Determinants of IT Outsourcing Relationships: A Conceptual Model

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Abstract

How can relationship quality in outsourcing partnerships be achieved, sustained, and improved?

In this paper we present a conceptual model that focuses on the identification of the relevant determinants for a successful IT outsourcing relationship as well as on the operationalization IT outsourcing relationship quality. We contribute to existing relationship literature by thoroughly examining existing constructs and, if applicable, splitting and redistributing them. We also consider additional relationship quality dimensions and determinants. The derived eleven dimensions and fifteen determinants are empirically validated in a subsequent three step empirical approach providing a much more detailed and thoroughly structured relationship quality model which will eventually help practitioners in improving their cross-organizational IT-business relationships.

1. Introduction

There have been several research works on relational governance in IT outsourcing relationships and other cross-organizational IT-business collaboration relationships published in the past. Nevertheless, successful relationship management is still a critical issue in which both practitioners and academics search for an instrument which would represent a measurement tool for relationship quality as well as an underlying explanatory nomological network to identify the critical drivers and inhibitors of relationship quality. Goles (2001) [16] and Goles et al. (2005) [18] reviewed the existing literature on constructs of relational governance which is mainly based on the relational exchange theory originating from the marketing sciences.

Nevertheless, we argue with Lee and Kim [41] “[…] since studies for outsourcing partnerships are still in a primitive stage, extension of this research is needed to include more specific and relevant factors […]” [41] as well as with Goles et al. (2005) [18] who claim their very valuable research to be “an initial evaluation of the measures and factors, and serves as a good starting point for further development” [10]. Thus, we hope to contribute to the existing literature on outsourcing relationships. We also argue that a proposed model of dimensions of relationship quality should not only cover specific IT outsourcing features but should follow a general approach of covering various relationships, esp. covering business process outsourcing (BPO) relations. We define BPO as the delegation of one or more, or entire, business processes to third party providers, including the software and hardware supporting those processes [13]; the client receives only the process result. By contrast, IT outsourcing is defined as the provision of IT infrastructures and applications by a third party while the related business functions remain in-house [9].

It is apparent that BPO will lead to certain relationship dimensions having a distinct level of importance, compared to an IT outsourcing relationship, but we argue that there will only be minor structural issues (if any) affecting the nomological model.

Aside from the fact that there is greater and more extensive research needed in order to develop the different dimensions of relationship quality and the corresponding causal network of antecedents which affect the several dimensions, past research also calls for more mature measurement models for the different dimensions of relationship quality [18].

Consequently, our research aim is twofold: first, we try to develop a unified and theoretically grounded nomological model which specifies both the different dimensions of relationship quality and the underlying causal network of influential factors. Second, we will develop a detailed model of measurement for these dimensions and validate it in several steps, on the practitioner side, by incorporating expert feedback, case study data, and finally survey results. The aim of this current paper is to address the first research objective.
2. Related literature

2.1 Theoretical foundation

Previous literature on relational governance in outsourcing usually references social exchange theory (SET), relational exchange theory (RET), and related perspectives of their theoretical foundation. SET stems from the academic discipline of sociology and was adopted by IS scholars e.g. [12, 33, 41]. Social exchange has been defined as “voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others” [6]. The main constructs which affect the relationship quality are reciprocity (symmetry of benefits between partners), balance (or interdependence), power, and cohesion (robustness of relationship in advent of conflict) [11].

RET has its origins in marketing sciences and focuses on “interactions between parties that are geared towards the joint accomplishment of the individual party’s objectives” [9]. The fundamental assumption of RET is that there will be an agreement on a superior benefit from cooperation for all partners (referring to the reciprocity concept in SET), compared to other forms of exchange or to cooperation with other potential partners [1, 10]. RET assumes contracts to be incomplete i.e. not taking into account all eventualities that may occur during contract duration and negatively affect one partner’s position [46].

“Consequently, exchanges between parties to a relationship are shaped and administered by a set of norms, or expectations about behavior that are shared between exchange partners, and that are intended to strengthen the relationship as a whole [26]” [18]. RET includes and structures the norms which are related to the establishment, preservation, and improvement of a relationship [46].

Another concept not necessarily included under this theory but nevertheless worthy of being incorporated into our model foundation is the research strand on social IT business alignment. In contrast to alignment on the strategic layer of the organization (e.g. [27]), the social dimension refers to the interaction between actors, examination of values, and cognitive linkages between the parties [57, 58] and single individuals within the partner firms in the case of an inter-organizational relationship. Several important features of these works can be incorporated as either antecedents or dimensions of relationship quality, e.g. the shared domain knowledge [57, 58] or mutual understanding and commitment [63].

2.2 Related research

Prior outsourcing relationship literature focuses on a general understanding of the relationship between insourcer and outsourcer [23, 34, 36, 37, 50] without distinctly separating and examining different dimensions of relationship quality. Another research strand develops a deeper understanding of the interpersonal dimensions of relationship quality and determinants [16, 17, 18, 21, 35].

Grover et al. (1996) showed the importance of partnership elements such as trust and communication for outsourcing success by defining partnership quality as the mediating variable between degree of outsourcing and outsourcing success [23]. Lee et al. (1999) delineate partnership quality and its determinants and demonstrate their effect on outsourcing success [41, 42]. Their further research deepens the focus on single determinants and their relation to outsourcing success [40]. Kern et al. (2000) develop a theoretical outsourcing relationship model based on social exchange and relational exchange theory [34] followed by the adoption of the “interaction approach” from marketing research that describes context, parties, interaction and behavioral dimensions of outsourcing relationships [35]. Goo et al. (2007) illustrate which factors influence the duration of outsourcing relationships [20]. For a brief overview of existing outsourcing relationship literature and models see [60].

So far, the most comprehensive collection of relationship quality constructs and its determinants has been presented by Goles (2001) and Goles et al. (2005) [16, 18]. They distinguish constructs by six attributes (“inherent characteristics or properties that contribute to the functionality and harmony of the relationship”: commitment, consensus, cultural compatibility, flexibility, interdependence, trust) and five processes (“the means by which the attributes are developed”: communication, conflict resolution, coordination, cooperation, integration) [18]. In the following, we refer to attributes as relationship quality dimensions and to processes as relationship quality determinants.

3. Model

We found Goles et al.s’ (2005) differentiation of relationship quality dimensions and its determinants to be very valuable. Using their model as a starting point, we tried to further clarify the border between determinants and dimensions.
For example, communication has been defined as relationship determinant [18]. By contrast, we argue that communication is a more multifaceted construct that also belongs to the attributes (e.g., communication quality). Communication contains formal and informal parts as well as quantitative and qualitative aspects. Thus, we refine their approach into several (sub-)constructs which help us to draw a clearer line between relationship quality dimensions and determinants.

As a result, we propose eleven dimensions of relationship quality and fifteen determinants (figure 1) described in the following sections.

3.1 Relationship quality constructs

We refer to the following constructs as representing distinct dimensions of the relationship quality between two partners, being an outsourcer firm and a vendor. These dimensions are:

- Mutual understanding is the “degree of understanding of behaviors, goals, and policies between partners” [41]. Particularly, the literature on alignment argues that shared domain knowledge between IT and business people and a common “language” is an important facet of alignment and thus relationship quality [3, 57, 58].

- Communication quality is the status of the efficiency and effectiveness of information exchange between partners [45, 58].

- Overall trust is the general belief in the partner to be basically competent in sufficiently providing the contractually defined services [25].

- By contrast, relational trust is the firm’s belief that the partner firm will perform acts that will result in positive outcomes for the firm and not take unexpected actions that would result in negative outcomes for the firm [1].

- Influence refers to the positively connoted possibility of partners to influence the decision of the corresponding side. We believe this influence to be especially important due to the different knowledge bases in a relationship [37].

- Commitment “refers to an implicit or explicit pledge of relational continuity between exchange partners” [10].

- Conflict “represents the overall level of disagreement in the working partnership” [1, 59]. Obviously, this dimension relates negatively to the overall relationship quality construct.

- Consensus “is the extent of general agreement between parties” [51].

- Congruence refers to the general agreement the partners have concerning the relationship and related activities. This construct is similar to IT business alignment defined as “cognitive ability to understand the point of view of another” [62].

Flexibility is the “bilateral expectation of willingness to make adaptations as circumstances change” [26]. Circumstances can be economically, technologically or regulatively reasoned. Cultural compatibility refers to the closeness of behavior patterns, values and norms within a partnership [43]. Forbearance “is forgoing certain behaviors that are not in the best interest of both parties” [47].

3.2 Relationship determinants

Relationship determinants are the factors proposed to affect the relationship quality or particular dimensions of relationship quality, respectively.

The determinants are arranged in four categories (interaction, structural, contractual, contextual) based on Kern and Willcocks’s (2000) differentiation of relationship features [34]. In figure 1, interaction determinants are depicted as grey boxes without borders, structural determinants as grey boxes with thin lines, contractual determinants as grey boxes with bold lines, and contextual determinants as white boxes with thin lines.

Interaction determinants

Interaction determinants are interpersonal, mechanisms to exchange information and knowledge between and within the outsourcing parties [31, 34].

- Formal communication is “the extent to which information is officially transmitted to the organizational members as conveyed in memorandums and company training manuals” [49] as well as in officially conducted meetings. Here, we refer to the quantity of formal communication conducted while the quality (or effectiveness) is included in the resulting dimension.

- Informal communication is “that which remains when rules and hierarchies, as ways of coordinating activities, are eliminated” [38] and people meet out of role, e.g. meetings in bars after official working hours. Similarly, to the formal communication we refer to the quantity of informal communication conducted.

- Strategic fit is the degree of realization of rules and procedures that were specified in the contract by the management and its implementation on the operational level within its own firm [7, 28].

Structural determinants

Structural determinants are institutionally arranged mechanisms to operate, manage, and control the outsourcing relationship [34].

- Knowledge sharing routines is a “regular pattern of interfirn interactions that permits the
transfer, recombination, or creation of specialized knowledge” [10]. E.g., these are structures to mutually train members of the partner or to use shared data bases with latest information.

Conflict resolution routines are activities to formalize and facilitate conflict resolution. E.g., documented and commonly applied escalation procedures [52].

Shared benefits and risks refer to a priori or ex ante defined “degree of articulation and agreement on benefit and risk between partners” [30, 41]. These arrangements vary from contractually defined shared service organizations to loose verbal agreements.

Organizational structures support and foster the efficient communication between outsourcer and insourcer, e.g. liaison units or people as specialized intermediary between parties or telephone directories to find the correct contact person [15].

Control mechanisms are instruments to monitor the relationship partner and his performance, e.g. service level reports [54].

Contractual determinants refer to the ex ante concluded outsourcing contract that precedes the relationship [34].

Contract completeness is the type and the degree of sufficiency of the outsourcing contract that precedes most relationships, e.g. standard vs. individual contract and SLAs [14].

Contextual determinants
The contextual determinants will serve as control variables in the subsequent empirical studies (white squared in figure 1). These factors cannot be altered by the partners in a particular outsourcing relationship since they have been defined ex ante or are part of a companies’ experience.

Service specificity is the extent to which the insourcer’s services are standardized or individually produced for a single customer. IT infrastructure outsourcing is less specific and requires less investment than development of e.g. credit loss evaluation applications [44].

Service complexity is the degree of provided service complexity. Desktop services are expected to be less complex than financial grid applications [2].

Interdependence “represents the extent to which each party’s behavior, actions, or goals are dependent on the behavior, acts or goals of the other party” [18]. Interdependence requires complementary assets and skills [24].

Cultural compatibility refers to the closeness of behavior patterns, values, and norms within a partnership [43].

Relationship demographics refer to relational characteristics that might influence the relationship quality, e.g. contract duration [22].

Company demographics are characteristics of the insourcer and the outsourcer, e.g. size, corporate strategy, financial performance, and outsourcing experience of the parties [4].

Figure 1. Relationship quality and determinants
We expect that factors like negotiation at equal footing or outsourcing experience of the partners will influence relationship quality. Roughly the same applies to service specificity and complexity which are characteristics of the outsourcing object and, thus, usually do not change when it comes to outsourcing. As a result, interdependence between partners relies on the kind of outsourced service and its complexity and specificity, but might have a strong influence on the relationship quality, as interdependence can lead to closer and more intimate relationships.

4. Matching relationship quality and its determinants

Figure 1 hypothesizes that each of the introduced determinants affects relationship quality, which in turn is represented by eleven dimensions. The literature refers to connections between determinants and relationship quality of two types. Either relationship quality is analyzed/measured as a generic construct without further differentiation of dimensions [23, 34], or research recognizes the complexity of the relationship quality construct and operationalized it to be composing it with several dimensions [16, 18]. To address the complexity of relationship quality we attempt to integrate both approaches into the following by considering a multi-dimensional relationship quality construct and also considering relationship quality as an endogenous construct, in order to capture literature that treats relationship quality as a generic construct.

Since a graph-based representation of the causal relations between the determinants and the several dimensions of relationship quality proposed in previous literature would lead to a much too complex picture, we chose a matrix representation in the following. Table 1 displays the relationship quality dimensions on the vertical axis and the determinants horizontally in a matrix. In the intersection of both axes we show the reference publications that describe which determinant influences relationship quality and its dimensions (e.g. in the upper left corner Robey et al. (1989) describe the influence of formal communication on mutual understanding). The five control (i.e. contextual) variables are separately presented in the five rightmost columns.

As can be seen in the matrix, we did not find publications that describe a direct influence between strategic fit and relationship quality as well as between all determinants and forbearance. Nevertheless, literature and preliminary interviews with practitioners encourages us to apply these factors as an important determinant of relationship quality.

Strategic fit: IT business alignment literature highlights the importance of structures that facilitate the implementation of decisions on the strategic level to the operational level [28, 32, 64]. The management of a company makes a decision regarding their relationship to a partner in favor of the relationship or their company. For successfully implementation of this decision, a structure and routines to transfer the decision from the strategic level and implement it on the operational level must exist. Hence, we argue that strategic fit will influence communication quality and relational trust. We hypothesize that if employees in both parties are well informed about the relationship, its goals, motivations, and adequate behavior patterns they will communicate more effectively and be more trusting towards their partner than without information about the outsourcing decision (both propositions are marked by 1 and 2 in the column “strategic fit” in table 1). Nevertheless, this only represents an initial proposition. More research on the relationship between strategic fit and relationship quality dimensions is necessary to verify this deduction.

Forbearance: According to Relational Exchange Theory we argue forbearance to be an important part of relationship quality [48, 55]. Thus, we hypothesize that forbearance is influenced by contractual completeness. If outsourcing contracts are very detailed, the outsourcer firm will react more forbearing towards its provider when minor problems occur because most of the shortcomings are contractually regulated. Further, we hypothesize that interdependence positively influences forbearance. In cases where the outsourcer has only little options to whom he might outsource and is therefore highly dependent on its insourcer, he might act very forbearing (both hypotheses are marked by 3 and 4 in the in table 1). This matrix-style approach has some limitations that have to be mentioned. This simple form of presentation of relations does not allow showing causal links between either different relationship quality dimensions or between different determinants although they are often proposed and tested by the cited research works as well, e.g. in [1, 10, 34, 59]; for example, McFarlan et al. (1995) show the influence of contract completeness on strategic fit [50]. We omit these here because, in this paper, we want to focus on the manifold and complex connections between determinants and relationship quality.
<table>
<thead>
<tr>
<th>Determinant (affects relationship quality dimensions)</th>
<th>Interaction</th>
<th>Structural</th>
<th>Contractual</th>
<th>Contextual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Quality</td>
<td>Poppo et al. 2002</td>
<td>Poppo et al. 2002</td>
<td>1</td>
<td>Lee et al. 1999</td>
</tr>
</tbody>
</table>

(see Table 1. Relationship quality and determinants matrix for more details)
The diversity of constructs allows us to deepen the understanding of relationship quality and its drivers and to shed light on this research objective. However, the difference between the constructs is sometimes difficult to recognize and their meaning is, in some cases, ambiguous. With this detailed examination of relationship factors we hope, after further steps, to be able to present practitioners with adequate and possible courses of action with respect to their outsourcing relationship management. The measurement of these detailed and multifaceted construct may present difficulties. We will address this issue with expert interviews and case studies to evaluate the constructs and derive new indicators.

5. Further research

Up to this point, our work has only been conceptual, but will be followed by a three-step empirical approach. We have already started with an expert survey, which will be followed by case studies this summer and finally by a cross-sectional survey for testing at least part of the model.

The goal of the expert survey is to derive indicators for all specified constructs from the practitioner side. Right now, most empirical studies on outsourcing relationship quality provide a good list of constructs but usually have only a narrow list of indicators for each construct (usually two indicators). This is often argued to be problematic [18], especially in the context of a socially oriented outsourcing research with constructs that are sometimes hard to delineate.

The expert survey has been constructed as a two-step approach – following the Delphi approach, but simpler. In the first questionnaire, we asked the participants to tell us by which indicators they would measure the eleven relationship quality dimensions and its fifteen determinants (or how they actually measure them in existing relationships). We provided empty fields for further constructs, sample answers, and a thorough description of the studies’ goal in the questionnaire. The obtained answers are currently being consolidated by a group of researchers experienced in outsourcing research and alignment research. The consolidated results will be returned to the practitioners. In this second questionnaire, they will weigh the conceptual fit between indicators and constructs to assist in a preselection of the appropriate measurement model for each construct. Furthermore, we will derive and apply the (few) indicators used by other researchers in previous studies (e.g. [18, 23, 41]).

The results of the expert surveys (indicators and also possibly new constructs) are used as input for the subsequent series of case studies. These will be conducted in cooperation with firms with IT infrastructure outsourced to a third-party vendor vs. firms who outsourced a whole business process vs. firms with in-house provision of IT. To reduce the impact of further organizational factors which might affect the constructs, we will restrict the case sample to one particular (and furthermore rather homogeneous) industry, i.e. the German banking industry. Many German banks have outsourced or cooperatively sourced their IT, many years ago, which allows us to choose from a sufficient number of possible cases and to draw comparative inferences in a relatively controlled setting.

Finally, a cross-sectional survey in the same industry is intended for testing the resulting model. Since Hirschheim (2003) has called for empirical outsourcing research at a more granular level to derive new and more reliable findings [29], our survey will (cross-sectionally) focus on three different core banking processes, which will be mortgage processing, securities processing and administration, and payments processing, in order to measure relationship quality between the related business unit and the supporting IT unit (often being outsourced) on this more granular level. Since there is a lot of dynamics in the financial service industry (e.g. frequent updates due to regulation issues, various business process outsourcing and process restructuring activities), a tight relationship between business departments and IT unit proves to be very important.

As argued above, we believe that the same model can effectively be used to measure other relationships as well, although different dimensions and determinants will naturally get a stronger impact. The targeted empirical domain offers great opportunities to test this proposition. In all of the three banking processes listed above, there is the tendency of outsourcing parts of the process (i.e. selective BPO). Thus, the interface between, e.g., front office and back office in mortgage processing can either be intra-organizational or inter-organizational. By conducting group-wise comparisons we will be able to dig deeper into a general understanding of relationship quality and its determinants.
6. Conclusion
Consequently, we can summarize the intended goals and contributions of our overall research as follows.

As the eventual theoretical contribution, we intend to extend the outsourcing relationship literature by

- clarification and rearrangement of the available constructs: complex constructs from the relationship literature, like communication, are delineated in the proposed model (formal vs. informal as well as quantitative vs. qualitative aspects of communication)
- identification of new constructs (e.g., complexity and specificity of the outsourcing object will influence the relationship quality)
- an examination of the previous available indicators and addition of empirically validated new indicators to the relatively sparse previous sets.

The managerial contribution would be the

- identification of the most significant and important drivers of relationship quality in different settings (which are the relevant determinants in an BPO vs. an ITO scenario)
- assistance to relationship managers in identifying the relevant keys to reaching and sustaining good outsourcing relationships.

References


[41] J.-N. Lee and Y.-G. Kim, "Effect of partnership quality on IS outsourcing success: conceptual frame-


