

How Organizational Identity influences Information Technology (IT) Outsourcing Success

Full Paper

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Abstract

Corporate Information Technology (IT) functions are under increasing pressure to succeed in their IT outsourcing (ITO) arrangements. Studies of ITO success have in the past mainly explored its operational and financial aspects. At the same time there is a dearth of research on broader organizational antecedents and outcomes of ITO. This study examines the effect of organizational identity on outsourcing success. Specifically, we ask: does the strength of an organization's identity- i.e. how unique it views its role in relation to other corporate functions- influence ITO success? We conduct an empirical study among 312 IT leaders engaged in outsourcing. We find that organizational identity strength mediates the effect of one pivotal outsourcing antecedent – effective knowledge sharing – on ITO Success. We thereby expose the role of identity strength as a potential determinant of ITO success and subsequently surmise that it's likely to have a material impact on the firm.

Key words: outsourcing; organizational identity; trust; effective knowledge sharing

Introduction

Worldwide Information Technology (IT) spending hovers around \$2 trillion in 2013 (Lovelock et al, 2013) of which 12% is directed to outsourcing (Petty & van der Meulen, 2012). At the same time, IT organizations are under an increasing pressure to succeed in their IT outsourcing (ITO) arrangements. As a result, IT managers pursue multiple ways to achieve sound ITO outcomes and seek related guidance. What they often find are simple 'toolboxes' which provide a set of detailed tactics to create a successful ITO engagement (Heath, 2009; Attard, 2003; Sullivan, 2013). For example, Attard (2003) suggests three task-centric steps that lead to outsourcing success, whereas Sullivan (2013) views establishing a center of ITO excellence as a key to a successful partnership. Although these frameworks provide practitioners useful tactics and steps to improve their relationships with outsourcing partners, they limit the IT leader's focus on a few narrow tactics and make them ignore possible broader effects of ITO on IT organizations.

This study moves beyond narrow tactics to address ITO challenges by elucidating significant contextual factors within the IT function which are likely to influence ITO success. In particular, we explore generic organizational characteristics of the IT function which are likely to influence the success of ITO. The motivation for this exploration comes from a recent study by McGuire et al (2014) which found that the type and strength of an IT organization's identity significantly contributes to the IT manager's experience of ITO success. Essentially, IT organization's identity shapes how it approaches and manages its external relationships- including how to relate to outsourcing partners. Generally, organizational identity governs how an organization sees itself and how it portrays itself to the outside world: "Identity is about us—as individuals and as organization members—and it enquires into the deepest level of our sensemaking and understanding." (Gioia et al, 2013, p. 125). A broad stream of research has also found that organizational identity forms a significant antecedent to firm performance (Gilley & Rasheed, 2000; Wang et al, 2008; Lee, 2006; Voss et al, 2006). By examining and understanding the IT organization's identity (today and desired future state), we hope to begin to understand how an IT organization builds up its identity and

how this influences client-supplier relationships in ways which have been shown to result in successful ITO arrangements.

As noted, identity is likely to shape the IT organizations' relationship development and dynamics-including those relationship determinants such as trust and knowledge sharing which have been found to influence ITO success (Dibbern et al, 2008; Lee & Kim, 1999; Lee, 2001). However, no extensive empirical studies have been conducted on the influence of IT organizations' identity characteristics on such relationship characteristics and consequently on ITO success. By leaving organizational identity out of the study of ITO success, we may have missed an opportunity to understand how cultural and sense-making aspects of the IT organization influence successful ITO arrangements.

Drawing upon recent empirical research (Han et al, 2008, Hart and Saunders, 1997, Lee, 2001), this paper seeks to further our understanding of the influences on ITO success. In particular, we examine the mediated relationship between previously established direct determinants of ITO success – effective knowledge sharing and trust –and ITO success through organizational identity strength. By doing so this study expands previous research on ITO's antecedents such as relationship, contractual, and partnership success (Grover et al, 1996; Lee, 2000; Schwartz, 2014, Lacity & Hirschheim, 1993). The study informs practitioners as it cautions against neglecting the impact of building strong organizational identity within the IT function. Instead, the study encourages IT leaders to evaluate the strength of their identity so that they can drive their ITO arrangements for sustainable positive effects. The remainder of the study is organized as follows: In the subsequent sections, we will review the concept of IT outsourcing, organizational identity, and ITO relationship determinants. This is followed by a review of the research method, research results, discussion, and implications.

Background

ITO Success, Effective Knowledge Sharing, and Trust

Outsourcing, in general, can be defined as the movement of functions, systems and staff from internal organizations to third party vendors (Lacity & Hirschheim, 1993). The success of any ITO engagement is accordingly evaluated across strategic, economic, and technical benefits (Lee, 2000). Numerous researchers have built a strong and expansive body of literature on that covers ITO operational practices, antecedents, and impacts (Lacity & Hirschheim, 1993; Buck-Lew, 1992; Lee et al, 2003; Bhatnagar & Madon, 1997; Kern and Willcocks, 2002).

ITO success studies have focused on four separate streams of effects – firm performance (Madison et al., 2006; Gewald and Gellrich, 2008; Wang et al., 2008), operational improvements in the IT function (Domberger et al., 2000; Dibbern et al., 2008), project execution outcomes (Gopal et al., 2002), and relationship characteristics between client organization and supplier (e.g., Grover et al., 1994; Lee and Kim, 1999). It is two of the client-supplier relationship characteristics – effective knowledge sharing and trust -which are examined more closely in this study. In this stream, Lee (2000) examined effects of knowledge sharing -the extent to which critical or proprietary information is communicated to one's partners- on ITO success. He found that whilst knowledge sharing is a powerful contributor to ITO success, it was stronger when an IT organization increased its capacity to receive and process information. He concludes that organizational dynamics which manage the organizational "system" must be more deeply investigated to understand ITO outcomes and their antecedents. Lee and Kim (1999) introduced trust -the confidence that the behavior of another will conform to one's expectations and in the goodwill of another- as a lens to explain how the level of trust between an IT organization and its outsourcing partner influenced ITO success. They found that the greater the level of trust between the outsourcing provider and the organization, the more successful the ITO arrangement. Trusting the ITO partner is about maintaining a belief that the ITO vendor will perform actions that will result in positive outcomes for the buying firm, and the vendor will not take unexpected actions resulting in negative outcomes for an ITO arrangement (Lee & Kim, 1999).

Organizational Identity Strength

Examining and understanding the IT organization's identity (today and desired future state), we can start to understand how an IT organization builds up its identity and how this influences the overall shaping of

client-supplier relationships which have been shown to result in successful ITO arrangements. The idea of an organization assumes the concept of identity - the members need to be able to draw a line between 'us' and 'them'. Albert and Whetten (1985) accordingly define organizational identity as a set of organizational characteristics that are central, enduring, and distinctive (Albert & Whetten, 1985). Later studies have called into question the notion of enduring identity and instead suggested that an organization's identity does change over time. It is a fundamentally relational construct which explains how the organization defines its typified relationships within its environment (Dutton & Dukerich, 1991; Fiol, 2002; Corley & Gioia, 2004).

All organizations possess some sort of an identity as they build and manage relationships with their environment. They need to signal to the environment who they are and what they stand for. The question then is what captures variations in identity and what are its dimensions. In this paper we will use the construct of identity strength introduced by Milliken (1990). It is defined as the degree to which its members perceive the identity as being special or unique to their organization. Such identity perceptions convey central and distinct characteristics which define "who we are" as an organization, and are widely held among the members of that organization. Milliken hypothesized (and subsequently found support) that a strong sense of organizational identity is associated with the organization's relative imperviousness to environmental changes - whether or not these perceptions reflect true reality. Several studies have found support that individuals' strength-of-identity perceptions also influences the member's approach to their work (e.g., Kreiner & Ashforth, 2004; Milliken, 1990). As ITO represents a constant environmental change to an organization, the success of the ITO arrangement partially rests with the attitudes and behaviors of organization's members toward their work with IT. Accordingly we can expect that identity strength has the potential of enhancing ITO success as it defines how IT staff relate to their outsourcing partners and how they approach their work.

Theory and Hypotheses

The objective of this study is to provide important new insights into the connection between IT organization's relationship characteristics and ITO success - specifically, to explore the role organizational identity strength plays on ITO outcomes. We propose a research model (Figure 1) aimed to understand the impact of IT organization's identity strength on ITO success. We generally surmise that an organization's identity strength *mediates* the effects of two relationship characteristics on ITO success. In other words, the identity intervenes as a mechanism to relationships and consequent behaviors that are likely to influence ITO success. Specifically, we posit that the positive influence of *effective knowledge sharing and trust* on *ITO outcomes* is mediated by the strength of the IT organization's identity. In the subsequent sections, we justify these hypotheses by theoretically articulating how IT organization's identity strength influences ITO success as a mediator.

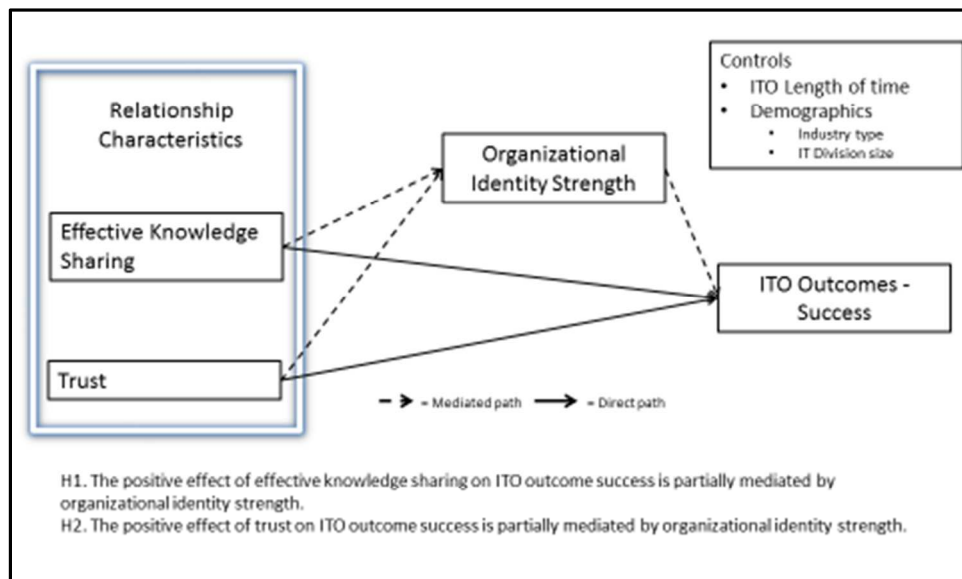


Figure 1. Research Model

Organizational identity strength influences outcomes

To build support for our claim that organizational identity acts as a mechanism to explain how effective knowledge sharing and trust lead to ITO success, we begin with studies which have examined whether identity influences outcomes through changing relational actions between organizations. Dutton & Dukerich (1991) established a connection between organizational identity and employee actions/behaviors when studying the Port Authority of New York and New Jersey. When the organization's image was threatened by bad press, the leaders used their identity as a mechanism to make contextual sense of the problem which enabled them to create a plan to address the homeless problem in their facilities. In other seminal work, Gioia and Thomas (1996) substantiated organizational identity strength's role, empirically showing a mediated path between the sense-making in strategic decision making via organizational identity strength towards effective issue management. Both of these findings suggest that organizational identity acts, in effect, as a visceral 'filter' that influences how in the face of change, organizational members' process and interpret issues such as new ITO arrangements.

We thus posit that an IT organization with a strong organizational identity is more likely to ensure the success of their organization's ITO arrangements. Stronger identification by organization's members with the organization's identity ensures role clarity for each member to carry out appropriate tasks such as engage in developing the client-supplier relationship and to set up appropriate expectations of related work. By doing so IT employees are more likely to also ensure that their partners- outsourcing vendor employees- have appropriate expectations about the ITO related behaviors.

Effective Knowledge Sharing

Per Lee (2000) successful knowledge sharing influences positively ITO outcomes: the higher the degree of effective knowledge sharing between the IT organization and the outsourcing provider, the greater the ITO outcome (Lee, 2000; Oshri et al., 2008; Murray et al., 2009). While the degree of implicit and explicit knowledge sharing has a meaningful relationship with ITO success, we posit that this relationship is partially explained by the level of organizational identity strength, too. First, previous studies support effective knowledge sharing's positive influence on organizational identity. Nag et al (2007) found that organizations who establish a mechanism to effectively share knowledge during times of strategic change fortify existing identities and foster future state identities. Hong & Fiona (2009) used an ITO engagement as the backdrop for the study where they found that the IT organization's and vendor's inability to establish a common language limited their collaboration and undermined opportunities for effective knowledge sharing. This led to a fracturing of the organization's identity, rather than a strengthening of a new identity. Both results suggest that a lack of information sharing can generate differences in member's self-perceptions about the organization's identity which in turn generates tensions in the client-supplier relationship which ultimately undermines outsourcing processes and outcomes. Thus we posit:

H1. The positive effect of effective knowledge sharing on ITO success is partially mediated by the organizational identity strength of IT organization (client).

Trust

Several studies conclude that trusting an ITO partner is about maintaining a belief that the ITO vendor will perform actions that will result in positive outcomes for the client and it will not take unexpected actions involving negative outcomes for the client. This has been found to be instrumental for a successful ITO arrangement (Lee & Kim, 1999; Han et al, 2008; Hart & Saunders, 1997, Sabherwal, 1999). But what is it that transforms these feelings of trust into positive action? We apply here the principal premise introduced at the beginning of this section – that identity promotes meaningful action. Sabherwal (1999), in his qualitative study found that activities which promoted identification-based trust (shared goals, team building) created a more unified client-supplier team with a stronger identity. He goes on to caution that the reverse can also be true – distrust among the team can fracture when the identity is missing and it affects team performance. Thus an IT organization's identity level is likely to influence how trust invites action by clarifying expectations and norms of what is expected within the ITO relationship. Accordingly, we posit:

H2. The positive effect of trust on ITO outcome success is partially mediated by the organizational identity strength of the IT organization (client).

Research Design and Methods

To validate our research model we designed and carried out an electronically disseminated self-administered cross-sectional survey. We built the survey instrument to elicit perceptions of organizational identity and outsourcing from individuals working in IT leadership roles on the client side. Our unit of analysis was the client IT organization and its outsourcing arrangements.

Construct operationalization

We adopted validated constructs from extant literature to test our proposed research model. All scales were defined as reflective (Jarvis, Mackenzie et al., 2003). Table 1 provides a summary of the constructs used in this study and Table A1 provides the item level detail. Each item was measured using a five-point Likert scale anchored by extremes of “strongly disagree” and “strongly agree.”

Dependent variable

IT Outsourcing (ITO) Success. This scale measures the success of an outsourcing arrangement defined as an attainment of strategic, economic, and technological benefits. A nine-item scale was employed in its entirety as developed by Lee (2000).

Independent variables

Effective Knowledge Sharing. A seven-item scale was adapted and modified from Lee (2001). The scale measures the degree to which clients and suppliers are successful in sharing and transferring knowledge. This broadly includes both tacit and explicit knowledge. Lee’s scale was modified to bring consistency to how we refer to the outsourcing vendor throughout the survey.

Trust. A three-item scale was adapted and modified based on Pennington et al (2003). As trust is considered to be relationship determinant several scales were evaluated for appropriateness and adaptation considerations (Dibbern et al., 2008, Grover et al., 1994, and Lee et al., 2008). The scale measures the confidence that the behavior of the second party will conform to the first party’s expectations and in its goodwill.

Mediating variable

Organizational Identity (OI) Strength. A six-item scale was adapted and modified from Milliken (1990). We also consulted Gioia and Thomas (1996) for adaptations. The scale measures a member’s perception of how well their organization maintains a set of characteristics that are central and distinctive. Modifications to the scale were made to eliminate the academic institution focus of the previous study.

Control variables

McGuire et al (2014) suggests that the length of the outsourcing arrangement may intensify (or weaken) the effect organizational identity strength has on outsourcing success. Previous studies (Loh, L., & Venkatraman, N., 1992), suggest that industry type and organizational size may affect the outsourcing success. Accordingly, we control for the length of the outsourcing engagement, industry type and organizational size.

Construct	Definition	Scale used/adapted
ITO Success	The success of an outsourcing arrangement is measured as an attainment of strategic, economic, and technological benefits.	Lee (2000)
Effective Knowledge Sharing	The degree to which clients and suppliers are successful in sharing and transferring knowledge. This definition broadly includes both tacit and explicit knowledge.	Lee (2001)
Trust	The confidence that the behavior of another will conform to one's expectations and in the goodwill of another.	Pennington et al (2003)
Organizational Identity Strength	A member's perception of how well their organization maintains a set of characteristics that are central and distinctive.	Gioia and Thomas (1996)
Length of outsourcing arrangement	The amount of time in which the organization has employed the outsourcing arrangement.	Lee et al (2004)
Industry Type	The primary industry classification of a client organization.	Cho and Kim (2002)
IT Organization size	The size of an IT department measured here as total number of employees.	Lynch (1999)

Table 1. Construct Summary

Instrument Development and Refinement

We assessed reliability and construct validity using Q-sort (Thomas & Watson, 2002), and pre-testing talk aloud exercises (Bolton, 1993) among individuals in IT leadership roles within the author's professional network. Both exercises surfaced insights resulting in scale revisions. The results were discussed with the respondents resulting in minor updates: (1) addition of an introduction page with definitions to key words (specifically organization, team, top management team) to improve consistency in respondent comprehension, and (2) consistent terminology applied throughout the survey.

Data Collection, Sampling and Screening

Our sample was created using two data collection methods. In both methods, respondents were assured of data confidentiality, and were offered to receive findings of the study. Our data was collected between August and October 2014 and was targeted to individuals in the US having the title IT Manager or similar and whose organization was involved in some form of IT outsourcing. Our first method of data collection was conducted via an email survey administered by the primary researcher. We sent out 350 initial emails to the primary author's professional network inviting participation, which was followed up a week later with a reminder email. 70 IT leaders agreed to participate in our survey giving us an initial participation rate of 20%. Our second data set was collected in partnership with Qualtrics Panel Data Services, and yielded an additional 270 responses bringing the total to 340 responses for evaluation. This response rate is lower than the 25% and higher commonly reported in studies, suggesting our results may be less generalizable than we might like. As low response rate could suggest a possible non-response bias (Armstrong & Overton, 1977), we created two test samples, the first included the first 25 responses that were returned and the second sample was made up of the 25 last responses to be returned). We then compared the mean on each item within the study's constructs as suggested by Carlo et al (2010) and determined using t-tests that no items had a P-value less than .05 suggesting no bias from non-response.

Statistical Analysis

Several statistical techniques were employed to ensure validity, reliability, and adequacy of the data, constructs, and model specification prior to the testing of the hypotheses against the structural model. The initial data set of 340 responses was screened for statistical assumptions (Mertler & Vannatta, 2005) including missing data, outliers, normality, linearity, homoscedasticity and multicollinearity. 28 respondents were eliminated immediately as data was completely missing. Of the remaining 312, the missing data for each item was less than 3% and was remediated using the median replacement method for Likert scale items and mean replacement for continuous variables. We found a number of respondents presenting consistent outlier conditions across the variables, but as this was disclosed during the univariate evaluation stage, we preserved the sample set intact. We found evidence of negative skewness in several items across all of the variables. Kurtosis was also in evidence across the organizational identity strength and ITO success dimensions. Specifically, we found 28 of our 31 items negatively skewed and 8 items had kurtosis issues with values ranging from .926 to -1.568. All items had adequate variance. Those of most concern were noted as watch items as we proceeded to model analysis. We did observe a few non-linear relationships between variables which may be related to outlier data. These were watched carefully through the development of the measurement model. Finally, performing a collinearity analysis on the predictor variables in our model, demonstrated tolerance and VIF values within acceptable limits (with all tolerance values greater than .5 and VIF values below 2), thus meeting the statistical standards set for structural equation modeling (Hair et al, 2010). (See Table 2 for result details).

Factor	Mean	Std. Dev.	ITO Success	Effective Knowledge Sharing	Org. ID Strength	Trust
ITO Success	3.94	0.735	1.000			
Effective Knowledge Sharing	3.78	0.826	.676	1.000		
Org. ID Strength	4.11	0.658	.679	.495	1.000	
Trust	3.88	0.825	.598	.650	.365	1.000

Table 2. Descriptive Statistics and Correlations among Constructs

Measurement Model

We conducted a confirmatory factor analysis (CFA) by incorporating each construct and associated items into a measurement model. The model was further refined through appropriate covariance relationships when theoretically justified (Ragin & Byrne, 2009). The overall fit for the model was excellent (CMIN/df = 1.9, RMSR = .04, TLI = .95, CFI = .95, AGFI = .87, RMSEA = .06, PCLOSE = .13). The composite reliability (CR) (Table 3) exceeded the acceptable threshold level (> .70) and the AVE for all factors was greater than .5 (Hair et al, 2010). To test for discriminate validity we compared the square root of the AVE (bold on the diagonal above in Table 4) to all inter-factor correlations. All factors demonstrated adequate discriminate validity as the diagonal values are greater than the correlations.

	CR	AVE	MSV	ASV
Org ID Strength	0.857	0.547	0.510	0.318
IT Outsourcing Success	0.920	0.561	0.520	0.501
Effective Knowledge Sharing	0.913	0.636	0.555	0.441
Trust	0.834	0.630	0.555	0.408

Table 3. Convergent Validity

	Org ID Strength	IT Outsourcing Success	Effective Knowledge Sharing	Trust
Org ID Strength	0.740			
IT Outsourcing Success	0.714	0.749		
Effective Knowledge Sharing	0.498	0.721	0.798	
Trust	0.443	0.688	0.745	0.793

Table 4. Discriminant Validity

Because all of the variables were collected via a single method (online survey) and because of the large percentage of explained variance from a single factor, a Common Method Bias (CMB) test was conducted using the common latent factor (CLF) method (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). After adding the CLF, sufficiently strong composite reliability and AVE scores for each construct were observed. After adding the CLF, there were no differences greater than 0.200 path estimates suggesting low threat of CMB.

Structural Model

Final structural model (Figure 2) was built using composites imputed from latent factor scores. The fitted structural model demonstrates a good model fit: (CMIN/df = 1.76, RMSR = .06, TLI = .95, CFI = .95, RMSEA = .05, PCLOSE = .54) and is consistent with the direct effects model (CMIN/df = 1.75, RMSR = .06, TLI = .95, CFI = .96, RMSEA = .05, PCLOSE = .55). Mediation was tested following a combination of the Baron and Kenny method (1986) and applying a 2000 bias corrected bootstrapping resample in AMOS (Preacher, Rucker and Hayes 2007) using a confidence interval of 95%. The results and discussion follows.

Results

The results of the hypotheses are interpreted using the mediation methods employed are Baron & Kenny's step-wise approach to mediation testing and bootstrapping using 2000 samples and 95% bias-corrected confidence interval (Preacher & Hayes, 2007) to examine differences in our direct and indirect effects with the final structural model diagram found in Figure 2. Our direct model showed a positive effect of effective knowledge sharing and trust on ITO success ($R^2 = 0.584$) and findings are consistent with previous studies (Lee, 2001; Murray et al, 2009; Dibbern et al, 2008). However when adding the organizational identity strength into the mediated model, we see a marked increase in explained variance ($R^2 = 0.735$) suggesting that the strength of an IT organization's identity influences ITO success.

A test of our hypotheses revealed that one of our two propositions were supported by the results of this research. First, our result indicates organizational identity strength mediates the relationship between effective knowledge sharing and ITO success, showing a direct effect of .303 ($p < .001$) and an indirect effect of .183 ($p < .001$)¹. Removing organizational identity strength from the model generated a base level effect from effective knowledge sharing to ITO success of .471 ($p < .001$). Adding back in organizational identity strength as a mediator, resulted in path weights between effective knowledge sharing and organizational identity strength ($\beta = .409$, $p < .001$), organizational identity strength and ITO success ($\beta = .448$, $p < .001$), and effective knowledge sharing and ITO success ($\beta = .303$, $p < .001$) that were all positive and significant, thus supporting **H1**. However, our results show organizational identity strength does not mediate the relationship between trust and ITO success, showing a direct effect of .261 ($p < .001$) and an indirect effect of .065 (ns). Again we removed organizational identity strength from the model generated a base level effect from trust to ITO success of .338 ($p < .001$). Adding back organizational identity

¹ These results were generated by bootstrapping using 2000 samples and utilizing a 95% bias-corrected confidence interval.

strength as a mediator resulted in path weights between trust and organizational identity strength ($\beta = .144, p = .171$), organizational identity strength and ITO success ($\beta = .448, p < .001$), and trust and ITO success ($\beta = .261, p < .001$) confirming no mediation, thus providing inadequate support of **H2**. A summary of our results is shown in Table 5.

All three controls had a significant, but weak effect in the model: ITO length of time to organizational identity strength ($\beta = -.09, p = .10$); size of the IT organization to ITO success ($\beta = -.08, p = .03$) and industry type to ITO success ($\beta = .07, p = .05$) (see Table 5).

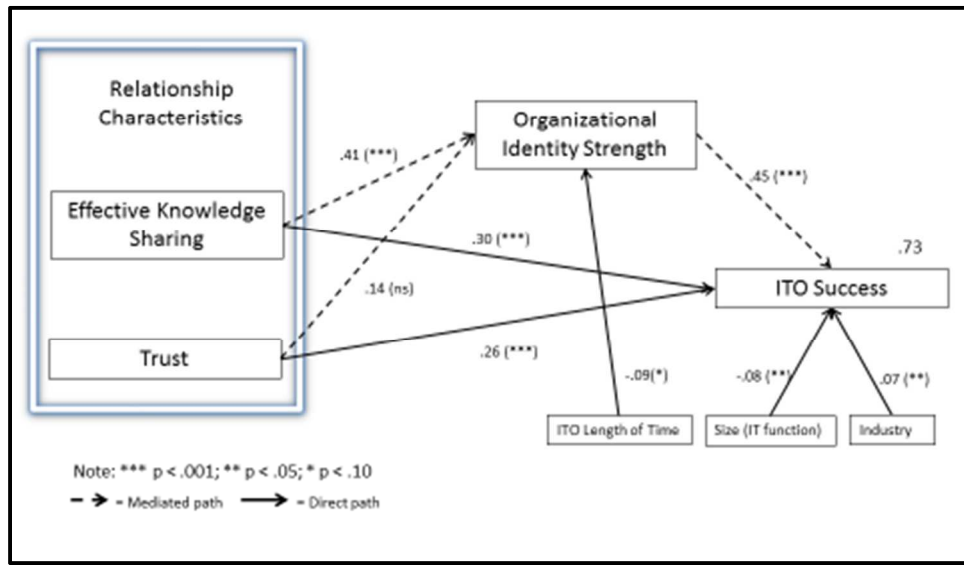


Figure 2. Structural Model – Mediated path results

Hypothesis	Evidence	Supported?
H1. The positive effect of effective knowledge sharing on ITO success is partially mediated by organizational identity strength of IT organization (client).	<u>Bootstrapping Method</u> Direct Effect = .303*** Indirect Effect = .183*** <u>Baron & Kenny Method</u> Direct Effect (without mediator OI Strength) = .471*** Mediated Direct Effect from: Effective Knowledge Sharing to ITO Success = .303*** Effective Knowledge Sharing to OI Strength = .409*** OI Strength to ITO Success = .448***	Supported
H2. The positive effect of trust on ITO outcome success is partially mediated by organizational identity strength of the IT organization (client).	<u>Bootstrapping Method</u> Direct Effect = .261*** Indirect Effect = .065 (ns) <u>Baron & Kenny Method</u> Direct Effect (without mediator OI Strength) = .338*** Mediated Direct Effect from: Trust to ITO Success = .261*** Trust to OI Strength = .141 (ns) OI Strength to ITO Success = .448***	Not Supported
Results from Controls		
Path	Beta	P-value
Length of ITO arrangement – OI Strength	-.09	.10
Size of IT organization – ITO Success	-.08	.03
Industry Type – ITO Success	-.07	.05

Note: *** p < .001; ** p < .05; * p < .10

Table 5. Hypotheses Summary and Results

Discussion

This study provides important new insights into the connection between relationship characteristics and ITO success. We explore the role organizational identity strength plays in ITO outcomes. We highlight two new insights: 1) we advance our understanding of what factors contribute to ITO success and 2) we clarify the connection between one previously established relationship determinant and ITO success to be more complex. Although we are surprised by organizational identity strength's insignificant effect in explaining trust's relationship to ITO success, we are encouraged by its meaningful impact on the relationship between effective knowledge sharing and ITO success.

The relationship between Effective Knowledge Sharing and ITO Success.

Several studies (including this one) have affirmed the positive effect of knowledge sharing on ITO success. But this study sought to go beyond the fact of the effect's existence by pursuing a deeper explanation for this relationship. Lee's 2000 study, which first introduced empirical evidence of effective knowledge sharing on ITO success called for further research in the dynamics which govern the organizational 'system' in an effort to more carefully examine this determinant - we offer organizational identity strength as a mechanism to enhance our understanding. We are grounded in the understanding that those IT organizations who have a strong and unified understanding of who they are will also have a strong desire to ensure the success of all work performed within their function. As outsourcing partners are often accountable for a portion of that activity, IT organizations see one of their imperatives is fostering and

managing their client-outsourcing provider relationships by establishing ways to share knowledge successfully.

What is interesting is not merely the presence of organizational identity strength in the effective knowledge sharing-ITO success path, but the degree of its effect on explaining the relationship. Effective knowledge sharing exhibited a strong and significant relationship to ITO success in a direct path model but in the mediated model, we observed a significant, but marked decrease in the direct effect of effective knowledge sharing on ITO success. This tells us that not only is organizational identity strength a factor to be considered, omitting it from the conversation promotes a narrow, tactical focus when leaders need broader insights on the impacts of ITO.

Limitations and Future Research

Although our initial findings are promising, our study is not without limitations. First, our study reflects a point in time and does not capture the possible feedback effect of effective knowledge sharing, OI strength, and outsourcing success over time. Ideally, we need a longitudinal research that tracks outsourcing engagements over time. Second, we used a convenient, not a random, sample in selecting firms that outsourced their IT functions. Third, the scope of our study is limited to IT functions within an organization. Further research is encouraged to test the generalizability to all outsourcing relationships.

This study bring promising implications for both the academic and practitioner communities. Fueled by what's uncovered here, we encourage further research which explores additional organizational dynamic's (such as culture and image) effect on this causal chain. We also encourage an extension of this model in two ways: 1) To other functional areas of the business which routinely engage in outsourcing, such as Human Resources and other business process management functions and 2) across levels of the organization as these may inform academic and practitioner communities of previously unexplored avenues concerning their own outsourcing success. This study focused on the client perspective of the client-supplier relationship yet there's much to be learned by exploring this model from the supplier's vantage point thus we encourage further study in this area. Lastly, socializing these findings among the IT practitioner community is called for. As IT organizations are under increased pressure to demonstrate value within their ITO engagements, fostering strength of their identity provides more opportunity to maximize effectiveness in sharing information with their outsourcing partners.

The empirical study of ITO success' relationship with organizational dynamics (such as identity) is in its early stages. This research contributes to the literature on ITO success by furthering our understanding of what explains the power of positive relationships to the success of maximizing the ITO arrangement. Practically speaking, by gaining a deeper understanding of how these two phenomena comingle, practitioners now have their own identity as another lever to exploit in improving the chances for success in their ever changing sourcing strategy.

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Appendix

Table A1. Item Detail

Construct	Definition	Scale used/adapted	Items – unless otherwise noted, all measured on a 5-point Likert scale anchored by extremes of “strongly disagree” and “strongly agree.”
Dependent Variable			
ITO Outcomes - Success	The success of an outsourcing arrangement is measured as an attainment of strategic, economic, and technological benefits.	Lee (2000)	We have been able to refocus on core business. We have enhanced our IT competency. We have increased access to skilled personnel. We have enhanced economies of scale in human resources. We have enhanced economies of scale in technological resources. We have increased control of IS expenses. We have reduced the risk of technological obsolescence. We have increased access to key information technologies. We are satisfied with our overall benefits from outsourcing.
Independent Variables			
Effective Knowledge Sharing	The degree to which clients and suppliers are successful in sharing and transferring knowledge. This definition broadly includes both tacit and explicit knowledge.	Lee (2001)	We and our outsourcing partner share business proposals and reports with each other. We and our outsourcing partner share business manuals, models, and methodologies with each other. We and our outsourcing partner share each other's success and failure stories. We and our outsourcing partner share business knowledge obtained from newspapers, magazines, journals, and television. We and our outsourcing partner share know-how from work experience with each other. We and our outsourcing partner share each other's know-where and know-whom. We and our outsourcing partner share expertise obtained from education and

How Organizational Identity influences Information Technology (IT) Outsourcing Success

			training.
Trust	the confidence that the behavior of another will conform to one's expectations and in the goodwill of another	Pennington et al (2003)	This outsourcing partner appears to be one who would keep promises and commitments (would deliver goods as expected). I believe the information that this outsourcing partner provides me. I would trust this outsourcing partner to keep my best interests in mind (not distribute my private information). This vendor is trustworthy. I do not find any reasons to be cautious with this vendor.
Communication	The degree to which parties are willing to openly discuss their expectations, progress, capabilities, strengths, weaknesses, and directions for the future	Lee and Kim (1999)	The manner and methods of communication quality between both the outsourcing partner and the IT organization were timely. The manner and methods of communication quality between both the outsourcing partner and the IT organization were accurate. The manner and methods of communication quality between both the outsourcing partner and the IT organization were complete. The manner and methods of communication quality between both the outsourcing partner and the IT organization were credible.
Mediator			
Organizational Identity Strength	A member's perception of how well their organization maintains a set of characteristics that are central and distinctive.	Gioia and Thomas (1996)	Members of top management of the IT organization have a strong sense of the IT organization's history. Your IT organization's top management team members have a sense of pride in the IT organization's goals and missions. Top IT management feel that your IT organization has carved out a significant place in the corporate IT community. IT top management team members not have a well-defined set of goals or objectives for the IT organization. Your IT organization has top management who is knowledgeable about the IT organization's history and traditions. Your IT organization has top management, middle management, and team members who identify strongly with the IT organization.
Controls			
Length of outsourcing arrangement	The amount of time in which the organization has employed the outsourcing arrangement.	Lee et al (2004)	Typical outsourcing service provider contract term (in years).
Industry Type	The primary industry classification of a client organization.	Cho and Kim (2002)	Please select the industry which best fits your organization: Manufacturing, Banking/finance/insurance, Government organization, Distribution, Construction, Transport/warehouse/communication, Research, Real estate, Agricultural/mining, or Other
IT Organization size	The size of an IT department measured here as total number of employees.	Lynch (1999)	The number of employees in your IT organization