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An Integrative Model of Trust on IT Outsourcing : From the Service Receiver's Perspective

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Abstract

As the investment in outsourcing continues to grow, both service provider and receiver face an increasing pressure to exhibit the value of outsourcing. Improving the quality of a relationship between service provider and receiver has frequently been suggested as the best way to meet this challenge. Recent studies stress that the most critical time for a successful interorganizational relationship is at the beginning of their relationships. Trust has been considered as a central aspect of a successful outsourcing from the beginning of outsourcing relationship to the end. A great deal of interest in trust has been described, but there has been little in the way of strong theoretical models to aid in understanding the role of trust, the antecedents of trust, and the consequences of trust in outsourcing relationship. This study suggests an integrative model of trust in the context of outsourcing by adopting Mayer and Davis's organizational trust model and then attempts to empirically explore the role of initial trust, initial distrust, and trust with knowledge sharing as mechanisms for a successful outsourcing project from the service receiver's perspective. The results show that mutual trust is very important for knowledge sharing and outsourcing success, and affected by initial perception to each other's partner at the beginning of outsourcing process. The results help extend our understanding of critical success factors in outsourcing.

Keywords: IT Outsourcing, Trust, Initial Trust and Distrust, Knowledge Sharing, Mutual Dependency, Outsourcing Success

1. Introduction

In recent years, “partner” based outsourcing has emerged as a major strategic alternative in information systems management. One of the critical success factors for the “partner” based outsourcing is the ability to effectively manage the relationship among various parties involved in outsourcing. This creates a real challenge because the catalyst for a successful relationship often requires not only well-crafted agreements but also the synergy from trust and interdependence as well as sharing of critical information among the parties involved. Moreover, as the investment in outsourcing continues to grow, both service provider and receiver face an increasing pressure to exhibit the value of outsourcing. Improving the quality of a relationship between service provider and receiver has frequently been suggested as the best way to meet this challenge. Recent studies stress that the most critical time for a successful interorganizational relationship is at the beginning of their relationships. Trust has been considered as a central aspect of a successful outsourcing from the beginning of outsourcing relationship to the end. A great deal of interest in trust has been described, but there has been little in the way of strong theoretical models to aid in understanding the role of trust, the antecedents of trust, and the consequences of trust in outsourcing relationship. Such a deficiency motivates us to undertake this study.

Our paper represents one of the forefront efforts to conceptualise and validate a theoretical model of trust in the context of outsourcing relationship. The proposed model in this study is based on an integrative model of organizational trust developed by Mayer et al. (1985). Then, the hypothesized model is then tested empirically using data collected from customer organizations in Korea. Research questions addressed in this study include: (1) *what is the role of mutual trust in outsourcing relationship?*; (2) *how can the mutual trust be nurtured?*; (3) *what are consequences of the mutual trust?* With the premise that the most critical time for successful interorganizational relationship is at the beginning of the interaction, this study tries to answer above three questions.

2. Theoretical Development

2.1 A Model of Trust on IT Outsourcing

Trust is considered as a fundamental basic factor in IT outsourcing, especially in a long-term outsourcing relationship (McFrlan and Nolan, 1995; Sabherwal, 1999). Therefore, many researchers have tried to explain trust on outsourcing relationship through correlation analysis among trust-related variables (e.g., Klepper, 1994) or correlation analysis between trust-related variables and outsourcing success (e.g., Lee and Kim, 1999). However, these studies drew multiple, sometimes conflicting conclusions with little business implications. Further, despite the various theories related to trust such as social exchange theory and social network theory, there has been a lack of an integrated view to provide an in-depth analysis of the trust on outsourcing relationship.

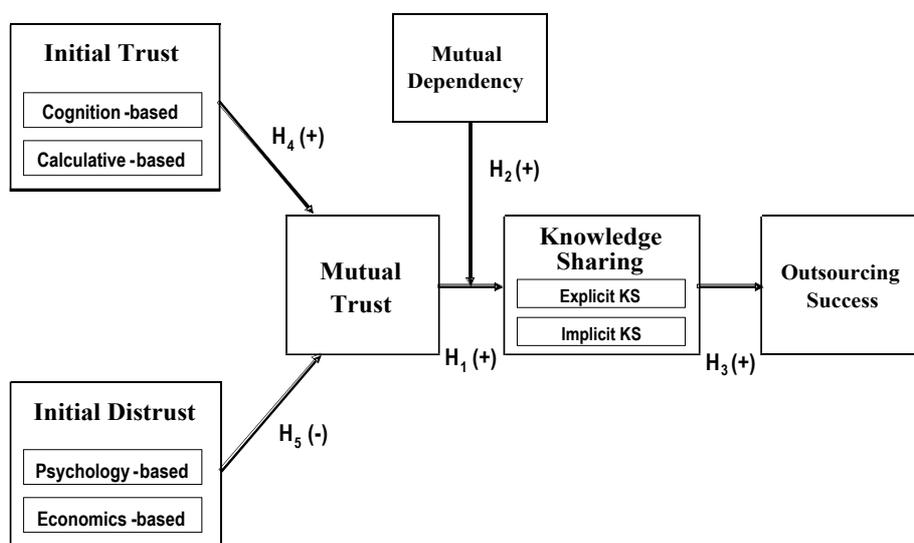


Figure 1: An outsourcing relationship trust model.

With above motivations, this study proposes an outsourcing relationship trust model by applying Mayer et al. (1985)'s model to the context of outsourcing. They proposed an integrative model based on a dyad of trustor and trustee by clarifying the role of risk in a trust-based relationship. The model assumes that the decision to trust is influenced by the trustor's initial perception, trust (e.g., willingness to assume risk) and trusting behaviours (e.g., actually assuming risk) are fundamentally different, and taking a risk leads to a positive or unfavourable outcome in a given context. This model is widely used in the relationship literature to study consumer behaviour in Internet (e.g., Gefen, 2002; Jarvenpaa and

Tractinsky, 1999), and relationship management (e.g., Mayer and Davis, 1999). In the context of IT outsourcing, we propose our research model, as shown in Figure 1, and discuss below.

2.2 The Importance of Mutual Trust in Outsourcing Relationship

Trust, a feature of relationship quality, has been conceptualized as the firm's belief that the other company will perform actions that will result in positive outcomes for the firm, and will not take unexpected actions that would result in negative outcomes for the firm (Gulati, 1995; Mayer et al., 1985). Practically, it is the expectation that commitments undertaken by another party will be fulfilled, especially in relationships where the trust party lacks control over the trusted party but must still depend on it (Fukuyama, 1995; Rotter, 1971). Therefore, Lee and Kim (1999) emphasize that trust is an essential component to classify a relationship type into transaction style and partnership style, and evolving through mutually satisfying interactions and increasing confidence in relationship. So, trust is considered as a major component of relationship quality, which directly affects the degree of outsourcing success.

2.3 Trust Consequences

2.3.1 Knowledge sharing as risk taking in relationship

In the outsourcing context, the knowledge sharing is not just a simple shared reality between groups in the case of IS performance. Because of the nature in a trust-based relationship, both the client organization and the service provider are coupled in an intimate interaction. There is a high degree of interdependency and vulnerability. Hence, knowledge sharing involves an element of risk taking. The effectiveness of knowledge sharing is related to the willingness for parties involved to take risks by opening up to each other. Thus, the higher level of perceived mutual trust between the client and the service provider organizations are in their relationship, the more willingness for risk taking the client and the service provider organizations have in their knowledge sharing.

For purpose of this study, we frame knowledge sharing as activities of transferring or disseminating knowledge from one person, group or organization to another. This conceptualization of knowledge sharing broadly includes both tacit and explicit knowledge. To make more concrete and new definitions of tacit and explicit knowledge, we introduce the concept of knowledge representativeness (Polanyi, 1996) - the degree to which knowledge can be expressed in verbal, symbolic or written form. That is, we consider the representativeness of knowledge to be a continuum. According to this rationale, tacit knowledge is defined as knowledge that cannot be expressed in verbal, symbolic and written form while explicit knowledge is knowledge that exists in symbolic or written form. Then, implicit knowledge is knowledge that can be expressed in verbal, symbolic or written form, but not yet expressed. Since tacit knowledge is hard to formalize and communicate, this study focuses mainly on explicit and implicit knowledge sharing between the service receiver and provider. Based on above premise, we propose the following hypothesis.

H₁: The mutual trust will be positively related to the degree of knowledge sharing.

2.3.2 Mutual dependency as perceived risk

In an outsourcing relationship, groups have to work together to achieve the interorganizational goals. This interdependence creates the sphere of mutual dependency. While the degree of interdependency is varied between the service provider and client organizations, it is clear that propensity by itself is not insufficient to account for the

association between mutual trust and knowledge sharing. To address this variance, we introduce another construct - mutual dependency as perceived risk. Mutual dependency between organizations results from a relationship in which participating parties perceive mutual benefits and share the risks from their interactions (Bensaou and Venkatraman, 1995; Emerson, 1962). Such dependency is determined by the organization's perception of its dependency on its partner in relation to the partner's dependency on it (Anderson and Narus, 1984). When the size of the exchange increases and the importance of the exchange are recognized, the level of mutual dependency is high (Heide and John, 1990).

In such a case, participating parties usually see their partners as the best alternative for sources of exchange. According to Lee and Kim (1999), the higher the degree of mutual dependency is likely to result in the higher quality of relationship. In an outsourcing context, we posit that the higher the mutual dependency between the service provider and client organizations, the more likely they would share their knowledge. Subsequently, the stronger the level of mutual dependency, the stronger the relationship between mutual trust and knowledge sharing. We hypothesize that:

H₂: The relationship between mutual trust and knowledge sharing will be moderated by the degree of mutual dependency.

2.3.3 Outsourcing success

The success of outsourcing can manifest in several different ways. Generally, success may be reflected by the degree to which predefined objectives are realized. In most outsourcing cases, outsourcing objectives relate to the strategic, economic and technological benefits. Then the success of outsourcing should be assessed in terms of attainment of these benefits (Loh and Venkatraman, 1992). Outsourcing relationship based on mutual trust can create a competitive advantage through the strategic sharing of organizations' key information and knowledge (Konsynski and McFarlan, 1990). Closer relationships result from more frequent and more relevant information and knowledge exchanges among high performance partners (Lam, 1997). By sharing knowledge between the client and the service provider, they are able to sustain a more effective outsourcing relationship over time. Therefore, the absence of knowledge sharing is a critical factor in a dysfunctional inter-organizational dynamics, whereas the presence of such a shared perception may lead to better outsourcing performance. Therefore, this study hypothesizes that:

H₃: The knowledge sharing will be positively related to the outcome of outsourcing.

2.4 Antecedents of Trust

This study examines initial trust in the outsourcing relationship as an antecedent to mutual trust. We define our notion of initial trust as one party's disposition to believe based on the economic and cognitive cues that the other party would fulfill the commitment and behave in a predictable way. In outsourcing relationship, interaction between client and its service providers is commonplace. Such a situation involves initial trust. Since they have not worked together enough to develop an interaction history, initial trust situations occur naturally.

Ajzen (1988) explains evidence that beliefs and intentions tend to stay consistent. If one is likely to have initial trust toward the other, they are likely to have a successful relationship with consistent trustworthiness from the beginning to the end. Some researchers for cognitive consistency have found evidence that related beliefs tend to stay consistent with each other because people keep their various cognitions reconciled (Abelson et al., 1968). When parties

first meet, already-formed initial trust will encourage a high level of trust beliefs and intentions. Over time, the relationship between parties will be reciprocal and will reach equilibrium. Although the level of initial trust can be lower (Worchel, 1979) or higher (Zand, 1972) as time passes and conditions change, we generally expect to find relatively consistent level of initial trust in forming and developing organizational relationships.

According to McKnight et al. (1998), there are five research streams to explain how initial trust forms: (1) calculative-based; (2) knowledge-based; (3) personality-based; (4) institution-based; and (5) cognition-based. Calculative-based trust researchers theorize that individuals make trust choices based on rationally derived costs and benefits (Lewick and Bunker, 1995). In this study, we chose two research streams – calculative-based and cognition-based – as a basis to conceptualize initial trust, even though each of other three streams can be adopted for initial trust. Knowledge-based trust assumes that the parties have firsthand knowledge of each other. However, the concept of initial trust in this study does not include any interaction history and focuses on second-hand knowledge such as reputation as a categorization process (McKnight et al., 1998). Personality and institution-based trust are not appropriate for this study because of their totally different point of view. Based on above explanation and classification, we formulate the following hypothesis.

H₄: Initial trust will be positively related to the level of mutual trust in an outsourcing arrangement.

According to Lewicki and Bunker (1995), distrust can be viewed as confident negative expectations toward other partners. Though many researchers described that trust is crucial in interorganizational relationships, interestingly few researchers brought up the notion of distrust in organizational relationship. Unlike Lewicki and Bunker's view of distrust as the opposite of trust, McKnight and Chervany (2001) insisted that distrust is not synonymous with low levels of trust. This is mainly because trust and distrust typically separate and appear to have somewhat different determinants and consequences. Having low trust in a vendor may indicate that one does not want to do business with this firm, whereas to have disposition to distrust in a vendor means that one is suspicious of the vendors' intention.

We define the notion of initial distrust as one party's disposition to believe based on the economic and cognitive cues that the other party may not fulfill the commitment or behavior in a predictable way. Similar to initial trust, we posit that initial distrust is an important construct in outsourcing. Applying McKnight and Chervany (2001)'s interpretation, we adopted two subconstructs for disposition to initial distrust: the first one based on the psychology perspective is the suspicion of humanity by which one assumes others are not usually honest, benevolent, competent, and predictable (Wrightsmann, 1991); and the second one related to the economic perspective is the distrusting stance by which one assumes that he/she will achieve better outcomes by dealing with people even though these people are not well-meaning and reliable (Riker, 1971).

The basic assumption is that initial distrust can be considered as the absence of such safeguards against risks of bad relationship. Thus, if a party's prior beliefs are negative, cognitive biases that prefer conservatism generally will sustain negative intensions and behaviors (Fazio and Zanna, 1981). Consequently, over time, the negative belief will compound and adversely affect the mutual trust and then the knowledge sharing and eventually the outcome of the relationship. Thus, our next hypothesis is the following.

H5: Initial distrust will be negatively related to the level of mutual trust in an outsourcing arrangement.

3. Research Methodology

In this study, a field survey method was adopted with a confirmatory analysis approach from the service receiver's perspective.

3.1 Measures

After developing the research framework, we conducted a series of personal interviews with IT outsourcing professionals to assess the external validity of the model. We then developed a questionnaire based on the previous literature and the comments gathered from the interviews. To develop the measurement, we relied on the multiple-item method and hence assigned each item on a five-point Likert scale. Whenever it is appropriate, we adapted the existing measures to our research context (e.g., knowledge sharing (Lee, 2001) and outsourcing success (Grover et al., 1996)). In some cases, we converted the definitions of the constructs into a questionnaire format (e.g., initial trust and initial distrust).

An initial version of the survey instrument was subsequently refined through extensive pretesting with seven academics who have significant expertise in the field of outsourcing. The instrument was further pilot tested with ten service receivers in Korea. We interviewed a CIO or a representative in charge of the firm's IT operations in each service receiver. The multiple phases of instrument development resulted in a significant degree of refinement and restructuring of the survey instrument (Nunnally, 1978). Our survey instrument is available upon request.

3.2 Sample and Data Collection

The data were obtained from a field survey of service receivers. The primary source of the sampling frame for service receivers was a list of the 1,000 large firms reported in the *Maeil Business Newspaper* in Korea as of year 2003. Then, these firms were checked in the *Book of Listed Firms* published by the Korea Stock Exchange to obtain the name of the IS executive in each firm. Finally, the survey questionnaire was mailed to 970 corporate-level top IS executives of the service receiver's firms.

In order to increase the response rate, Dillman's Total Design Method (1991) had been applied. A postcard follow-up was conducted one week after the original mailing and the same questionnaire was mailed again four weeks after the original mailing. After the three rounds of solicitation, a total of 285 service receivers responded to the survey representing a response rate of about 29 percent. Most of the respondents provided the name and address of the vendor representative who was most knowledgeable about the relationship. 86 out of 285 responses did not provide their vendor information, while 36 responses were discarded due to incomplete data. Finally, 163 responses could be used for the second survey for the service provider. Among respondents, a large number of the responses came from the manufacturing (25.2%), construction (22.7%), and banking and finance (20.2%). Of the 163 companies, 54 firms had total sales of 1 billion dollars or more. The average outsourcing period was about 3.5 years (S.D.=1.52).

4. Analysis and Results

4.1 Analysis Method

This study selected a confirmatory approach using Partial Least Squares (PLS). Although one of advantages in adopting the PLS method is to test the measurement model and structural model at the same time, this study decided to adopt a two-step analysis approach in which the measurement model was first estimated, much like the factor analysis, and then the measurement model was fixed in the second stage when the structural model was estimated (Anderson and Gerbing, 1988; Hair et al., 1998). The rationale for this approach is to ensure that our results on the structural relationship come from accurate and desirable representation of the reliability of the indicators in the measurement model.

Table 1. Results of PLS confirmatory factor analysis

| Construct | Item* | Composite Reliability / Average Vance Extracted | Loading | t-value |
|--|-------|---|---------|---------|
| Cognition-based Initial Trust | COIT1 | 0.949/0.823 | 0.887 | 51.069 |
| | COIT2 | | 0.964 | 214.440 |
| | COIT3 | | 0.805 | 24.273 |
| | COIT4 | | 0.964 | 214.439 |
| Calculative-based Initial Trust | CAIT1 | 0.884/0.718 | 0.771 | 8.375 |
| | CAIT2 | | 0.889 | 9.718 |
| | CAIT3 | | 0.877 | 9.736 |
| Psychology-based Initial Distrust | PSID1 | 0.906/0.707 | 0.895 | 9.876 |
| | PSID2 | | 0.882 | 9.775 |
| | PSID3 | | 0.743 | 8.015 |
| | PSID4 | | 0.834 | 9.614 |
| Economics-based Initial Distrust | ECID1 | 0.863/0.677 | 0.773 | 8.963 |
| | ECID2 | | 0.882 | 9.818 |
| | ECID3 | | 0.810 | 9.183 |
| Mutual Trust | MT1 | 0.871/0.632 | 0.702 | 12.815 |
| | MT2 | | 0.763 | 17.294 |
| | MT3 | | 0.758 | 14.188 |
| | MT4 | | 0.620 | 9.053 |
| | MT5 | | 0.764 | 17.294 |
| | MT6 | | 0.758 | 14.188 |
| Explicit knowledge sharing | EKS1 | 0.932/0.775 | 0.888 | 9.837 |
| | EKS2 | | 0.862 | 9.710 |
| | EKS3 | | 0.856 | 9.690 |
| | EKS4 | | 0.913 | 9.881 |
| Implicit knowledge sharing | IKS1 | 0.866/0.684 | 0.767 | 8.699 |
| | IKS2 | | 0.881 | 9.734 |
| | IKS3 | | 0.829 | 9.401 |
| Mutual Dependency | MD1 | 0.957/0.816 | 0.920 | 11.525 |
| | MD2 | | 0.879 | 15.834 |
| | MD3 | | 0.919 | 11.524 |
| | MD4 | | 0.879 | 15.834 |
| | MD5 | | 0.920 | 11.522 |
| Outsourcing Success | OS1 | 0.920/0.664 | 0.692 | 14.944 |
| | OS2 | | 0.771 | 23.003 |
| | OS3 | | 0.750 | 20.423 |
| | OS4 | | 0.738 | 10.183 |
| | OS5 | | 0.735 | 15.458 |
| | OS6 | | 0.780 | 25.210 |
| | OS7 | | 0.812 | 31.741 |
| | OS8 | | 0.756 | 20.263 |
| | OS9 | | 0.807 | 30.827 |

4.2 Measurement Model

To validate our measurement model, three types of validity were assessed: content validity, convergent validity and discriminant validity of the instrument. First, content validity refers

to the comprehensiveness of the items used to create a scale. It is established by ensuring the consistency between the measurement items and extant literature, by interviewing senior practitioners and pilot-testing the instrument. Second, convergent validity was assessed by looking at the composite reliability and the average variance extracted from the measures (Hair et al, 1995). Table 1 shows that the average variances extracted by our measures were very satisfactory at 0.632 or above. In addition, Table 2 exhibits the loadings and t-values of the measures in our research model. All measures are significant on their path loadings at the level of 0.01, as expected. Finally, the discriminant validity of our instrument was verified by looking at the square root of the average variance extracted. As shown in Table 3, the result revealed that the square root of the average variance extracted for each construct on models is greater than the correlations between it and all other constructs. Also, the results of the inter-construct correlations exhibited that each construct shared larger variance with its own measures than with other measures. Overall, these results explain that the measurement models are strongly supported by the gathered data and ready for further analysis.

We then checked multicollinearity of the measurement model. Multicollinearity may potentially exist among the independent variables. Table 2 displays the correlations among all variables. These correlations plus the result from VIF suggest that multicollinearity is not a serious problem for the proposed model from the service receiver’s perspectives, particularly when the purpose of the analysis is to make inferences on the response function or the prediction of new observations (Neter et al., 1985), which is the case in this study.

Table 2. Correlations between constructs

| | COIT | CAIT | PSID | ECID | MT | EKS | IKS | MD | OS |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cognition-based Initial Trust (COIT) | 0.907 | | | | | | | | |
| Calculative-based Initial Trust (CAIT) | 0.333 | 0.847 | | | | | | | |
| Psychology-based Initial Distrust (PSID) | 0.237 | 0.092 | 0.841 | | | | | | |
| Economics-based Initial Distrust (ECID) | 0.265 | 0.206 | 0.366 | 0.823 | | | | | |
| Mutual Trust (MT) | 0.375 | 0.317 | 0.055 | 0.306 | 0.795 | | | | |
| Explicit knowledge sharing (EKS) | 0.389 | 0.344 | 0.155 | 0.501 | 0.553 | 0.880 | | | |
| Implicit knowledge sharing (IKS) | 0.281 | 0.291 | -0.091 | 0.334 | 0.610 | 0.584 | 0.827 | | |
| Mutual Dependency (MD) | 0.314 | 0.135 | 0.157 | 0.122 | 0.236 | 0.201 | 0.147 | 0.903 | |
| Outsourcing Success (OS) | 0.363 | 0.300 | 0.183 | 0.391 | 0.477 | 0.462 | 0.423 | 0.242 | 0.815 |

4.3 Structural Model

The results of the analysis of the structural models are summarized with the path coefficients and t-values in Figures 2. Tests of significance of all paths in each model were performed using the bootstrap resampling procedure. As shown in the Figure, among five hypothesized paths, three are found significant at the level of 0.01.

4.3.1 Mutual trust

A service receiver’s perception of initial trust was found to be significantly related to the mutual trust ($\beta=0.418$; $t=6.127$; $p<0.01$). Hence, Hypothesis 4 was supported. However, initial distrust was not found to be significantly related to the service receiver’s perception of

mutual trust; Hypothesis 5 was not supported. The testing results of both Hypotheses 4 and 5 indicate that mutual trust is more likely shaped by its initial trust of a service provider and not its initial distrust. In other words, the more positive a service receiver's disposition to believe based on the economic and cognitive cues that its service provider is a trustworthy partner, the stronger its perception of mutual trust with its service provider becomes.

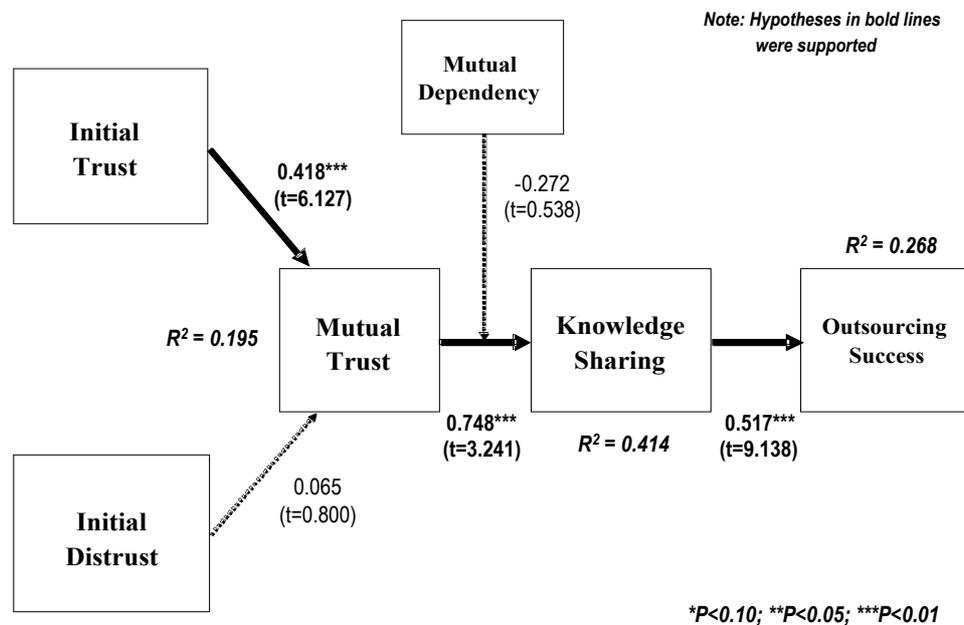


Figure 2: Results of PLS analysis

4.3.2 Knowledge sharing

As hypothesized, the results show that mutual trust has a significant impact on the degree of knowledge sharing between the service receiver and its provider ($\beta=0.748$; $t=3.241$; $p<0.01$), supporting Hypothesis 1. This means that when a service receiver has confidence in its service provider, it is more willing to engage in activities of explicit and implicit knowledge sharing. Contrary to previous studies (e.g. Bensaou and Venkatraman, 1995), mutual dependency didn't have significant effect on the relationship between mutual trust and knowledge sharing. This suggests that when engaged in an outsourcing arrangement, a service receiver may already presume its dependency on its service provider. Hence, it is a mutual trust rather than mutual dependency that plays a significant role in the process of knowledge sharing.

4.3.3 Outsourcing success

As expected, the degree that a service receiver engages in knowledge sharing with its service provider is significantly associated with the outsourcing success. That is, the higher the degree of explicit and implicit knowledge sharing taken by a service receiver, the greater the attainment of the strategic, economic, and technological outsourcing benefits, supporting Hypothesis 3.

5. Discussion

By applying an integrative model of organizational trust to the context of outsourcing relationship, this study has explained the importance of initial trust, mutual trust, and knowledge sharing for the success of outsourcing. The results from this study partially

support the proposed framework. Two major factors - mutual trust and knowledge sharing - influence the outsourcing success. Similarly, both the mutual dependency and initial distrust were found to be insignificant, while initial trust contributes to strengthen the mutual trust. Specifically, the finding of this study first shows that knowledge sharing is perceived to be a critical success factor in outsourcing relationship, which is consistent with the existing literature (e.g., Lam, 1997). The result of Hypothesis 3 suggests that the perception of outsourcing success is determined by the extent to which both service receiver and provider share their explicit and implicit knowledge with one another. The evidence indicates that knowledge sharing plays an important role for the attainment of outsourcing strategic, economic, and technological benefits. Furthermore, explicit knowledge sharing appears to be a more effective way for outsourcing success than implicit knowledge sharing. Explicit knowledge is easier to understand and share with other organizations than implicit knowledge that is yet not expressed.

Second, mutual trust is found to be significantly affected by the initial trust. Hence, the initial disposition that one believes in the other's ability, expertise, and credibility is very crucial in the emergence of mutual trust (Nelson and Coopridge, 1996). Moreover, once it is established and developed, mutual trust also focuses not only on specific actions or behaviors but also on the motives and intentions of the exchange partner (Rempel et al., 1995). As a result, mutual trust increases the confidence in which the exchange parties have for one another in performing the tasks and achieving the common goals. Then, it reduces the uncertainty in the relationship and in turn contributes to the process of knowledge sharing. With mutual trust, both parties believe that no one is taking advantage of the others and walk away from the project in the event of unanticipated contingencies. The results suggest that mutual trust can provide a conducive environment where knowledge can be freely flow and shared between a service receiver and provider. It is an ingredient that fosters cooperation and partnership.

Third, since the dynamic nature of trust provides the need for identifying and assessing its antecedents, this study introduces two relevant antecedents, initial trust and initial distrust. According to the test result, there is no significant negative effect of initial distrust on their perception of mutual trust, contrary to what we expected (Fishbein and Ajzen, 1975; Ajzen, 1988). One possible explanation is that, unlike the initial trust, the initial distrust is often emerged from the experience or exposure to specific negative actions or behaviors. This implies an existing or previous relationship among the parties involved. Thus, in the absence of working history, the parties involved are less likely to develop initial distrust for one another. With respect to the initial trust, the service receiver considers initial trust to be as a significant factor in its perception of mutual trust. This credibility is based on the extent to which a service receiver believes that a certain provider has the required expertise to perform the job successfully (Lindskold, 1978).

The analysis of initial trust and initial distrust provides a mechanism to examine the relationship between mutual trust and knowledge sharing at a deeper level. By recognizing and including initial trust and initial distrust, it is possible to derive three possible cases. In the first case, initial trust and distrust assume to have minimal impact because the mutual trust may already be formed. In the second case, the knowledge sharing process involves no previous relationship. In this situation, the initial trust plays a dominant role in shaping the sequent development of mutual trust and knowledge sharing. In the final case, the knowledge sharing process involves the case where one party or both parties has some distrust on the other or on one another. In this case, the initial distrust has an interesting impact on the evolving relationship between both parties.

Finally, regarding the mutual dependency, previous studies suggest that it is an influencing factor on both trust and knowledge sharing (e.g., Bensaou and Venkatraman, 1995). While Lee and Kim (1999) reported that the degree of mutual dependency affects the quality of outsourcing relationship, this study shows non-significant effect of mutual dependency on knowledge sharing. It is possible that when both the service receiver and provider have developed a mutual trust, they are more inclined to perceive that their knowledge sharing is not driven by the degree of mutual dependency but in large part by the level of trust with one another. In a tightly coupling relationship, the feeling of mutual trust among the parties is much stronger and prevalent than that of mutual dependency. This in turn is a good effect because mutual trust provides much more effective environment for knowledge sharing than mutual dependency.

6. Conclusion

Although a great deal of interest in trust has been explored in previous studies, there has been little in the way of strong theoretical models to aid in understanding the role of trust, the antecedents of trust, and the consequences of trust in outsourcing relationship. Filling this deficiency in the outsourcing literature marks one of the potential contributions of this study. Our research is associated with the introduction of new concepts - initial trust, and initial distrust. While the prior studies have overlooked their effects on outsourcing success, this study shows that they are significant determinants of knowledge sharing and outsourcing success. It implies the need to provide opportunities for these qualities to be developed. Internally, by defining knowledge sharing as an appreciation between the service receiver and provider for the technologies and processes that influence their mutual performance, both should be provided opportunities to socially interact and communicate about their work. Externally, by having positive reputation and impression between the service receiver and provider in market, both should be provided opportunities to believe and be believed each other when they start a project. These opportunities could lead to improved outsourcing performance by providing a greater belief and commitment and understanding and appreciation of the constraints and environment of each other.

There are some limitations associated with this study. First, while the tests of the research framework provide partial support for the hypotheses, the nature of our cross-sectional design study limits our ability to eliminate the confound effects and also other possible causes. Another limitation is that the results of this study may include some bias since the sample was restricted to Korea. Although we tried to remove the distinctiveness of the Korean outsourcing context, replication of this study is needed to fine-tune the analysis in a more extensive geographical area.

From a managerial perspective, it is important to know the significant role of knowledge sharing in determining the success of IT outsourcing initiatives. Fostering a productive environment for knowledge sharing is one of the critical successful factors for outsourcing relationship in general and for partnership-oriented outsourcing in particular. Outsourcing based on the premise of knowledge sharing would help to draw both the receiver and the provider together on seeing a shared vision and achieving a common goal. Being sensitive and aware of the presence of initial trust and initial distrust is critical especially for the service receiver, because it may provide managers with many subtle cues for selection and evaluation of the right service provider. Putting an effort to build strong initial trust would be a stepping stone for the successful outcome of their outsourcing relationship.

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