ENHANCING THE APPLICATION AND MEASUREMENT OF RELATIONSHIP QUALITY IN FUTURE IT OUTSOURCING STUDIES

Research-in-progress paper

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Abstract

Studies have emphasised the importance of a strong relationship between a client and vendor to ensure positive IT Outsourcing (ITO) outcomes. To measure and assess this relationship strength, a construct known as Relationship Quality (ReQ) has been widely used in the ITO context. However, recent studies have highlighted the inconsistent and even contradictory application of this construct in previous studies raising concern over its validity. To address this matter, we conducted a critical literature analysis to systematically examine how ReQ has been applied in previous ITO studies. The findings from our review highlight three important knowledge gaps with the current ITO studies: 1) lack of rich qualitative studies investigating ReQ that is complex and subjective in nature; 2) inappropriate application of economic and strategic based theoretical lenses; 3) lack of differentiation between ReQ attributes. This study provides a number of recommendations to enhance the application and measurement of ReQ in future ITO studies. The next step of the study will address the three identified knowledge gaps. This study offers important implications to both theory and practice.

Keywords: IT Outsourcing; Relationship Quality; Critical literature review
# 1 Introduction

IT Outsourcing (ITO) has experienced significant growth since the first major deal between Kodak Eastman and IBM in 1984. Recent figures suggest that the overall ITO industry surpassed $288B USD in 2013, with projected growth rates of 5.4% between 2013 - 2017 (Gartner 2013). However, outcomes from ITO projects continue to remain poor despite four decades of experience and research (St. John et al. 2014). Recent studies suggest that the reason for this lack of improvement is due to ITO agreements becoming more complex as they shift from being a mere cost cutting exercise to one which holds significant strategic and social importance to the firm as well (Roy and Sivakumar 2012).

To ensure that organisations are able to achieve the necessary economic, strategic and social benefits from modern day ITO agreements, creating and maintaining a quality relationship between the client and vendor is now considered an integral part of achieving successful outcomes (Babar et al. 2007). This is because to work as partners, stronger ties need to be established based on shared norms and mutual beliefs to ensure that there is enough flexibility for firms to work beyond the contractual obligations (Kim et al. 2013). Therefore, recent studies have focused heavily on determining, measuring and understanding how different relational factors influence the ITO relationship (Goles and Chin 2005).

One of the ways used by researchers to measure the overall strength of the ITO relationship is through a construct known as Relationship Quality (ReQ). ReQ is defined as the “degree of connectedness between a client and a vendor in an aim to achieve specified goals” (Winkler et al. 2008). It measures the overall strength of the relationship based on the likelihood that a client and vendor will meet the expectation, satisfaction and performance levels associated with an ITO agreement (St. John et al. 2014; Swar et al. 2012).

Based on empirical studies to date, higher ReQ levels have been significantly related to ITO success because it enables clients and vendors to work more closely together to achieve goals associated with an ITO project (Lacity et al. 2009). On the other hand, lower levels of ReQ have been identified as a major cause of failure and poor performance in ITO because it leads to an eventual breakdown of the client-vendor relationship (Babar et al. 2007; Lee and Kim 1999). For instance, Dibbern et al. (2004) found that ReQ was an important factor in offshore ITO and BPO (Business Process Outsourcing) success, whereas Swar et al. (2012) suggested that ReQ was one of the most important factors to prevent the possibility of project failures. As such, understanding and measuring ReQ accurately is critical in improving ITO outcomes.

However, defining and determining ReQ has been a challenge due to its subjective and complex nature. ReQ is based on social aspects that extend beyond the formal agreement, making it difficult to assess and measure (Lacity and Willcocks 2012). Currently, there has been limited consensus over what comprises and determines ReQ to date. As a result, comparing, contrasting and building upon the pre-existing body of knowledge have been difficult since inconsistent and often conflicting results have been identified (Liang et al. 2016). Therefore, our study aims to improve the current understanding and future application of ReQ in ITO studies by conducting a systematic literature review on previous ITO studies to identify knowledge gaps that contribute to inconsistent application of ReQ. Specifically, the following research questions are addressed:

1. How has ReQ been researched and applied in ITO studies to date?
2. How can we improve the application and measurement of ReQ in future studies?

We conducted a literature review consisting of 22 studies on ReQ from top IS journals and conferences. We focus our analysis on research methodologies of those previous studies, theoretical lenses applied and attributes of ReQ that were assessed. Our findings highlight three important gaps related to (1) lack of in-depth qualitative studies; (2) inappropriateness of economic and strategic based theories to define ReQ; (3) lack of differentiation between ReQ attributes.

The remainder of this paper is structured as follows. The following section provides an overview of the search methodology used to identify the key papers on the subject matter, followed by a summary and discussion of our findings and recommendation for future studies. Then, we explain the next step...
of our study to address the identified knowledge gaps. Finally, we conclude by outlining practical and theoretical contributions of this study, and highlight some of the study limitations.

2 Literature Search Methodology

To ensure that we integrate existing research on ReQ and its impact on ITO outcomes, a comprehensive literature review was conducted using the guidelines recommended by Cooper (1998). The first step in conducting the literature search is to clearly define the boundary of the review. This study only examines studies which have investigated both Relationship Quality AND IT Outsourcing as its core themes. As ITO has expanded rapidly over the years, it has created different variations and sub-streams such as IT Offshoring, Business Process Outsourcing (BPO), Opensourcing and Business services outsourcing (BSO). Although minor differences exist between each of these sub-streams, all of them share a common dependency on the client-vendor relationship to ensure success, and was therefore included for the purpose of this study.

Next, we conducted an extensive database search (i.e. JSTOR, SCOPUS, EBSCO) along with Google Scholar was conducted using a combination of the related ITO keywords (IT Outsourcing; ICT Outsourcing; ITO; IT Offshoring; Business Process Outsourcing; BPO; Business Services Outsourcing; BSO; Opensourcing) AND Relationship Quality (Partnership Quality; Relationship levels; Relationship Strength). As the first paper on client-vendor relationships in ITO is generally considered to have been written in 1990 (Henderson 1990), the timeframe for the search was set from 1990 to 2017.

To ensure that only relevant studies were selected for this study, we conducted a three-step filtering process of the preliminary studies found through the initial search as per below. The initial search resulted in 108 papers. From there, the first filtering process eliminated a total of 43 studies which were based on book chapters; research-in-progress papers and non-peer reviewed journals and conferences as we wanted to explicitly focus on high quality, peer-reviewed publications. Based on the remaining 65 studies, the second filter removed another 36 studies that did not identify “Relationship Quality” (or similar keywords) in the Title, Abstract and Keywords sections. Out of the remaining 29, we eliminated an additional 7 studies including those that were considered to overlap with the same authors’ prior studies, literature review based studies or those that were not directly associated with the core themes. In total, 22 studies were assessed for this study.

3 Literature Analysis: Findings and Discussion

Based on the studies identified through the literature search, we conducted a detailed analysis of the research methodology, theoretical foundation and the ReQ attributes discussed in those previous studies. Below, we briefly present the key finding of our literature analysis focusing on the knowledge gaps identified and propose suggestions for future directions.

3.1 Lack of in-depth qualitative studies

Despite the subjective and interpretive nature of ITO relationships in general, we identified almost twice as many quantitative studies (n=13) compared to qualitative ones (n=7). Out of the 7 qualitative studies, we identified six case studies which were primarily focused on exploring different attributes affecting ReQ. For example, Winkler et al. (2008) conducted a multiple case study that explored how behavioural differences in service delivery caused by cultural differences between German clients and Indian vendors had a negative impact on ReQ levels. In another study, Alborz et al. (2005) explored what the key indicators of ReQ were by conducting a multiple case study involving Australian ITO vendors and suggested that there were ten attributes that influenced ReQ levels.

All the 13 quantitative studies examined collected their data through surveys which were primarily used to measure and validate conceptual models of ReQ and its critical attributes. For instance, Goles and Chin (2005) developed a conceptual framework to identify, define and measure eleven critical attributes that determine the ReQ construct, whereas Qi and Chau (2015) also identified four key attributes of ReQ, and investigated how the formal contract had an impact on the overall ReQ levels.
There were also two mixed methods studies (Lane and Van Der Vyver 2005; Lee and Kim 1999) which focused on determining the critical attributes that influence ReQ levels. Lee and Kim (1999) conducted 148 interviews spanning across 36 organisations in Korea that identified trust; business understanding; benefit and risk sharing; conflict and commitment as the key ‘components’ of ReQ. The other mixed-method study by Lane and Van Der Vyver (2005) was based on 10 in-depth interviews with individuals from Australian ITO vendors. It cross-examined the key attributes of ReQ identified by Lee and Kim (1999), and came up with similar results which retained the same key attributes based on their analysis.

Although there are certain benefits of having quantifiable evidence that backs up the conceptual frameworks and key determinants of ReQ highlighted in previous studies, ReQ within the ITO context is still a construct with significant discrepancies and conflicting results (Liang et al. 2016). This is because it is difficult to compare the results between the studies because each study defines its own set of constructs and variables to determine ReQ. Therefore, we recommend that further rich and in-depth qualitative studies are carried out to enrich our understanding of what constitutes and determines ReQ and how ReQ impacts the overall ITO outcome.

3.2 Inappropriateness of theoretical lens applied

A total of 12 different theories were identified to have been applied in 13 of the studies examined as per Table 1 below. It must be noted that 9 of the studies developed and proposed their own theoretical framework based on pre-existing knowledge and literature, and 7 studies were found to have applied multiple theories to their study. Each is based on one of three different perspectives of ITO – transactional, strategic and social. For example, theories such as Transactional cost economics and Agency theory focus on the economic perspective of the ITO relationship and are used to measure the economic benefit associated with the minimisation of cost, time and effort. On the other hand, Upper echelon and Resource dependency theories are based on the strategic perspective focusing on how firms can improve their competitive advantage by acquiring additional resources or exploring ways to better utilise their existing resources. Furthermore, there are theories such as Relational exchange and Social exchange theory etc. which have been used to investigate the social perspective of ITO. These theories have been primarily used to investigate the different interactions between parties and how they affect the formation, interaction and dissolution of ITO relationships.

However, the application of economic and strategic based theories in determining ReQ and its attributes is arguably not suitable due to the following limitations. Firstly, studies which apply economic and strategic based theories focus too heavily on the client’s perspective only (Goles and Chin 2005). Considering that it takes two to make a relationship work, it is important to apply a theory which can provide insight into the mutual obligations and exchanges between all contractual parties rather than from just the client’s perspective. Unfortunately, theories such as TCE fail at identifying ReQ from both the client and vendor’s perspective as its underlying principle states that in order for a party to benefit economically from a particular transaction, another party must incur the cost associated with that transaction (Lacity et al. 2011).

Secondly, economic and strategic based theories rely heavily on the contractual obligations to set the boundary for how much firms should invest into improving ReQ (Koh et al. 2004). However, empirical evidence suggests that current ITO agreements require stronger ties to be established based on shared values, norms and mutual beliefs that extended beyond the contractual obligations in order to improve outcomes (Kim et al. 2013). This is due to the additional complexities that surround current ITO projects as ITO has evolved to include activities closer to the firm’s core competencies. Therefore, it is important that the theory used to determine ReQ can identify factors that go beyond the boundaries of the formal ITO agreement.

Lastly, economic and strategic based theories focus extensively on the inter-organisational relationships often neglecting the inter-personal relationships that are established within an ITO project. Considering that the day-to-day activities are carried out at an individual level, and the fact that each project member may have his/her own subjective interpretation on the ITO agreement, it is important that
the theory applied to identify ReQ is able to make sense of the factors that determine inter-personal relationships in ITO.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Study</th>
<th>Perspective</th>
<th>Application in ITO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational Exchange</td>
<td>[3] [6] [9] [15] [21]</td>
<td>Social</td>
<td>To ensure that the necessary social and relational norms which allow for stronger relationships are established between firms.</td>
</tr>
<tr>
<td>Social Exchange</td>
<td>[1] [6] [15] [21]</td>
<td>Social</td>
<td>To identify the various social processes and exchanges that go beyond the formal agreement that occurs between individuals engaged in a working relationship.</td>
</tr>
<tr>
<td>Transactional Cost Economics</td>
<td>[6] [8] [13] [17]</td>
<td>Economic</td>
<td>To ensure that transactional costs (money, time and effort) are minimized for the client.</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>[4]</td>
<td>Social</td>
<td>To measure the level of connectedness between a client and vendor in an aim to achieve specified goals.</td>
</tr>
<tr>
<td>Cultural Intelligence</td>
<td>[16]</td>
<td>Social</td>
<td>To measure the capability level of a firm and/or individual in effectively working with others from diverse cultures.</td>
</tr>
<tr>
<td>Psychological Contract</td>
<td>[18]</td>
<td>Social</td>
<td>To identify the mental beliefs and expectations individuals have on the reciprocal obligations within a contractual relationship.</td>
</tr>
<tr>
<td>Upper Echelons</td>
<td>[19]</td>
<td>Strategic</td>
<td>To understand how decisions made by top managers are based on their own interpretation of the situation that is influenced by their experience, background and values.</td>
</tr>
<tr>
<td>Practice Theory</td>
<td>[13]</td>
<td>Social</td>
<td>To identify how participants, try and change their working environment through monetary, knowledge, social and symbolic capital.</td>
</tr>
<tr>
<td>Agency Theory</td>
<td>[8]</td>
<td>Economic</td>
<td>To ensure that the necessary contractual incentives and monitoring devices are implemented so that individuals behave and act accordingly.</td>
</tr>
<tr>
<td>Power-political</td>
<td>[1]</td>
<td>Social</td>
<td>To measure the relative strength of the relationship based on the resources at stake, and to identify how this influences the interdependency between parties.</td>
</tr>
<tr>
<td>Resource Dependency</td>
<td>[17]</td>
<td>Strategic</td>
<td>To identify how vendor aligns their human, financial, capital, technology and natural resources to produce goods and services as demanded by their clients.</td>
</tr>
<tr>
<td>Conceptual</td>
<td>[2] [5] [7] [10] [11] [12] [14] [20] [22]</td>
<td>Not available</td>
<td>Developed and proposed their own theory based on pre-existing knowledge and literature.</td>
</tr>
</tbody>
</table>

Thus, we recommend future studies to consider theories which are based on the social perspective to investigate ReQ and its determinants. This will potentially lead to a more accurate and complete understanding of ReQ and its impact on ITO outcomes.

Table 1. ReQ and its theoretical perspectives

Therefore, we recommend future studies to consider theories which are based on the social perspective to investigate ReQ and its determinants. This will potentially lead to a more accurate and complete understanding of ReQ and its impact on ITO outcomes.
3.3 Lack of differentiation of Relationship Quality (ReQ) attributes

Determining and defining ReQ and its attributes has been a well-known challenge to researchers due to the subjectivity and complexities involved (Roy and Sivakumar 2012; Swar et al. 2012). Previous studies have often criticised the messy reality of ReQ, and the ambiguity and inconsistency over the selection and treatment of ReQ attributes in research (Goles and Chin 2005). Consistently, out of the 22 studies examined, we found not a single study used the same combination of the 36 attributes of ReQ identified in our study. Furthermore, the definitions over these attributes also differed between studies adding more ambiguity over its use in investigating the ITO phenomenon.

Studies suggest that ReQ attributes can be further differentiated between dimensions and determinants. This is done by differentiating between attributes which are ongoing interactions that occur between the client and a vendor on an ongoing basis (determinants), or attributes which have a direct effect on the outcome of the ITO project (dimensions) (Lee and Kim 1999; Rhodes et al. 2016). Therefore, we further categorize the 36 different attributes of ReQ identified into ReQ dimensions (inherent properties which contribute to the degree of connectedness in the relationship) or ReQ determinants (the means by which these dimensions are developed) as per Table 2. Based on our analysis, Trust (n=22) and Commitment (n=18) are the two main ReQ dimensions identified, which confirm prior studies (Ee et al. 2013; Goo and Nam 2007). In the 10 studies where ReQ attributes were further differentiated between dimensions and determinants, Communication (n=7); Coordination (n=4); Conflict resolution (n=4) and Cultural distance (n=4) have been identified as the key determinants of ReQ.

<table>
<thead>
<tr>
<th># of studies</th>
<th>Relationship Quality dimension</th>
<th>Relationship Quality determinant</th>
<th># of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Trust</td>
<td>Communication*</td>
<td>7</td>
</tr>
<tr>
<td>18</td>
<td>Commitment</td>
<td>Coordination</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Communication*</td>
<td>Conflict resolution*</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Business understanding</td>
<td>Cultural distance*</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Conflict resolution*</td>
<td>Cooperation</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Benefit and risk share*</td>
<td>Integration</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Consensus</td>
<td>Contractual governance</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Cultural distance*</td>
<td>Knowledge sharing</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Flexibility*</td>
<td>Service quality</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Interdependence</td>
<td>Absorptive capability &amp; 16 others *</td>
<td>1</td>
</tr>
</tbody>
</table>

* identified as both dimension and determinant

Table 2. Dimensions and determinants of ReQ identified

However, we also observed that in a number of studies a ReQ attribute has been identified as both a dimension and determinant. For example, communication, and cultural distance were identified as ReQ determinants in studies such as Lee and Kim (1999) and Swar et al. (2012) etc. whereas other studies such as Goles and Chin (2005) and Rhodes et al. (2016) etc. categorized them as dimensions.

We identified two possible reasons as to why there have been such inconsistencies and ambiguity. First, we found that many ReQ attributes shared similar definitions despite being termed differently. Table 3 shows an example of the use of different terminologies to represent ReQ attributes that share similar definitions. In this example, all three ReQ attributes may be interpreted as the ‘understanding the key aims and objectives of the outsourcing agreement between parties’.
### Table 3. Example of different terms used to describe similar ReQ attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Definition</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business understanding</td>
<td>“The degree of understanding of behaviours, goals and policies between partners.”</td>
<td>Lee and Kim (1999), pg. 36</td>
</tr>
<tr>
<td>Mutual understanding</td>
<td>“Parties observing and understanding other parties in order to adjust their own actions.”</td>
<td>Swar et al. (2012), pg. 461</td>
</tr>
<tr>
<td>Interdependence</td>
<td>“The extent to which each party’s attainment of goals is dependent on the other party.”</td>
<td>Olsson et al. (2008), pg. 266</td>
</tr>
</tbody>
</table>

Second, we identified the opposite scenario where ReQ attributes shared the same terminology despite differences over their definitions. As shown in Table 4, we identified multiple definitions provided for the main ReQ attributes. One possible reason for this problem is because social attributes such as Trust are difficult to observe and measure since their definition may change based on the context and norm of the situation (Lane and Lum 2011).

Furthermore, the definition may differ based on the background and perspective of the researcher as different disciplines have different views on socio-cultural attributes (Babar et al. 2007). As such, we argue that there is no right or wrong definition of these attributes, but that all the variations as to how these attributes have been defined should be considered. For example, when defining and measuring ‘Trust’ as a ReQ attribute, it must take into consideration multiple definitions that have been identified as per Table 4.

### Table 4. Multiple definitions of Trust and Commitment

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Definition</th>
<th>Sample Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Fulfilment of promises and obligations.</td>
<td>Goles and Chin (2005)</td>
</tr>
<tr>
<td></td>
<td>Belief that the actions performed will be beneficial (not harmful) for both parties.</td>
<td>Beimborn et al. (2015)</td>
</tr>
<tr>
<td></td>
<td>Behave fairly even when the possibility for opportunism is present.</td>
<td>Swar et al. (2012)</td>
</tr>
<tr>
<td>Commitment</td>
<td>The willingness to invest resources so that the relationship is sustained.</td>
<td>Qi and Chau (2015)</td>
</tr>
<tr>
<td></td>
<td>The durability, input, and consistency of a relationship.</td>
<td>Goo and Nam (2007)</td>
</tr>
</tbody>
</table>

Therefore, we recommend future studies take careful consideration when defining ReQ attributes to ensure that overlaps in the terminology and misinterpretations over the definition can be minimised. This will help address the inconstancies and confusion over ReQ and its attributes that have been identified in prior studies.

### 4 Exploring the ReQ in further detail

To address the knowledge gaps identified in our study, the next step of our study involves a rich, detailed qualitative study exploring how ReQ key determinants influence ReQ key dimensions and vice versa, and how ReQ impacts on ITO outcome. Figure 1 shows the proposed research model that will guide the empirical study involving a multiple case study involving 4-6 IT outsourcing agreements between the vendor and the client. A brief description of the model is below.
Research to date suggests that ReQ levels are determined based on a sequence of events involving ongoing interactions between ITO partners (Goles and Chin 2005). Therefore, as shown in Figure 1, dimensions and determinants of ReQ are considered to interact with each other in a cyclical fashion that results in continuous changes to the strength of the ReQ. As a result, certain determinants of ReQ serve as antecedents to the dimensions of ReQ. For example, the everyday activities which involve coordination (ReQ determinant) between clients and vendors will likely influence the overall commitment (ReQ dimension) levels that determine the context of the ITO relationship. This level of commitment in turn will strengthen or weaken the coordination activities conducted within the ITO relationship.

ReQ attributes identified in previous studies can be differentiated into dimensions and determinants based on whether or not they have a direct influence on the overall ITO outcome. This is because ReQ dimensions are considered attributes which contribute to the functionality and closeness of an ITO relationship thus having a direct impact over the ITO outcome, whereas ReQ determinants/factors are considered to be the day-to-day activities carried out by which ReQ dimensions are developed (Olsson et al. 2008). For example, empirical evidence suggests that the presence or lack of Trust in an ITO relationship is a strong indicator of ITO success vs. failure. Therefore, Trust is considered to be a dimension of ReQ due to its ability to have a direct influence over the ITO outcome. On the other hand, although communication between parties may have a direct influence over the ITO relationship, it cannot by itself be used to determine whether the ITO outcome will succeed or fail although it can work as a measure of how much Trust is present between parties (Mao et al. 2008). In this regard, communication is considered a determinant of ReQ rather than a dimension.

Social Exchange Theory (SET) which considers the social perspective of ITO phenomena will be employed as a theoretical lens. Our future study is expected to provide a more complete understanding of how ReQ affects ITO outcomes and address the three research gaps outlined in this paper.

5 Conclusion

Our study has implications for both theory and practice. From a theoretical perspective, we highlight the key reasons as to why there have been so much discrepancy surrounding ReQ in ITO studies to date, and discuss how these issues can be addressed in future studies. From a practical perspective, we highlight the importance of ReQ in measuring the strength of the relationship between an ITO client and vendor, and provide clear, concise definitions over the key attributes that influence ReQ levels.

Finally, we acknowledge that there are limitations to this study due to its relatively small sample size because of the boundaries set in our literature search. Therefore, we encourage future studies to take a more interdisciplinary approach to better understanding ReQ and its impact on outcomes in inter-party relationships that extend beyond the scope of ITO. Furthermore, we also acknowledge that there may still be a significant amount of ambiguity over the terminology used throughout this paper in regard to ReQ and its attributes. However, this ambiguity is a mere reflection of what we have identified throughout the literature, and additional work may be required to further clarify and improve our attempt at defining and differentiating the dimensions and determinants of ReQ presented in this paper.
References


