systems**, Vol 106, No 9, 1233-1248.
- Gonzales, R., Gasco, J. and Llopis, J. (2006b), "Information Systems Outsourcing: A Literature Analysis", **Information & Management**, Vol 43, No 7, 821-834.
- Grover, V., Cheon, M.J. and Teng, J.T.C. (1994), "A Descriptive Study on the Outsourcing of Information Systems Functions." **Journal of Management Information Systems**, Vol 27, No 1, 33-44.
- Gurung, A. and Prater, E.L. (2006), "A Research Framework for the Impact of Cultural Differences on IT Outsourcing", **Journal of Global Information Technology Management**, Vol 9, No 1, 24-43.
- Han, H.-S., Lee, J.-N. and Seo, Y.-W. (2008), "Analyzing the Impact of a Firm's Capability on Outsourcing Success: A process Perspective", **Information & Management**, Vol 45, No 1, 31-42.
- Henderson, J. and Venkatraman, N. (1992), "Strategic Alignment: A Model for Organisational Transformation Through Information Technology", in Kochan, T. and Useem, M. (Eds.), **Transforming Organisations**, Oxford University Press, New York, pp. 97-117.

- Henderson, J. and Venkatraman, N. (1999), "Strategic Alignment: Leveraging Information Technology for Transforming Organizations", **IBM Systems Journal**, Vol 38, No 2&3, 472-484.
- Hirschheim, R. (2006), "Offshore Outsourcing: Challenge to the Information Systems Discipline", in Hirschheim, R., Heinzl, A. and Dibbern, J. (Eds.), **Information Systems Outsourcing: Enduring Themes, New Perspectives and Global Challenges**, 2 ed., Springer, Berlin, pp. 687-699.
- Håkansson, H. (Ed.) (1982), **International Marketing and Purchasing of Industrial Goods: An Interaction Approach**. John Wiley & Sons, Chichester.
- Håkansson, H. and Snehota, I. (Eds.) (1997), **Developing Relationships in Business Networks**. Routledge, London.
- Kern, T. (1997), "The Gestalt of an Information Technology Outsourcing Relationship: An Exploratory Analysis", in: *Proceedings of the 18th International Conference on Information Systems*, (DeGross, J.I. and Kuldeep, K.; Eds.), December 15-17, Atlanta, Georgia, USA 37-58.
- Kern, T. (1999). *Relationships in Information Technology Outsourcing: an Exploratory Research Study of a Conceptual Framework*. Unpublished PHD thesis, University of Oxford, Christ Church, Oxford, 468.
- Kern, T. and Willcocks, L. (2000), "Exploring information technology outsourcing relationships: theory and practice", **Journal of Strategic Information Systems**, Vol 9, No 4, 321-350.
- Kern, T. and Willcocks, L. (2001), **The Relationship Advantage. Information Technologies, Sourcing and management**. Oxford University Press, Oxford.
- Kern, T. and Willcocks, L. (2002), "Exploring Relationships in IT Outsourcing: The Interaction Approach", **European Journal of Information Systems**, Vol 11, No 1, 3-19.
- Klepper, R. (1995), "The Management of Partnering Development in IS Outsourcing", **Journal of Information Technology**, Vol 10, No 4, 248-258.
- Koh, C., Ang, S. and Straub, D.W. (2004), "IT Outsourcing Success: A Psychological Contract Perspective", **Information Systems Research**, Vol 15, No 4, 356-373.
- Kwon, T.H. and Zmud, R.W. (1987), "Unifying the Fragmented Models of Information Systems Implementation", in Boland Jr, R.J. and Hirschheim, R.A. (Eds.), **Critical Issues in Information Systems Research**, John Wiley & Sons Ltd, pp. 227-251.
- Lacity, M. and Willcocks, L. (2000), "Relationships in IT Outsourcing: A Stakeholder Perspective", in Zmud, R.W. (Ed.), **Framing the Domains of IT Management - Projecting the Future Through the Past**, Pinnaflex Education Resources, Cincinnati, Ohio, pp. 355-384.
- Lee, J.-N. and Kim, Y.-G. (1999), "Effect of Partnership Quality on Information Systems Outsourcing Success: Conceptual Framework and Empirical Validation", **Journal of Management Information Systems**, Vol 15, No 4, 29-61.
- Leek, S., Turnbull, P. and Naude, P. (2000), "Is the Interaction Approach of any Relevance in an IT/E-commerce Driven World?" in: *Proceedings of the 16th IMP Conference*, University of Bath, UK (available at www.impgroup.org).
- Loh, L. and Venkatraman, N. (1992), "Diffusion of Information Technology Outsourcing: Influence Sources and the Kodak Effect", **Information Systems Research**, Vol 3, No 4, 334-358.
- Markus, M.L., Axline, S., Petrie, D. and Tanis, S.C. (2000), "Learning from Adopters' Experiences with ERP: Problems Encountered and Success Achieved", **Journal of Information Technology**, Vol 15, No 4, 245-265.
- Morgan, R.M. and Hunt, S.D. (1994), "The Commitment-Trust Theory of Relationship Marketing", **Journal of Marketing**, Vol 58, No 3, 20-38.
- Mårtensson, A. and Steneskog, G. (1996), "Business Process Excellence - Some Characteristics", in Lundeberg, M. and Sundgren, B. (Eds.), **Advancing Your Business: People and Information Systems in Concert**, Studentlitteratur, Lund, pp. IX: 1-20.
- Nilsson, A.G. (1995), "Evolution of Methodologies for Information Systems Work - A Historical Perspective", in Dahlbom, B. (Ed.), **The Infological Equation - Essays in Honor of**

- Börje Langefors**, Vol. 6, Gothenburg Studies in Information Systems, Gothenburg, pp. 251-285.
- Nilsson, A.G. (2001), "Using Standard Application Packages in Organisations - Critical Success Factors", in Nilsson, A.G. and Pettersson, J.S. (Eds.), **On Methods for Systems Development in Professional Organisations. The Karlstad University Approach to Information Systems and its Role in Society**, Studentlitteratur, Lund, pp. 208-230.
- Pei, Z., Zhen-Xiang, Z. and Chun-Ping, H. (2007), "Study on Critical Success Factors for IT Outsourcing Lifecycle", in: *Proceedings of the International conference on wireless communications, networking and Mobile Computing 2007*, (Piscataway, N.; Ed.), IEEE, Shanghai, China 4374-4377.
- Prikladnicki, R., Audy, J.L.N. and Evaristo, R. (2003), "Global Software Development in Practice: Lessons Learned", **Software Process Improvement and Practice**, Vol 8, No 4, 267-281.
- Tolis, C. and Nilsson, A.G. (1996), "Using Business Models in Process Orientation", in Lundeberg, M. and Sundgren, B. (Eds.), **Advancing Your Business: People and Information Systems in Concert**, Studentlitteratur, Lund, pp. VIII: 1-24.
- Walsham, G. (1993), **Interpreting Information Systems in Organizations**. John Wiley & Sons Ltd, Chichester.
- Webster, J. and Watson, R.T. (2002), "Analyzing the Past to Prepare for the Future: Writing a Literature Review", **MIS Quarterly**, Vol 26, No 2, xiii-xxiii.
- Willcocks, L.P. and Kern, T. (1998), "IT Outsourcing as Strategic Partnering: the Case of the UK Inland Revenue", **European Journal of Information Systems**, Vol 7, No 1, 29-45.
- Österle, H. (1995), **Business in the Information Age - Heading for New Processes**. Springer, Berlin.