



## The Role of Vendor Legitimacy in IT Outsourcing Performance: Theory and Evidence

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Theory and Evidence<sup>12</sup>**

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# The Role of Vendor Legitimacy in IT Outsourcing Performance: Theory and Evidence

## Abstract

Information technology (IT) outsourcing relationships today are facing increasingly turbulent environments. With rapid changes in technological, commercial, societal, and regulatory landscapes, client firms have to closely and continually assess the desirability and appropriateness, or legitimacy, of their vendors in such dynamic settings. In this research, the focus is on client firms' perceived legitimacy of vendors, termed "vendor legitimacy." Specifically, building on institutional theory, vendor legitimacy is conceptualized as consisting of three dimensions – pragmatic, moral, and cognitive – and is examined through their respective impact on IT outsourcing performance. The role of key governance strategies for managing vendor legitimacy, namely contractual governance and relational governance, are likewise explored. Results from a multiple-sourced, matched pair, cross-industry sample of executives and managers of 185 client firms reveal that these various governance strategies exert differential impacts on the aforementioned dimensions of vendor legitimacy, which, in turn, drive performance.

**Keywords:** *IT outsourcing; contractual governance; relational governance; vendor legitimacy*

## 1. Introduction

Outsourcing information technology (IT) functions to professional vendors has been commonly adopted by organizations worldwide to reduce capital expenditures, save recurring costs, increase operational flexibility, and acquire strategic innovations (Lacity et al. 2010; Lee et al. 2004). In today's increasingly uncertain and volatile business environments, however, outsourcing is fraught with problems (Deloitte 2018). Client firms have to closely and continually assess the desirability and appropriateness of their vendors in that digital technologies, industry landscapes, regulatory frameworks, and social environments are rapidly evolving (KPMG 2017). In such ever-changing settings, previously high-performing vendors may no longer be deemed legitimate (Barrett et al. 2008) by the client. A perceived loss of legitimacy may thus subsequently influence outsourcing outcomes. Deconstructing the role of such client perceptions about vendor legitimacy is theoretically interesting in that such knowledge can deepen our understanding of the dynamics between clients and vendors in what is now a turbulent environment. Such knowledge is also managerially important since empirical findings can provide insights into how client organizations can effectively govern and navigate contemporary IT outsourcing (ITO) projects.

The notion of legitimacy in ITO relationships has become increasingly salient for several reasons. The proliferation of disruptive technologies (Kane et al. 2015), the emergence of vendors from diverse global markets

(Fogarty and Bell 2014), and changing social and regulatory landscapes (Babin et al. 2011) have all been molding client expectations about and evaluations of their vendors. These, in turn, influence the clients' interaction with vendors and follow-on ITO performance. Recent industry surveys on firm experiences with IT outsourcing worldwide, for example, reveal that clients face a variety of challenging issues and concerns, including vendors' reactive approach, unqualified resources, insufficient service quality, limited responsiveness, and lack of innovation (Deloitte 2016) as well as uncertainties related to security, legal compliance, and intellectual property (Deloitte 2018). This suggests that in order to successfully navigate ITO landscapes, client organizations should actively and continuously monitor and manage vendor desirability, credibility, and appropriateness, namely, their legitimacy.

Since the turn of the millennium, legitimacy has become a seminal concept in academic research on interorganizational relationships, relationships such as strategic alliances and firm networks (Dacin et al. 2007; Human and Provan 2000). Defined as "a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed systems of norms, values, beliefs, and definitions" (Suchman 1995, p. 574), legitimacy is a form of intangible, highly significant organizational resource (Bitektine 2011), one that assures that "organization[al] practices, values or contributions are aligned with stakeholders' interests" (Landau et al. 2014, p. 1324). Moreover, it directly affects organizational performance (Dacin et al. 2007).

The information systems (IS) literature has explored the notion of legitimacy with a focus on ITO's "external legitimacy in its host environment" (Kostova and Zaheer 1999, p. 67), that is, the acceptance of a firm by the broader societal environment. Specifically, prior studies have examined how external pressures from organizational institutional environments affect the adoption of ITO as a new operating model (Ang and Straub 1998; Angst et al. 2017; Miranda and Kim 2006). Complementing the existing IS and management literatures, the present research focuses on legitimacy internal (Drori and Honig 2013) to ITO relationships, that is, "the acceptance of an organization by its internal constituencies" (Kumar and Das 2007, p. 1427). Specifically, the first extended goal of this research is *to unpack client perceptions of the legitimacy of vendors and to then examine the ITO performance impacts of such perceptions*.

Vendor legitimacy can be shaped by the strategic actions taken by parties involved in an ITO project. Both academic and practitioner literatures have documented a host of strategic actions for managing ITO (Himmelreich et al. 2019; Srivastava and Teo 2012). These are commonly categorized into two types. *Contractual governance* focuses on the use of formal, specific, and explicit contracts to regulate the interactions between clients and

vendors. *Relational governance* relies on partnering arrangements such as information sharing and cooperation as mechanisms to enforce obligations and expectations in interorganizational exchanges (Goo et al. 2009; Poppo and Zenger 2002).

Governance strategies can influence legitimacy in ITO in multiple ways. Externally, contractual and relational governance can be adopted as strategic responses to institutional pressures from markets at large (Yang et al. 2012). Internally, evidence suggests that effective governance strategies can increase the legitimacy of ITO in general and the legitimacy of individual vendors in particular (Su et al. 2016). Building on this work, our second main aim, thus, is *to further examine how governance strategies influence vendor legitimacy in ITO projects*.

Two key research questions emerge: (RQ1) To what extent does an ITO vendor's legitimacy, as perceived by its client, affect outsourcing performance?; and (RQ2) To what extent do outsourcing governance strategies affect vendor legitimacy? To address these two research questions regarding the relationship between vendor legitimacy, performance, and governance, vendor legitimacy is conceptualized via its three subconstructs. Following this is a modeling of their respective impact on outsourcing performance. Next the links between governance strategies and the three types of vendor legitimacy are posited. Finally, our theoretical model is then tested using multiple-sourced, matched pair, cross-industry sample of managers from 185 ITO clients.

Findings contribute to the IS literature in several ways. First, the study identifies and incorporates a novel perspective of vendor ITO legitimacy, an increasingly important yet understudied theoretical lens. It develops a nuanced conceptualization of three types of legitimacy internal to the client-vendor relationship. Importantly, the theoretical model complements and enriches currently dominant theoretical underpinnings of the ITO literature. Second, the study advances our understanding of the key ITO success factors by empirically examining the differential performance implications of the three types of vendor legitimacy. Results suggest that the cognitive legitimacy of the vendor, which centers on the client's perception of the vendor as a taken-for-granted and integral part of the interfirm relationship, has a particularly high impact on ITO performance. Third, the study offers fine-grained insights into the pivotal role of governance strategies by showing how different types of vendor legitimacy can be influenced by the deployment of contractual governance and relational governance in ITO arrangements.

## **2. IT Outsourcing Relationship**

IT outsourcing, a movement that has shaped the global business landscape, has been extensively studied. Several dominant theoretical perspectives have been adopted to conceptualize, model, and illuminate the relationships

between clients and vendors.<sup>1</sup> These complementary theoretical perspectives (e.g., Lee et al. 2019; Tiwana and Bush 2007) collectively provide the foundation for understanding the multi-faceted decisions and actions in ITO.

Much of the ITO literature has been grounded in economic theories. Transaction costs economics (TCE), in particular, has served as an important theoretical lens (Ang and Straub 1998). Focusing initially on the broader context of vertical integration (Williamson 1985), transaction costs represent a key factor influencing firms' outsourcing decisions and performance (Aral et al. 2018; Aubert et al. 1996). In addition to TCE, agency theory has also been adopted to theorize risks in ITO and the associated risk mitigation mechanisms (Bahli and Rivard 2003; Choudhury and Sabherwal 2003; Gefen et al. 2008).

The strategic perspective on ITO develops the concept of resource, from the resource-based view (RBV) of the firm (Barney and Clifford 2010; Peteraf 1993), as the foundational logic for ITO decisions (King and Torkzadeh 2008; Roy and Aubert 2002). Consonant with RBV, ITO decisions are driven by the client turning vendor-offered resources, such as human resources (Levina and Ross 2003), talent and expertise (Kotlarsky et al. 2014), organizational structures (Du and Pan 2013), social capital (Rottman 2008), intellectual property (Walden 2005) and innovation (Sartor and Beamish 2014), into competitive advantage (Jarvenpaa and Mao 2008).

The social perspective emphasizes the role of social interactions in shaping ITO relationships. Prior research has identified a rich set of social mechanisms, including bonding, communication, mutual dependency, and power dynamics between and within ITO parties (Kern and Willcocks 2000; Lee and Kim 1999), which contribute to the development and maintenance of client-vendor relationships. Organizational capabilities in effectively managing such ever-changing social processes (Handley and Angst 2015; Kaiser and Hawk 2004) can directly impact the quality of the interfirm relationship and ITO performance (Abbott et al. 2013; Swar et al. 2012).

The psychological perspective focuses on the role of individual-level psychological factors and processes. Psychological contracts, that is, "an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party" (Rousseau 1989, p. 123), in particular, have proven to be an especially important concept in ITO. Psychological contracts strengthen the explicit legal contractual agreements by incorporating the mutual obligations internalized by the stakeholders in both the client and the vendor (Kim et al. 2007; Koh et al. 2004). Such obligations have significant effects on both the governance and

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<sup>1</sup> See Online Supplement Appendix A for the discussion on the conceptual distinction between trust and legitimacy in interorganizational relationships and Online Supplement Appendix B for the table of summary on theoretical perspectives on ITO relationships

performance of ITO (Kim et al. 2013; Lioliou et al. 2014; Miranda and Kavan 2005), as well other innovative forms of outsourcing, such as global open sourcing (Ågerfalk and Fitzgerald 2008).

The novel theoretical perspective in our study that brings the legitimacy construct to the fore is increasingly relevant in today's ITO arena. In an existing ITO relationship, rapid changes in technologies, market environments, and regulatory and social landscapes (Kane et al. 2015) can all radically alter clients' perceptions about to what extent vendors are appropriate and desirable, that is to say, legitimate (Suchman 1995). The critical role of "*internal legitimacy*" (Martinez and Dacin 1999, pp. 81- 82, italicizing added for emphasis) – perceived by clients as one of their driving forces in organizational decision-making and action – has been well documented and highlighted in the management literature (Kostova and Zaheer 1999; Lu and Xu 2006). Legitimacy, for example, can contribute to new venture performance in that legitimacy, despite deep environmental uncertainty, helps motivate investors by "signaling that the organization is properly constituted; committed to the proper scripts, rules, norms, values, and models; able to use appropriate means; and pursuing acceptable ends" (Zimmerman and Zeitz 2002, p. 416).

Notably, the IS literature has taken a first step to identify and decompose the concept of legitimacy in client-vendor relationships. For example, exploratory, qualitative research has uncovered strategies and activities employed by a client to legitimize offshore ITO, demonstrating why legitimacy should be managed strategically and how such legitimacy could lead to successful ITO projects (Barrett et al. 2008). But further examination of legitimacy is needed. Today's ITO landscape requires decision-makers to assess whether and how different vendors are legitimate. Initially, perceived vendor legitimacy can be shaped by client governance strategies. This perception can then strengthen the interactions and deepen the relationship between the client and the vendor, which in turn, should influence performance. A more in-depth understanding of the causal linkages among legitimacy, governance, and outsourcing performance can be especially relevant for both IS theories and managerial practices of ITO in an increasingly uncertain global environment.

### **3. Vendor Legitimacy in IT Outsourcing**

Drawing on institutional perspectives and theories, we adapt Suchman's conceptualization of legitimacy (1995) to define vendor legitimacy in ITO. It is the client's perception that the vendor's actions are desirable, proper, or appropriate with respect to the norms, values, and beliefs of the client organization. Based on Suchman (1995), vendor legitimacy consists of three broad types, termed *vendor pragmatic legitimacy*, *vendor moral legitimacy*, and

*vendor cognitive legitimacy*. Specifically, pragmatic legitimacy derives from self-interested calculations regarding practical consequences of actions; moral legitimacy reflects the evaluation regarding rightness and fairness in the broader value systems; and cognitive legitimacy emphasizes taken-for-grantedness of the involved organization (Kumar and Das 2007). Prior studies have demonstrated the importance of pragmatic, moral, and cognitive legitimacy in influencing the viability or performance of organizations in areas such as strategic alliances (Kumar and Das 2007), internationalization (Yang et al. 2012), and cross-cultural interorganizational information systems adoption (Hsu et al. 2015). In the same vein, this taxonomy of legitimacy potentially allows for a more nuanced, substantive and in-depth elaboration of the impacts of legitimacy on ITO relationships.

*Vendor pragmatic legitimacy* refers to the client's perception of the vendor's actions as furthering the client's own interests. This type of legitimacy is based on the client's assessment and judgement of the vendor's adherence to desirable behavior and expected practices, typically specified in the agreement between the two organizations. Being committed and responsive to the client's requirements and expectations can be seen as contributing to the attainment of pragmatic legitimacy (Suchman 1995). For example, Barrett et al. (2008) found that offshore IT vendors could gain legitimacy when demonstrating skills and capabilities for completing the specific tasks defined in the contract and in supporting the overall business strategy of the client. Their findings align well with Kumar and Das' description (2007) of pragmatic legitimacy mitigating uncertainties regarding whether a partner can consistently and effectively achieve the stated goals of a strategic alliance.

*Vendor moral legitimacy* reflects the client's perception of the vendor's rightness and fairness (Kumar and Das 2007) within the client organization's "system of norms, values, beliefs, and definitions" (Suchman 1995, p. 579). This type of legitimacy is related to the evaluation of the vendor's conformance to ITO justice norms. During interorganizational interaction, if the vendor is perceived as not meeting the client's expected moral and ethical standards, this type of legitimacy can be weakened. For example, Aron et al. (2005) and Handley and Benton (2012) explored the risks in outsourcing associated with unethical vendor actions of poaching or misuse of sensitive information, two actions that signal the erosion of vendor moral legitimacy. Li and Zhou (2017) also suggest that questions regarding firms' moral legitimacy can emerge when environmental and social problems arise in ITO.

*Vendor cognitive legitimacy* relies on "widely held beliefs and taken-for-granted assumptions that prove a framework for everyday routines" (Scott 1995, p. 81). Vendor cognitive legitimacy implies that the client firm accepts the interaction with the vendor as a natural and inevitable reality (Kumar and Das 2007). This acceptance is reified



by the client not even considering any other vendor as a viable alternative for their ITO project, for instance. According to Suchman (1995, p. 583), “this kind of taken-for-grantedness represents both the subtlest and the most powerful source of legitimacy.” Vendor cognitive legitimacy can contribute to the formation of interorganizational identity (Peteraf and Shanley 1997) while reducing the mental effort associated with evaluation of the vendor and avoiding “at least some of the [client] scrutiny of its activities” (Bitektine 2011, p. 157). One good example of this in ITO would be how, during the evolution of interorganizational collaboration, the vendor can gradually establish its perceived legitimacy while the client might reduce its scrutinizing and questioning of the vendor’s practices and relax the micromanagement of the vendor’s actions (Su 2015).

Institutional theorists (DiMaggio and Powell 1983; Scott 1995) have consistently stressed the performance implications of the acquisition and maintenance of legitimacy. In an interorganizational context, Dacin et al. (2007) suggest that “legitimation is an important means by which technical benefits can be realized and firm and alliance performance can be enhanced. Thus, firms are driven to acquire and maintain legitimacy” (p. 171). Human and Provan (2000) likewise demonstrate empirically that legitimacy is a key success factor in interorganizational networks. In a highly dynamic environment, legitimacy becomes especially critical to successful adaptation by organizations. An example of this is when Zimmerman and Zeitz (2002) state that “when faced with uncertain decisions (as so many decisions are), social actors refer back to this stock of scripts, rules, norms, values, and models in order to proceed” (p. 416). This stance highlights the role of legitimacy rather than “means-ends rationality” (p. 416) as a basis for organizational decision-making. In ITO projects in particular, as the technological, business, and social environment becomes increasingly volatile, vendor past performance can become a less reliable and relevant driver of decision-making (Su et al. 2016). Instead, legitimacy can function as an important, intangible “organizational resource...” (Bitektine 2011, p. 151) that shapes the client’s decision-making and actions, which subsequently influences ITO performance.

Given the importance of legitimacy to firm survival and success, extant research on legitimacy has shown that organizations engage in strategic actions that can enhance legitimacy and thereby contribute to the pursuit of performance or the achievement of goals. Focusing on different settings, such strategic actions include establishing strategic alliances to acquire legitimacy through partnering, an alliance that yields economic and competitive benefits for the partners (Dacin et al. 2007). Such benefits include working with established institutions to create

cognitive legitimacy for an emerging industry (Aldrich and Fiol 1994) and designing and leveraging rhetorical strategies to legitimize major institutional changes (Suddaby and Greenwood 2005).

Documented in the literature, these strategic actions, however, tend to focus on the focal firm's management of *external* legitimacy, that is, legitimacy in relation to its broader surrounding environment. Much less is known about the management and related dynamics of legitimacy within interorganizational relationships (Balogun et al. 2019; Kumar and Das, 2007), especially ITO relationships.

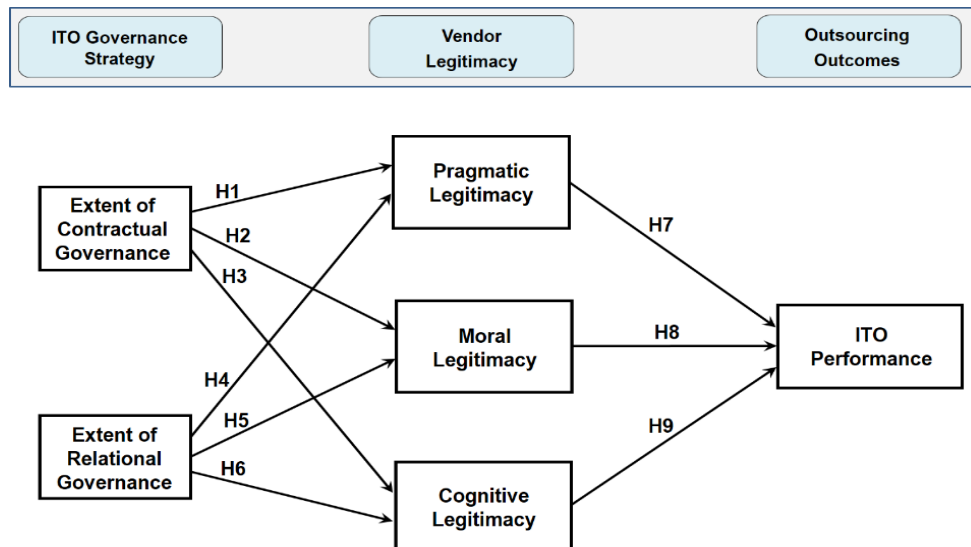
To this end, we suggest that vendor legitimacy, an element *internal* to ITO relationships, is a complex, previously lightly-explored but critical element, an element that can be shaped and managed by strategic actions of the involved parties during the course of ongoing interorganizational interactions. As Srivastava and Teo (2012) put it: "[T]hrough the exercise of control that clients can motivate vendors to deliver applications that meet the clients' specific requirements and are of value to them" (p. 116).

Indeed, both the academic and practitioner literatures have identified an extensive portfolio of strategic actions for governing ITO. Key actions can be broadly categorized into either contractual or relational governance (Goo et al. 2009; Huber et al. 2013; Oshri et al. 2015). Such governance strategies may also directly contribute to the management of legitimacy in interorganizational settings. For instance, Yang et al. (2012) suggest the use of customized contracts to "legitimize...[a] company's behavior" (p. 44) in cross-border channel relationships. Human and Provan (2000) find that developing strong bonds and information exchanges among member firms can contribute to the legitimacy of multilateral networks of such firms. In ITO, both contractual and relational governance strategies have the potential to shape vendor legitimacy and impact ITO performance, especially in turbulent business environments (Su et al. 2016).

However, what is clear is that no prior research has formally theorized and empirically examined the impacts of these two established governance strategies on vendor legitimacy. Building on extant theoretical perspectives and empirical findings, we posit that governance strategies deployed to manage client-vendor relationships could also influence vendor legitimacy, thereby also impacting ITO performance. By focusing on vendor legitimacy as a key perspective for examining dynamics in client-vendor interactions, this study seeks to further unpack how governance strategies shape ITO relationships.

#### **4. Model and Hypothesis Development**

Linking the dots together, Figure 1 foreshadows the research model proposed in this study.



**Figure 1.** Theoretical Model Depicting the Role of Vendor Legitimacy in IT Outsourcing

#### 4.1. Governance Strategies and Vendor Legitimacy

##### 4.1.1. Contractual Governance and Vendor Legitimacy

Contractual governance emphasizes the design and implementation of specific, detailed, and explicit contracts that “represent promises or obligations to perform certain actions in the future” (Poppo and Zenger 2002, p. 708). Overall, contractual governance creates a “logic of appropriateness” (March 1994, p. iii) between the partnering firms. In ITO, contracts between clients and vendors typically encompass several broad areas, including expected services, monitoring provisions; dispute resolution; property rights allocation and protection, contingency, and incentives (Chen and Bharadwaj 2009; Liu and Aron 2015). A logical extension of this is that client adoption of contractual governance can have a positive impact on client perceptions of the three types of vendor legitimacy.

Vendor pragmatic legitimacy deals with the perception that a vendor’s actions can further a client’s own interests. Contractual governance shapes vendor pragmatic legitimacy through two mechanisms. First, by detailing the client’s expectations and evaluation schemes, well-specified contracts can ensure that vendor actions and input in ITO are aligned with client interests. In ITO, contractual clauses typically include client expectations regarding “service-level target, time frame definition, quality statements, etc.” and measurement charters regarding “what is to be measured” and the “process to periodically measure the defined categories” (Goo et al. 2009, p. 131). When measuring the direct vendor input is not intuitively obvious, contractual clauses can specify procedures for monitoring the vendor through “disclosure of necessary documents to justify work done” (Poppo and Zenger 2002, p. 709). Through such clauses, contracts can accordingly better regulate and control vendor productivity

(Choudhury and Sabherwal 2003; Srivastava and Teo 2012). Contractual clauses, hence, contribute to aligning the vendor's interests with the client, an alignment that increases vendor pragmatic legitimacy.

Second, contractual governance contributes to the avoidance of interfirm conflict and facilitates the resolution of interfirm disputes. In interfirm relationships, contractual governance delineates explicit, clear, agreed-upon provisions regarding the roles, responsibilities, prohibitions, and legal sanctions for the partnering firms. ITO contracts also specify detailed conflict arbitration procedures, exit policies, and penalties for violating the contract, for both the client and the vendor. Strong contractual governance can thus reduce interfirm conflicts by guarding against vendor opportunistic behavior (Oliveira and Luminea 2019) against underinvestment in the interfirm relationship (Williamson 1985) and against "misrepresentation," "bluffing," and "outright falsification" (Kumar and Das 2007, p. 1439). When conflict arises, contractual governance also "allows the parties to better understand each other's interests and to establish working rules and habits for how to amicably resolve points of contention" (Lumineau and Malhotra 2011, p. 548). Contracts serve as a safeguard against opportunism and a framework for conflict resolution (Reuer and Ariño 2007; Malhotra and Murnighan 2002) and increase the client's confidence that the vendor will exhibit expected behaviors, an effect that further enhances vendor pragmatic legitimacy. Based on the rationale above, we hypothesize that:

**H1:** *Contractual governance is positively related to vendor pragmatic legitimacy in ITO.*

Vendor moral legitimacy relies on the client's perception of vendor rightness and fairness. In ITO, the concept of moral legitimacy has been particularly salient in two domains. The first area concerns the ownership and appropriation of ITO assets and IP, that is, intellectual property (Chen and Bharadwaj 2009; Walden 2005). Vendor moral legitimacy is challenged when inappropriate moral practices arise from disputed use of the IP and distribution or reverse engineering of software source code or other products. ITO contracts increasingly emphasize the institutionalization of standards, certifications, policies, procedures, and regulations on IP-related issues (Agrawal and Lee 2019; Bartley 2007). For instance, service level agreements (SLAs) in ITO contracts provide clear definition of confidential and secret information, which can help prevent data-related misconduct by the vendor (Benaroch et al. 2016). As a result, contractual governance directly contributes to the client's perception of the "rightness" of the vendor, an assessment that leads directly to a heightened perception of moral legitimacy.

The second aspect of vendor moral legitimacy is related more broadly to judgements about vendor ethical standards and moral practices such as their corporate social and environmental responsibility (CSER). In sourcing in general (Agrawal and Lee 2019; Orsdemir et al. 2019) and ITO in particular (Babin et al. 2011; Babin and Nicholson 2009), contractual governance increasingly requires policies and provisions that mandate that vendors show responsibility and concerns for a diverse set of stakeholders beyond their clients. Such contractual clauses can foster a vendor's positive relationship with other, different stakeholders, including "employees, local communities, society-at-large, [and] the natural environment" (Flammer 2018, p. 1302). Vendor adoption of and engagement in CSER-related standards and practices signals (Harjoto and Jo 2011) that the vendor is positioning itself as a good citizen (Flammer 2018). As Suchman (1995) highlighted, moral legitimacy reflects "a prosocial logic" (p. 579) of rightness and the sense of citizenship. Thus, through the exercise of contract controls, vendors are likely to behave in a morally acceptable manner, thereby contributing to the client perception (Panagopoulos et al. 2016) that its collaboration with the vendor fits with its own beliefs and values, i.e., being "the right thing to do" (Kumar and Das 2007, p. 1434). Based on the rationale above, we posit that:

**H2:** *Contractual governance is positively related to vendor moral legitimacy in ITO.*

Vendor cognitive legitimacy is associated with interorganizational dynamics based on cognition rather than calculation of interest or evaluation (Aldrich and Fiol 1994). In ITO, cognitive legitimacy manifests itself in the client taking the involvement of the vendor for granted (with positive, not negative connotations). This takes place through the formation of deep cognitive bonds and routines (Scott 1995) between the two organizations. Contractual governance shapes vendor cognitive legitimacy through two mechanisms. First, contractual governance enhances mutual understanding between client and vendor (Lumineau and Malhotra 2011). In an interfirm relationship, "the difference in latent knowledge" (Kumar and Das 2007, p. 1431) of the partnering firms represents a barrier in establishing cognitive legitimacy and subsequent coordination (Hargadon and Fanelli 2002). In contractual governance, the process of designing, negotiating, implementing, and renewing contracts (Faems et al. 2008) serves as a learning experience for both partners (Li et al. 2010; Ryall and Sampson 2009). Through this experience, the client acquires in-depth knowledge of the vendor's strategic interests and organizational practices (Lumineau and Malhotra 2011; Im and Rai 2008). Such knowledge is conducive to the client accepting the vendor's reality (Kumar and Das 2001), which, in turn, increases cognitive legitimacy.

Second, contractual governance facilitates the emergence of interorganizational routines, or “stable patterns of interaction [between the] two firms” (Zollo et al. 2002, p. 701). The SLAs specify detailed interorganizational processes such as plans for communication, innovation, and feedback (Goo et al. 2009). With these plans in place, the behavior of the two organizations tends to become routinized (Cohen and Bacdayan 1994; Nelson and Winter 1982) in a semiautomatic rather than deliberate or conscious manner (Zollo et al. 2002). In such relationships, the vendor will be viewed as a natural extension of the client’s own organization, signaling a high level of vendor cognitive legitimacy. Therefore, we hypothesize the following:

**H3:** *Contractual governance is positively related to vendor cognitive legitimacy in ITO.*

#### **4.1.2. Relational Governance and Vendor Legitimacy**

Relational governance emphasizes social processes that promote information exchange, open communication, solidarity, and collaboration between the parties (Poppo and Zenger 2002). Vendor pragmatic legitimacy can be strengthened by relational governance in two ways. First, active information exchange between client and service provider can align the interests of the exchange partners (Aral et al. 2018; Poppo et al. 2008). This mutually-beneficial client-vendor interaction is, in fact, sometimes termed a “pragmatic collaboration...” (Helper et al. 2000, p. 443). From the client’s perspective, there is a heightened expectation that the vendor will engage in activities that advance the interest of the client, an eventuality that then contributes to client-perceived pragmatic legitimacy.

Second, relational governance involves “an organization’s engagement in activities for the development of informal self-enforcing safeguards” (Sarkar et al. 2009, p. 587). Taking the form of the sharing of private information, commitment to joint action, and norms of flexibility, such safeguards can further attenuate exchange hazard, examples being transaction-specific investments, questionable performance measurements, and other uncertainties<sup>2</sup> that cannot be sufficiently addressed contractually (Poppo and Zenger 2002). In particular, the informal control mechanisms commonly embedded in ITO relational governance (Gopal and Gosain 2010) foster an environment that “encourages the firms to openly discuss and mutually agree upon any procedural adaptations and refinements” (Tiwana 2010, p. 98). Such an environment not only reduces conflict and incompatibility between the client and the vendor (Lee and Kim 1999), but also promotes harmonious conflict resolution by enabling the

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<sup>2</sup> This is often termed “incomplete contracting” in the ITO literature.

organizational parties to collaboratively identify and reconcile incompatible viewpoints (Goo et al. 2009; Janssen et al. 1999). This combination of safeguards reinforces the client perception that the vendor's expected behavior can further the client's own interest, another way in which vendor pragmatic legitimacy is enhanced. Based on the rationale above, the hypothesis is that:

**H4:** *Relational governance is positively related to vendor pragmatic legitimacy in ITO.*

Sustained socialization taking place between clients and vendors through relational governance mechanisms contributes to the emergence of "values shared among exchange partners concerning appropriate behavior that maintains or improves their relationship" (Tangpong et al. 2010, p. 398). Congruence of values is foundational to the perception of legitimacy (Lagenspetz 1992). Shared values and norms encompass both ethical and moral considerations (Joyner and Payne 2002; Oliveira and Luminea 2019) as well as philosophies and practices related to corporate social and environmental responsibility (Jin and Drozdenko 2010). The development of shared values and norms therefore contributes to the vendor moral legitimacy perceived by the client.

Besides this, relational governance enables the client to acquire a more nuanced, contextualized, and in-depth understanding of vendor actions and decisions related to business ethics and social and environmental responsibilities. Research has shown that standards and judgements related to business ethics can vary with the social context, a context that includes diverse institutional, cultural, and national environments (Tsui and Windsor 2001). These can even vary significantly within the same country (Martinson and Ma 2009). In relational governance, the ongoing social bonding between client and vendor enhances information exchange through informal interaction, which allows the two parties to "open a dialog on their needs, experiences and even trade secrets" (Lee and Choi 2011, p. 98). This increased level of transparency (Sarkar et al. 1998) combined with a "sincere attempt to understand the other party's perspective" (Kumar and Das 2007, p. 1431), can provide the client with a more informed and well-rounded judgement about the appropriateness vendor actions and decisions. When this works, it leads to enhanced perceived vendor moral legitimacy. Based on this, we hypothesize that:

**H5:** *Relational governance is positively related to vendor moral legitimacy in ITO.*

Through repeated social interactions where cognition and knowledge are deeply embedded (Scott 2008), "social-psychological bonds" (Ring and Van de Ven 1994, p. 93) between the exchange partners are developed and strengthened. Specifically, socialization between the client and the vendor facilitates the formation of a joint

identity and a higher order of meaning in interorganizational collaboration (Kumar and Andersen 2000). For example, in offshore outsourcing, joint training and opportunities for socializing between the client's onshore, internal IT staff and the offshore vendor's staff can blur the line between "them" and "us" (Rottman 2008). Through informal interactions, a deepening interpersonal relationship between parties spans organizational boundaries and transforms outsiders into insiders; it also enhances the solidarity between the two firms (Su and Littlefield 2001). Overall, relational bonds formed through social interaction mitigate cognitive distance (Yang et al. 2012) and improve cognitive congruence (Heide 1994), contributing thereafter to cognitive vendor legitimacy.

Second, vendor cognitive legitimacy is further strengthened by the establishment of interorganizational routines between client and vendor. Open and active sharing of business information and practices adds to both partners' knowledge and experience, functioning as a foundation for new interorganizational routines. As interorganizational routines become embedded in the exchange relationship, partners increasingly take each other for granted, again, in a positive sense (Gulati 1995; Gulati and Gargiulo 1999; Zollo et al. 2002). Through the process of routinization, the "persistent cognitive component" of routines (Hodgson and Knudsen 2010, p. 13) strengthens this "taken-for-grantedness," leading to more vendor cognitive legitimacy. Based on the rationale above, we hypothesize that:

**H6:** *Relational governance is positively related to vendor cognitive legitimacy in ITO.*

#### **4.2. Vendor Legitimacy and Outsourcing Performance**

Existing research has demonstrated the value of legitimacy and the performance implications of legitimacy in sundry settings (Aldrich and Fiol 1994; Dacin et al. 2007; Rao et al. 2008). In light of ITO complexities and uncertainties, attaining and sustaining these three types of vendor legitimacy helps to align vendor actions with client interests, to view vendor actions through moral and ethical standards, and to accept the vendor as a natural, taken-for-granted partner. Collectively, these effects lead to improved outsourcing performance, as articulated in the set of hypotheses in this section.

First, vendor pragmatic legitimacy can contribute to ITO performance. High levels of vendor pragmatic legitimacy mean that vendor actions are aligned well with client interests. Well aligned in this way, the vendor makes a "self-interested calculation..." (Suchman 1995, p. 578) to further its own interest at the same time as the interest of its client (Kumar and Das 2007). This comes directly from both parties being confident that their



partnership can achieve their mutual goals in an effective way. In support of this point, Lee and Kim (1999) show that the psychological belief of mutual benefit has a direct and positive impact on outsourcing success. Furthermore, with aligned interests, the vendor tends to capitalize on the outsourcing relationship as an opportunity to build capabilities (Levina and Ross 2003), is more willing to take up managerial responsibilities (Lee and Kim 1999), and delivers overall high performance in ITO projects (Lacity and Willcocks 2013).

Second, the sense of transactional interest alignment between parties reduces the likelihood of opportunistic behaviors (Yang et al. 2012), which further lowers transactional safeguarding costs. Thus, instead of investing energy and resources in monitoring and relationship management, a strong belief in vendor pragmatic legitimacy allows both parties to redirecting time and resources into exploiting and creating value for sustained growth and long-term ITO success. Based on the above rationale, we hypothesize that:

**H7:** *Vendor pragmatic legitimacy is positively related to ITO performance.*

Vendor moral legitimacy also increases ITO performance. First, when the vendor's values and practices are perceived to be ethical and moral from the perspective of the client organization, the vendor is more likely to follow the agreed-upon codes of conduct and maintain expected standards even in the face of complex social, legal, environmental, and political issues. In the area of IP, a key area of concern in ITO in particular, the vendor with a high level of moral legitimacy is less likely to poach or misappropriate sensitive information and violate property rights (Handley and Benton 2012), which not only lowers the cost incurred in safeguarding the breaches (Benaroch et al. 2016, Chen and Bharadwaj 2009) but also limits "the loss of competitive advantage arising from the wide-scale distribution of the intellectual property" (Walden 2005, p. 700). Second, Kumar and Anderson (2000) contend that moral legitimacy tends to strengthen partnering firms' psychological commitment to the alliance and maintain high level of procedural justice during the interorganizational exchange. In this connection, when a firm is perceived to treat its alliance members and other relevant stakeholders with respect and reasonable ethics, actors involved are more likely to respond and commit to offering better access to resources, maintaining cooperative attitudes, and being willing to provide active support of the organization, all of which lead to favourable alliance outcomes. In the ITO literature, several scholars have uncovered the positive impact of commitment on outsourcing performance (Grover et al. 1996; Lee 2001). Empirical evidence in a corporate environment also suggests that firm

ethical practices such as CSER related engagements can contribute to their financial performance (Margolis and Walsh 2003; Margolis et al. 2007). Based on this rationale, we posit that:

**H8:** *Vendor moral legitimacy is positively related to ITO performance.*

Vendor cognitive legitimacy can also improve ITO performance. First, attaining cognitive legitimacy in an interorganizational relationship implies that organizations have obtained the knowledge of what makes the interfirm arrangement successful (Kumar and Das 2007). In ITO, such knowledge contributes to the client's acceptance of the interaction with the vendor as a natural and inevitable reality (Kumar and Das 2007), without actively considering any other vendor as a viable alternative (Su 2013). As the client relaxes their close scrutiny and micromanagement of vendor actions, the vendor's autonomy and flexibility to experiment and innovate can create significant value for the client (Levina and Vaast 2005; Lacity and Willcocks 2013), a freeing-up that directly contributes to ITO performance.

Second, compared with the other two forms of legitimacy, cognitive legitimacy represents a subtle yet powerful form of legitimacy (Suchman 1995). In uncertain and fast-changing environments, firms are more likely to question the nature of partnership and their prior vendor choices. With high vendor cognitive legitimacy, however, the taken-for-grantedness of the interorganizational routines reinforced by the client perception of cognitive legitimacy can effectively reduce "the evaluator's costs of information search and the mental effort associated with the evaluation of each individual organization" (Bitektine 2011, p. 157). This was evident in Su's qualitative findings in which the vendor describes the relationship with the client as follows: "[O]nce they (the client) recognize you, they will not easily choose others.... They will not solicit bids for everything... They think of this as a symbiotic relationship" (Su 2013, p. 184). In ITO, such deeply embedded interorganizational routines contribute to a "vertical-quasi integration" (Kern and Willcocks 2000, p. 339) between the client and the vendor. Evidence suggests that this integration of the vendor as a natural extension of the client's own organization can increase the effectiveness and efficiency of ITO arrangements, especially in a turbulent business environment (Su et al. 2016). Accordingly:

**H9:** *Vendor cognitive legitimacy is positively related to ITO performance.*

## **5. Research Methodology**

The method adopted was a field study using a matched-pair instrument for data collection. The unit of analysis is an IT outsourcing project and the main nomological constructs and linkages have already been depicted above in

Figure 1. Matched-pair data were gathered from 185 client organizations in Korea via a research instrument using independent sources, namely, the Chief Information Officer (CIO) vis-à-vis the IT staff interfacing with the client's outsourcing vendors. These self-reports were augmented by relatively objective archival performance data garnered from the public source of the Korean Stock Exchange (<http://sm.krx.co.kr>). Since the sampling frame of this study was 1,500 larger Korean companies, the 185 organizations in our sample were all listed on the Korean stock market and their financial performance data can be found on the website. The full dataset was analyzed via Covariance-Based Structural Equation Modelling (CB-SEM) (Hair et al. 2014).

### **5.1. Development of Measures**

We designed, pre-tested, and piloted an instrument consisting of all reflective scales to measure the two independent variables (contractual governance and relational governance) and the three mediating variables (vendor pragmatic legitimacy, moral legitimacy and cognitive legitimacy). In addition, the dependent, latent variable of outsourcing performance was measured as a formative second-order, reflective first-order construct consisting of two sub-constructs (specifically, value capture focusing on operational efficiency and value creation focusing on innovation and generation of new knowledge).<sup>3</sup>

Scale development took place over three stages: (1) item generation based on prior literature using the card sorting method (Moore and Benbasat 1991) and extensive feedback from 15 academics and practitioners; (2) pre-testing of scales by five IT outsourcing managers from a set of industry-diverse firms; and (3) a pilot test involving 45 companies experienced in IT outsourcing practices. During the scale development process, 14 out of 35 items that were initially developed were dropped (seven items in a pretest and seven items in a pilot test), which resulted in 21 final items. The final questionnaire items appear in Online Supplement Appendix C and the instrument validation steps prior to the primary data-gathering and testing are described in much greater detail in Online Supplement Appendix D.

Multiple subsequent phases of instrument development and validation led to further refinement and restructuring of the instrument and also established the initial face validity of the measures (Nunnally and Bernstein 1994; Trochim et al. 2016). These tests provided strong evidence that the instrument was ready for full scale testing.

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<sup>3</sup> Value creation and value capture can be classified as two major types of Ricardian interorganizational rent (Miranda and Kavan 2005; Subramani 2004). Value capture refers to efficiency in resource allocation and process deployment by replicating services and increasing current productivity (Moran and Ghoshal 1999). Value creation promotes the idea that organizations can combine and transform existing interorganizational resources to generate a new service or to innovate (Bowman and Ambrosini 2000; Miranda and Kavan 2005).

To account for extraneous sources of variation in outsourcing benefits and to deal with the inevitable endogeneity issues inherent in non-experimental research, nine control variables (i.e., *outsourcing project type*, *outsourcing project size*, *outsourcing project length*, *prior outsourcing relationship*, *client industry type*, *vendor established year*, *vendor reputation*, *relative firm size*, and *time span*) were incorporated into the model. The downstream impacts of outsourcing governance and vendor legitimacy can differ according to the size and length of the outsourcing project as measured by the actual amount and project duration stated in the contract (Ang and Straub 1998; Rai et al. 2009). We also controlled for outsourcing project type, which referred to the various functional categories of IT outsourcing. Six dummy variables were used to represent major outsourcing functions: (1) application development and maintenance; (2) network management; (3) IT consulting; (4) data center management; (5) help desk activities; and (6) all others (Lacity and Willcocks 1998 and Rai et al. 2009).

In addition, since the existence of an *a priori* outsourcing relationship between an organization and its outsourcing vendor could conceivably have some influence on the realization of benefits (Lee and Kim 1999; Rai et al. 2009), the duration of prior relationships was controlled for to partial out a potentially spurious effect. We also controlled for client industry and the year the vendor was established because they could have some influence on the realization of outsourcing benefits (Lee and Kim 1999; Rai et al. 2009). In case of client industry, six dummy variables were used to specify six major industry sectors: (1) manufacturing; (2) banking and finance; (3) insurance and healthcare; (4) utility and energy; (5) retail and wholesale; and (6) all others. In that the reputation of the vendor could likewise have some influence on the relationship between vendor legitimacy and outsourcing performance (Hancox and Hackney 2000; Taylor 2007), it was included as a control variable (measured by market share) to discount this potential effect. Furthermore, relative firm size between a client and its vendor was treated as a control variable because it can represent power differentials and could influence perceptions of legitimacy and outsourcing performance. Finally, we controlled for the time span between the end time of ITO project and the time the instrument was completed in that respondents can have different remembrances about the same project, depending on the point in time of their response.

## **5.2. Sample and Data Collection**

The main data collection took place from May to August of 2014. We followed the key informant method by applying the procedure reported in prior outsourcing literature (Goo et al. 2009; Rai et al. 2012; Tallon et al. 2000) and using a multi-phased approach to maximize participation across a wide variety of firms and industries. Since larger

organizations are more likely to outsource, the initial sampling frame was the 1,500 larger companies covered by Maeil Business Newspaper's Annual Corporation Report in Korea. The CIO or the top IT manager in each firm was then identified from the Book of Listed Firms published by the Korea Stock Exchange. Because of our focus on vendor legitimacy from the perspective of service receivers, 215 IT service providers were removed from the sample. Before mailing out the instrument, the top IT manager in each of the 1,285 firms in the sample frame was contacted so we could explain the research objective and invite them to be respondents, a "best practice" according to Sivo et al. (2006). Out of the 1,285 firms, 897 firms indicated that they were willing to participate in the research, thus constituting our prospective sample.

Next, the questionnaire was sent to 897 corporate level top IT managers of the client firms using personalized cover letters that once again explained the study and guaranteed the confidentiality of the collected data. In this instrument, respondents were asked to select the most important outsourcing project they had had within the last 5 years and answer questions regarding that specific project and its service provider. In addition, the top IT managers were asked to answer questions about ITO governance strategies (contractual and relational governance) and outsourcing rent/performance (value capture and value creation) while IT staff who were in charge of the focal outsourcing project were asked to answer questions relevant to the three vendor legitimacy factors (pragmatic, moral, and cognitive legitimacy). In this way, we were able to create source independence between IVs, mediators, and the DV, an approach that virtually rules out CMV, that is, common methods variance (Podsakoff et al. 2003).

During the main data collection process, eleven companies contacted us to provide more detailed information about our questionnaire. In response to this, a briefing session in each company provided in-depth explanations of our major constructs and their measures (i.e., governance types, legitimacy factors, outsourcing performance). The briefing session was followed by a Q&A session to ensure accurate understanding of all the measures. This presentation of our major constructs assisted respondents in accurately answering our measures.

To increase the response rate, the Total Design Method proposed by Dillman (1991) and Sivo et al. (2006) was used. A follow-up post-card was mailed one week after the original mailing and the same questionnaire was mailed again three and six weeks after the original mailing. After the three rounds of solicitation, a total of 273 responses were received, providing a response rate of 30.4%. This relatively high response rate, we felt, was due to the simplicity of the instrument and the personalized solicitation.

As a first step, data quality was ensured. Sixteen responses that did not have responses from both the top IT managers and the IT staffs were discarded while 23 responses were eliminated due to incomplete data. We then excluded 15 responses from the CIOs or the top IT managers who were in the current position fewer than five years because they might not have enough knowledge about the selected IT outsourcing project.

The next step to increase generalizability was to identify relationships between a focal firm and outsourcing vendors that were unique to Korea, specialized relationships that could compromise the integrity of the data. In Korea, conglomerate groups such as Samsung, LG, Hyundai, and other *chaebols* often conclude ITO contracts with their affiliated firms (e.g., Samsung SDS, LG-CNS, SK C&C) within the same conglomerate group. The potential issue with such strong affiliative relationships is that ITO contracts are often secured mainly due to the *chaebol* connection, thus making the relationship different from a more independent relationship between an IT service provider and client firm. This case may be true not only in Korea but also in other countries in that they typically focus on generic systems management services rather than creating unique and innovative IT solutions tailored to each customer. Thus, to increase generalizability, 24 *chaebol* responses<sup>4</sup> were culled.

Furthermore, overlapping outsourcing vendors in the sample were examined. Although the unit of analysis in this study is an outsourcing project between a client firm and its vendor, bias is possible when a particular vendor was involved in several outsourcing projects across clients. Thus, we handled the issue in three different ways. First, the dataset was split into two subgroups, one with vendors not overlapping (n=140) and the other with vendors overlapping (n=55), and then compared the IV and DV means (specifically, two governance types, three legitimacy factors and outsourcing performance) between two groups using t-statistics. The results showed no differences, as shown in the E.1 section of Online Supplement Appendix E. Second, the dataset was divided into other subgroups, in particular responses from the first mailing (n=112) and those from the second mailing (n=83). In each subgroup, the differences between responses with vendors overlapping and those with vendors not overlapping, using t-statistics were tested. Results of the T-tests showed no significant differences in the early response group and only one significant difference in the late response group, as summarized in the E.2 section of Online Supplement Appendix E. Thus, out of an abundance of caution, 10 late responses that were overlapping with other vendors were dropped, a process that ended up with only one vendor appearing five times in our sample.

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<sup>4</sup> This was based on the list of Top 30 *chaebols* with their affiliated IT firms issued by the CEO Score Daily ([www.ceoscoredaily.com](http://www.ceoscoredaily.com)).

Finally, with a total of 185 responses, a fixed effect model that controls the effect of vendor overlapping (Han and Mithas 2013) was constructed and tested using vendor overlapping dummy (Gould 2011). The test resulted in a statistically insignificant p-value of 0.221, inferring that there is no effect from overlapping vendors in the dataset.

In addition, the potential difference between the final sample (n=185) and the complete sample but excluded from the final analysis (n=49; 15 responses fewer than five years in the current position + 24 chaebol responses + 10 late responses that were overlapping with other vendors) was examined using t-statistics. The results showed no differences between the two groups, as shown in the E.3 section of Online Supplement Appendix E.

The realized sample size for testing, N=185, was sufficient for CB-SEM (Gefen et al. 2011). Respondent characteristics in terms of industry type, number of employees, total sales revenue, outsourcing project size, project types, and length of prior relationship are summarized in Table 1. As shown in Table 1, some respondents did not answer a few questions regarding number of employees, total sales revenue, outsourcing project type and outsourcing project size. To deal with the missing data, relatively objective data (number of employees and total sales revenue) from the public source of the Korean Stock Exchange served as substitutes and the outsourcing project-related data (outsourcing project type and project size) were recollected by contacting the client respondent.

To further deal with CMV and to improve data quality, the prescriptions of Podsakoff et al. (2003) for ensuring anonymity as well as separate data sources for the predictor and criterion variables were followed to the letter. To ensure independence of sources, top IT managers were asked questions about ITO governance strategies (exogenous variables) and outsourcing performance (the ultimate endogenous variable) and IT staff were asked about the three vendor legitimacy variables (mediators). This source separation of the IVs from the final DV is one of the surest ways to avoid CMV (Podsakoff et al. 2003).

Furthermore, three distinct analyses were performed to test for the effect of CMV. First, we performed Harman's single factor test, which is, admittedly, a weaker test. If common method variance is a serious problem in the collected data, one might expect either a single factor to emerge from a factor analysis or one general factor to account for the majority of the covariance among all measures. A factor analysis was carried out on all items. Results demonstrated that seven factors (two independent, three mediators, and two dependent) were extracted with eigenvalues greater than one and no general factor was apparent in the unrotated factor structure, indicating no excessive CMV. Second, a partial correlation approach was used, following Podsakoff and Organ (1986). The AMOS model included the highest factor from the principle component factor analysis as a control variable on two

dependent variables. This factor produced no changes in variance explained in any of the two dependent variables, which hints that there was no serious CMV. Finally, we performed a single-method factor analysis in AMOS with indicators that measure theoretical constructs and a common method construct and rerunning the structural model, in accordance with Podsakoff et al. (2003). The results did not change. All in all, the results of the three tests plus the independence of data for the IVs and DV (discussed above) suggest that CMV is not of great concern.<sup>5</sup>

**Table 1.** Summary of Respondent Profiles

(a) Industry type			(d) Outsourcing project type		
Industry Type	Frequency	%	Type	Frequency	%
Manufacturing	51	27.6	Application development	46	24.9
Banking and Finance	27	14.6	Application maintenance	31	16.8
Insurance/Healthcare	37	20.0	Network management	20	10.8
Utility/Energy	18	9.7	IT consulting	13	7.0
Retail/Wholesale	16	8.6	Data center management	30	16.2
Transportation	9	4.9	Desktop configuration	19	10.3
Construction	14	7.6	Helpdesk activities	21	11.3
Information and Comm.	13	7.0	Others	5	2.7
<b>Total</b>	<b>185</b>	<b>100</b>	<b>Total</b>	<b>185</b>	<b>100</b>

(b) Number of total employees			(e) Outsourcing project size		
Range	Frequency	%	Range	Frequency	%
Less than 100	40	21.6	Less than \$10 mil.	10	5.4
101 – 500	49	26.5	\$10 - \$50 mil.	8	4.3
501 – 1,000	33	17.8	\$50 - \$100 mil.	18	9.7
1,001 – 5,000	47	25.5	\$100 - \$500 mil.	57	30.9
5,001 – 10,000	3	1.6	\$500 - \$1 bil.	49	26.5
10,001 and above	2	1.1	\$1 bil. and above	35	18.9
Unanswered	11	5.9	Unanswered	8	4.3
<b>Total</b>	<b>185</b>	<b>100</b>	<b>Total</b>	<b>185</b>	<b>100</b>

(c) Total sales revenue			(f) Length of prior relationship		
Range	Frequency	%	Range	Frequency	%
Less than \$50 mil.	5	2.7	Less than 6 months	11	5.9
\$50 - \$100 mil.	8	4.3	6 months – 1 year	15	8.1
\$100 - \$500 mil.	25	13.5	1 – 2 years	27	14.6
\$500 - \$1 bil.	26	14.1	2 – 3 years	32	17.3
\$1 - \$5 bil.	62	33.5	3 - 4 years	56	30.3
\$5 - \$10 bil.	27	14.6	4 – 5 years	16	8.7
\$10 bil. and above	23	12.4	5 years and above	28	15.1
Unanswered	9	4.9	Unanswered	0	0
<b>Total</b>	<b>185</b>	<b>100</b>	<b>Total</b>	<b>185</b>	<b>100</b>

An analysis of non-respondent bias was conducted by comparing the total sales revenue and the number of employees across the sampling frame (Babbie 1990). For this test, 50 companies were selected at random from among the non-respondents and their total sales and number of employees were compared with those of all

<sup>5</sup> Chin et al. (2012) have shown that the common method factor estimation approach is ineffective, but the behavioral sciences have no viable substitutes for this at the moment. In our case, as noted above, independent sources of data for the IVs and DVs is itself surely sufficient to counter the possibility of CMV, according to Podsakoff et al. (2003) and many others.



respondents, respondents from the first mailing, and respondents from the second mailing. Results of T-tests of these timed waves showed no differences among all four comparisons at an alpha protection level of 0.05 (Armstrong and Overton 1977). Given the assumption that late respondents can be reasonable surrogates for non-respondents, there appears to be no serious bias. We also conclude that respondents were at the appropriate management level and can therefore be expected to provide reasonably accurate answers.

## 6. Analysis and Results

CB-SEM via AMOS, the Analysis of Moment Structures program, version 20.0 (Arbuckle, 2011) was used to test the proposed model in Figure 1. CB-SEM was used because of the strength of prior theory, because of its ability to isolate measurement error in the measurement portion of the model as well as to test the theorized model, and because the relevant effects of interest can be tested simultaneously rather than through a series of regression equations (Gefen et al. 2011). As recommended by Gefen et al. (2000), a two-stage analytical process was employed for the data analysis. The measurement model was first assessed to determine how observed items load on the constructs in the model. Then, the assessment of the structural model allows for hypothesis testing by examining the relationships among the constructs.

Before analyzing the AMOS model, assumptions of independent observations and univariate/multivariate normality should be examined (Arbuckle 2011; Gefen et al. 2011), as described in Online Supplement Appendix F. In addition, Table 2 shows the correlations between the summates of the research variables. The highest correlation exists between value capture and relational governance (0.542)<sup>6</sup> while the remaining correlations among constructs ranged from -0.116 to 0.465. Multicollinearity between independent and moderating variables was assessed using the Variance Inflation Factor (VIF). The results show that the values of VIF for variables are acceptable ranging from 1.126 to 2.321<sup>7</sup> (Petter et al. 2007). These correlations plus the result from the VIF test suggest that multicollinearity is not a serious problem, 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).

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<sup>6</sup> We did not consider the correlations between outsourcing performance and value capture and between outsourcing performance and value creation because outsourcing performance is the second-order factor consisting of value capture and value creation.

<sup>7</sup> We also checked the correlations among different first-order measures. The correlations ranged from -0.073 to 0.521. The highest correlation is 0.521 between 1<sup>st</sup> measure item of relational governance and 2<sup>nd</sup> measure item of value capture and the second highest is 0.494 between 4<sup>th</sup> measure item of relational governance and 1<sup>st</sup> measure item of cognitive legitimacy. Among three legitimacy factors, the highest correlation is 0.433 between 2<sup>nd</sup> measure item of moral legitimacy and 2<sup>nd</sup> measure item of pragmatic legitimacy, while the second highest one is 0.426 between 2<sup>nd</sup> measure item of moral legitimacy and 1<sup>st</sup> measure item of pragmatic legitimacy. Multicollinearity was tested using the VIF. The values of VIF ranged from 2.247 to 3.492, which are acceptable by some methodological standards (Petter et al. 2007).

**Table 2.** Correlations between Constructs

Construct	Means (S.D.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Project Size	4.410 (1.431)	1.000													
2. Project Length	5.380 (2.547)	-.053	1.000												
3. Prior Relation	3.515 (1.967)	.081	.125	1.000											
4. Vendor established Year	1991.83 (6.976)	-.116	.029	.035	1.000										
5. Vendor Reputation	6.778 (5.418)	-.068	-.030	-.013	.066	1.000									
6. Relative Firm Size	5.388 (3.676)	.075	.035	.047	.161*	-.117	1.000								
7. Time span	3.430 (1.145)	-.033	.031	.004	.051	.062	-.058	1.000							
8. Pragmatic Legitimacy	4.537 (1.237)	.075	-.030	.003	.029	.023	-.016	-.028	1.000						
9. Moral Legitimacy	4.567 (1.104)	-.003	-.004	.026	.070	-.053	.019	.007	.129	1.000					
10. Cognitive Legitimacy	4.585 (1.097)	-.056	-.022	.105	.040	-.003	-.013	-.090	.010	.220**	1.000				
11. Contractual Governance	4.565 (1.180)	.004	-.053	-.017	.029	.019	-.004	-.043	.089	.291**	.199**	1.000			
12. Relational Governance	4.576 (1.150)	-.026	-.058	-.070	.125	-.042	.086	.015	.075	.453**	.332**	.465**	1.000		
13. Value Capture	4.566 (0.927)	-.060	.140	-.053	.104	-.097	.045	.012	.074	.448**	.223**	.279**	.542**	1.000	
14. Value Creation	3.479 (1.303)	.009	-.072	.021	.028	-.012	-.008	-.098	-.071	.215**	.400**	.034	.121	.159*	1.000

Note: Two categorical control variables (i.e., outsourcing project type and client industry type) are not included. \*  $p < 0.05$ ; \*\*  $p < 0.01$

The first step was to estimate the measurement model using AMOS 20.0. Overall, the resulting fit indices suggest an acceptable fit, as detailed in Online Supplement Appendix G. With an adequate measurement model and an acceptable level of multicollinearity, we next estimated the structural model, based on both the hypothesized relationships between the latent constructs and their associated observed variables (Gefen et al. 2000). As summarized in Table 3(a), results show that the value of chi-square/df is 1.153, which is within the acceptable range between 1 and 5 (Ragu-Nathan et al. 2008) and the fit indices are satisfactory (GFI=0.914; AGFI=0.882; NFI=0.937; TLI=0.984; RMSEA=0.025; SRMR=0.056). Although the AGFI value is lower than 0.9, an AGFI higher than 0.8 is also deemed by many methodologists to be acceptable (Hadjistavropoulos et al. 1999; Ragu-Nathan et al. 2008). As shown in Table 3(b) and Figure 2, seven out of the nine hypotheses within the model were supported at the 0.05 alpha protection level. In addition, no control variables showed significant relationships with either three mediators or outsourcing performance, with one exception, the relationship between time span

and cognitive legitimacy.<sup>8</sup> It is also critical to note that the proposed model accounted for a quite respectable 29.6% of the variance in outsourcing performance.

Figure 2 shows that the contractual governance had a significant effect on both the maintenance of vendor pragmatic legitimacy ( $\beta=0.166$ ;  $t=2.189$ ;  $p<0.05$ ) and that of vendor moral legitimacy ( $\beta=0.206$ ;  $t=2.368$ ;  $p<0.05$ ), supporting H1 and H2. However, the effect of the contractual governance on the maintenance of vendor cognitive legitimacy was insignificant, indicating that H3 was not supported.<sup>9</sup>

As in Figure 2, relational governance had a significant effect on all three types of vendor legitimacy, namely, vendor pragmatic legitimacy ( $\beta=0.559$ ;  $t=7.457$ ;  $p<0.01$ ), vendor moral legitimacy ( $\beta=0.387$ ;  $t=4.961$ ;  $p<0.01$ ), and vendor cognitive legitimacy ( $\beta=0.275$ ;  $t=3.586$ ;  $p<0.01$ ), providing support for H4, H5, and H6.

We expected that outsourcing performance would be positively affected by three types of vendor legitimacy. The results showed that vendor pragmatic legitimacy ( $\beta=0.267$ ;  $t=2.015$ ;  $p<0.05$ ) and vendor cognitive legitimacy ( $\beta=0.358$ ;  $t=5.764$ ;  $p<0.01$ ) had positive significant effects on outsourcing performance while vendor moral legitimacy did not. H7 and H9 were thus supported but H8 was not.<sup>10</sup>

**Table 3.** Results of the Structural Model Analysis

(a) Goodness of fit for the Structural Model

Fit Indices	$\chi^2$	df	$\chi^2/df$	GFI	AGFI	NFI	RMSEA	SRMR	IFI	RFI	TLI	CFI
Observed Value	246.75	214	1.153	0.914	0.882	0.937	0.025	0.056	0.994	0.925	0.984	0.989
Desired Value	-	-	< 3	> 0.9	> 0.9	> 0.9	< 0.08	< 0.08	> 0.9	> 0.9	> 0.9	> 0.9

(b) Causal Effects in the Structural Model

Endogenous Variable	Determinants	Standardized Causal Effect			Results
		Direct	Indirect	Total	
Pragmatic Legitimacy (R <sup>2</sup> =0.417)	H1 (Contractual Governance)	0.166**	-	0.166**	Supported
	H4 (Relational Governance)	0.559***	-	0.559***	Supported
	Project Type I (application development & maintenance)	-0.001	-	-0.001	-
	Project Type II (network management)	-0.004	-	-0.004	
	Project Type III (IT consulting)	0.014	-	0.014	
	Project Type IV (data center management)	0.027	-	0.027	
	Project Type V (help desk activities)	0.011	-	0.011	
	Client Industry I (manufacturing)	-0.026	-	-0.026	-
	Client Industry II (banking & finance)	-0.034	-	-0.034	
	Client Industry III (insurance & healthcare)	0.021	-	0.021	
	Client Industry IV (utility & energy)	0.014	-	0.014	
	Client Industry V (retail & wholesale)	-0.019	-	-0.019	
	Project Size	0.004	-	0.004	-
	Project Length	0.030	-	0.030	-
	Prior Relation	0.013	-	0.013	-
	Vendor Established Year	0.049	-	0.049	-
Vendor Reputation	0.017	-	0.017	-	

<sup>8</sup> Campbell and Fiske (1959) point out that it is inevitable that in large matrices, such as in this case, there will be some spurious violations. One violation in a matrix this large is likely just by chance (Campbell and Fiske 1959).

<sup>9</sup> There is little possibility of a Type II error in that the statistical power was above .8.

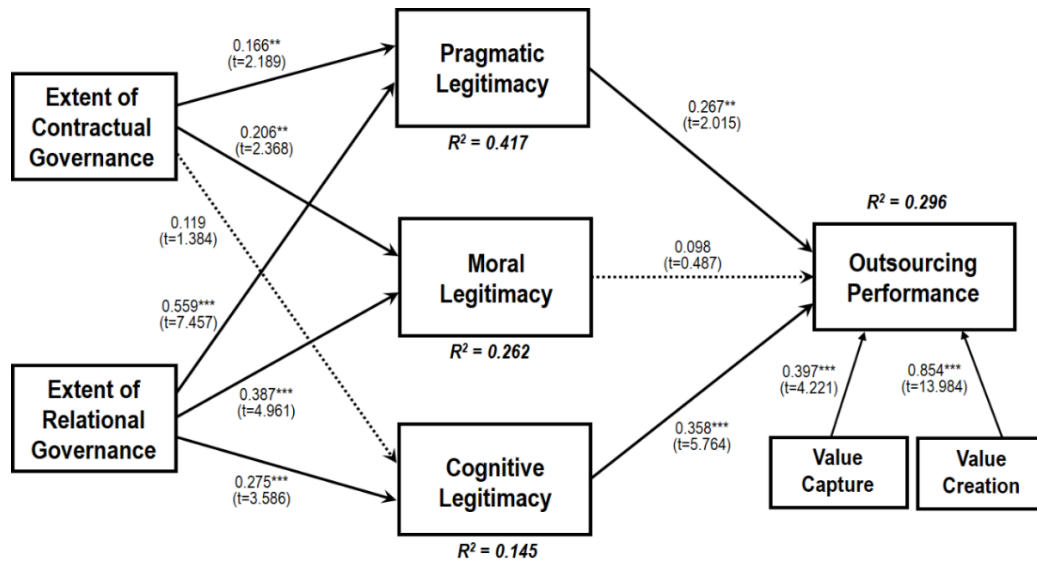
<sup>10</sup> Again, statistical power was above .8.

	Relative Firm Size	0.020	-	0.020	-
	Time Span	0.061	-	0.061	-
<b>Moral Legitimacy</b> (R <sup>2</sup> =0.262)	<b>H2 (Contractual Governance)</b>	0.206**	-	0.206**	<b>Supported</b>
	<b>H5 (Relational Governance)</b>	0.387***	-	0.387***	<b>Supported</b>
	Project Type I (application development & maintenance)	0.021	-	0.021	
	Project Type II (network management)	0.014	-	0.014	
	Project Type III (IT consulting)	0.005	-	0.005	-
	Project Type IV (data center management)	-0.028	-	-0.028	
	Project Type V (help desk activities)	-0.005	-	-0.005	
	Client Industry I (manufacturing)	0.024	-	0.024	
	Client Industry II (banking & finance)	0.038	-	0.038	
	Client Industry III (insurance & healthcare)	-0.002	-	-0.002	-
	Client Industry IV (utility & energy)	-0.016	-	-0.016	
	Client Industry V (retail & wholesale)	0.032	-	0.032	
	Project Size	0.016	-	0.016	-
	Project Length	0.020	-	0.020	-
	Prior Relation	0.034	-	0.034	-
	Vendor Established Year	0.007	-	0.007	-
	Vendor Reputation	0.045	-	0.045	-
Relative Firm Size	0.016	-	0.016	-	
Time Span	0.021	-	0.021	-	
<b>Cognitive Legitimacy</b> (R <sup>2</sup> =0.145)	<b>H3 (Contractual Governance)</b>	0.119	-	0.119	<b>Not Supported</b>
	<b>H6 (Relational Governance)</b>	0.275***	-	0.275***	<b>Supported</b>
	Project Type I (application development & maintenance)	-0.021	-	-0.021	
	Project Type II (network management)	0.003	-	0.003	
	Project Type III (IT consulting)	-0.005	-	-0.005	-
	Project Type IV (data center management)	0.014	-	0.014	
	Project Type V (help desk activities)	0.024	-	0.024	
	Client Industry I (manufacturing)	0.023	-	0.023	
	Client Industry II (banking & finance)	-0.018	-	-0.018	
	Client Industry III (insurance & healthcare)	0.025	-	0.025	-
	Client Industry IV (utility & energy)	-0.055	-	-0.055	
	Client Industry V (retail & wholesale)	0.007	-	0.007	
	Project Size	0.081	-	0.081	-
	Project Length	0.019	-	0.019	-
	Prior Relation	0.097	-	0.097	-
	Vendor Established Year	0.014	-	0.014	-
	Vendor Reputation	0.005	-	0.005	-
Relative Firm Size	-0.002	-	-0.002	-	
Time Span	-0.102*	-	-0.102*	-	
<b>Outsourcing Performance</b> (R <sup>2</sup> =0.296)	<b>H7 (Pragmatic Legitimacy)</b>	0.267**	-	0.267**	<b>Supported</b>
	<b>H8 (Moral Legitimacy)</b>	0.098	-	0.098	<b>Not Supported</b>
	<b>H9 (Cognitive Legitimacy)</b>	0.358***	-	0.358***	<b>Supported</b>
	Contractual Governance	-	0.089	0.089	-
	Relational Governance	-	0.258	0.258	-
	Project Type I (application development & maintenance)	0.034	-	0.034	
	Project Type II (network management)	-0.015	-	-0.015	
	Project Type III (IT consulting)	-0.004	-	-0.004	-
	Project Type IV (data center management)	0.018	-	0.018	
	Project Type V (help desk activities)	0.052	-	0.052	
	Client Industry I (manufacturing)	0.032	-	0.032	
	Client Industry II (banking & finance)	0.021	-	0.021	
	Client Industry III (insurance & healthcare)	0.008	-	0.008	-
	Client Industry IV (utility & energy)	-0.003	-	-0.003	
	Client Industry V (retail & wholesale)	-0.010	-	-0.010	
	Project Size	0.015	-		-
	Project Length	0.003	-		-
Prior Relation	-0.058	-	-0.058	-	
Vendor Established Year	0.012	-		-	
Vendor Reputation	-0.025	-		-	
Relative Firm Size	-0.024	-		-	
Time Span	-0.019	-		-	

. Note: \* p < 0.10; \*\* p < 0.05; \*\*\* p < 0.01

It is interesting to note that relational governance was more important by far than formal contractual mechanisms in influencing legitimacy and subsequently outsourcing performance. Notably, the standardized path coefficient for relational governance is nearly three times as large as that of contractual governance on vendor

pragmatic legitimacy. Relational governance also has a stronger effect on vendor moral legitimacy than contractual governance. In addition, relational governance has a significant impact on vendor cognitive legitimacy whereas the effect of contractual governance on this variable is insignificant. Hence, in explaining outsourcing performance, vendor cognitive legitimacy is key.



Note: Hypotheses in bold lines were supported; \* p < 0.10; \*\* p < 0.05; \*\*\* p < 0.01

Figure 2. Hypotheses Testing Results

## 6.2. Endogeneity and Robustness Checks

To account for potential endogeneity between two types of ITO governance strategy and three legitimacy factors, we adopted three different approaches. First, we followed the Durbin-Wu-Hausman method to check whether the endogeneity exists in our research context (Davidson and MacKinnon 1993; Dong et al. 2017). In this process, we applied the instrumental variable (IV) technique by introducing two IVs (i.e., internal IT governance types including hierarchy governance and network governance). With the two IVs, the Durbin-Wu-Hausman analysis was carried out for both self-reported performance data (i.e., outsourcing performance) and relatively objective archival performance data (i.e., total sales as of 2013). The results show that both ITO governance strategies (contractual governance and relational governance) were exogenous in our setting, as described in the H.1 section of Online Supplement Appendix H. Second, we ran endogeneity tests using the *estat* endogenous procedure and the two-step GMM procedure (Baum et al. 2003; Dong et al. 2017) in STATA with the two IVs to confirm whether endogeneity is a serious concern. Both analyses show consistent results, indicating that contractual governance

and relational governance are exogenous in our research model, as explained in the H.2 section of Online Supplement Appendix H.

In addition, we carried out two further, different analyses to handle endogeneity arising from the possible reverse causality between vendor legitimacy and outsourcing performance. One approach involves formulating a regression equation for each of two possible causal pathways (Pindyck and Rubinfeld 1999; Spearing et al. 2012; Wooldridge 2009). In particular, Spearing et al. (2012, p. 1221) suggested this as a good way to test the existence of reverse causality. For example, we can estimate two equations [e.g., (1) outsourcing performance (DV) = pragmatic legitimacy (IV) and (2) pragmatic legitimacy (DV) = outsourcing performance (IV)] simultaneously, and then observe whether or not there is statistically significant correlation between the error terms of the two equations. The other approach is to conduct the Durbin-Wu-Hausman analysis focusing on the relationship between three legitimacy factors and outsourcing performance (Davidson and MacKinnon 1993; Dong et al. 2017). Findings from both tests indicate that there is no reverse causality between three vendor legitimacy factors and outsourcing performance, as shown in the H.3 section of Online Supplement Appendix H.

To check the robustness of our results, we re-estimated the model in five different ways. The results of four different robustness tests were then compared with the results from our original model. First, we reexamined our model with relatively objective data instead of outsourcing performance. We computed a three-year average from 2014 to 2016 of ROA as a surrogate for outsourcing value capture and Tobin's q as a surrogate for outsourcing value creation and reran the structural model in AMOS. The results using these financial data were very similar to that of our original self-report data analysis, as shown in the I.1 section of Online Supplement Appendix I.

Second, we randomly chose 100 out of 185 total sample and then reran the model using AMOS (Fafchamps and Labonne 2017). The results are similar to our original analysis although there is a small difference in terms of coefficients and *R*-square, as explained in the I.2 section of Online Supplement Appendix I.

Third, we used the *vce* (robust) regression option in STATA for adjusting heterogeneity in OLS (Stata 2013). With assumptions that there are heterogeneity and autocorrelation in the OLS estimations and error terms, this STATA option adjusts for heterogeneity in OLS. Thus, after conducting the *vce* option in STATA, we compared the results between the original OLS and the adjusted OLS. As summarized in the I.3 section of Online Supplement Appendix I, there seem to be no serious heterogeneity and autocorrelation.

Fourth, we checked on whether or not our model is superior to competing models. The mediation model proposed in Figure 1 can be tested against a direct model that links the two types of outsourcing governance directly to outsourcing performance. This model is pitted against a mediation model where vendor pragmatic legitimacy, vendor moral legitimacy, and vendor cognitive legitimacy play mediating roles in the relationships between the two types of governance and outsourcing performance. To test whether the mediation model proposed here is better than a direct model, we carried out an additional analysis, as detailed in Online Supplement Appendix J. The results show that our mediation model is superior. Another competing model is a moderation model where three legitimacy factors moderate direct causal links between the governance strategies and outsourcing performance. We examine this as well as conducting another test on the direct model and present these results in Online Supplement Appendix K. Neither competing model performs better than our full mediation model.

Finally, we checked on the possibility of co-determination of both contractual governance and relational governance (although the two governance types are supposed to be conceptually independent). In other words, organizations may not typically embrace either a pure contractual governance strategy or a relational governance strategy. Different from prior studies focused on analyzing the complementary or substitute effect between certain contractual governance factors (e.g., contract complexity and contract flexibility) and relational governance factors (e.g., information exchange and harmonious conflict resolution) as in Poppo and Zenger (2002), Goo et al. (2009), and Rai et al. (2012), our approach was to place our sole attention on vendor legitimacy and to analyze how contractual governance or relational governance function, in general, in managing outsourcing relationships with vendors. Results indicate that the interaction effects between contractual governance and relational governance were not positively significant, as summarized in Online Supplement Appendix L. All in all, based on the results of various endogeneity and robustness checks, we conclude that endogeneity is not a serious concern and the overall consistency of results across different approaches are robust.

## **7. Discussion and Contributions**

Vendor legitimacy has become increasingly pertinent in today's ITO relationships. Drawing upon the theoretical literatures on organizational legitimacy and ITO, a set of hypotheses for understanding the nature and the impacts of vendor legitimacy as well as governance strategies in managing legitimacy were posited. Empirical results support all but two hypotheses, providing evidence for the core of our theoretical arguments. In this section, the

theoretical implications of the findings are discussed along with explanations for the unsupported hypothesis. Finally, we present recommendations for managerial practice and future academic research.

This research contributes to the IS literature in several ways (Table 4). First, the study extends the ITO literature by identifying, incorporating and developing a legitimacy perspective, complementing the existing dominant theoretical foundations of the research on ITO. Specifically, while prior research has noted the role of legitimacy in the adoption of ITO as an innovative way of organizing, the present study deconstructs how legitimacy influences outcomes in specific ITO relationships, especially the role of the client’s perceived legitimacy of the vendors, a notion that has become particularly relevant in the prevailing turbulent technological, business, and social environments. Vendor legitimacy is conceptualized via three components, namely, pragmatic, moral, and cognitive legitimacy. Empirical findings suggest that while vendor legitimacy contributes overall to ITO performance, these three types of legitimacy demonstrate varying levels of influence. Vendor cognitive legitimacy, reflecting the client’s perception of the vendor as a taken-for-granted, integral partner to the client’s activities, has a particularly high impact on outsourcing performance. Moral legitimacy, on the other hand, appears to have little-to-no effect.

**Table 4.** Summary of Implications and Contributions

Prior IT Outsourcing Literature	This Study’s Approach	Contributions
Considers primarily the role of external legitimacy in organizations’ adoption of outsourcing as a model for organizing. Vendor legitimacy as a salient force in today’s changing IT outsourcing landscape is understudied.	Introduces internal, vendor legitimacy and depicts and analyzes its impact on IT outsourcing performance.	<ul style="list-style-type: none"> <li>- Extends the conceptualization and application of organizational legitimacy to the context of IT outsourcing.</li> <li>- Advances the institutional perspective by offering a legitimacy lens for further exploring performance outcomes in IT outsourcing.</li> </ul>
Identifies contractual governance and relational governance as two key strategies for managing vendors. Prior research had not linked these governance strategies to legitimacy management.	Investigates the impact of the two types of governance strategies on the three types of vendor legitimacy	<ul style="list-style-type: none"> <li>- Enriches the legitimacy management literature by theorizing and empirically validating the important roles of contractual and relational governance strategies.</li> <li>- Highlights the managerial imperative of fostering communication and bonding between clients and vendors.</li> </ul>
Extensively examines the direct link between clients’ governance strategies and outsourcing performance	Analyzes the mediating effect of vendor legitimacy on the relationship between governance and outsourcing performance.	<ul style="list-style-type: none"> <li>- Responds to the calls for theorizing and empirical investigation of client-vendor relationship and performance in IT outsourcing.</li> <li>- Provides a nuanced conceptualization of the mechanisms by which governance strategies shape outsourcing performance.</li> </ul>



Why was there a nonsignificant relationship between vendor moral legitimacy and performance, however? Vendor moral legitimacy involves a commitment to ethical practices, corporate social responsibility and sustainability-related initiatives, which may only bring economic value to the outsourcing relationship in the long term (Babin et al. 2011; Wang and Bansal 2012). If this is true, then, the time frame of the current study may not be long enough to capture the future impact of vendor legitimacy. Similarly, the perceived risk of IP loss, associated with lower vendor moral legitimacy, tends to damage performance in the long term but not necessarily in the near term (Pisano and Shih 2009; Rossetti and Choi 2005).

The current study advances the specific stream of research on ITO governance in a second way by unpacking the effects of governance strategies in shaping vendor legitimacy. The results demonstrate the overall positive impact of contractual and relational governance on the three types of vendor legitimacy. Meanwhile, while both types of governance improve pragmatic and moral legitimacy, relational governance, rather than contractual governance, plays a much more significant role in increasing vendor cognitive legitimacy. This finding both contrasts with and complements existing research on how to identify, assess, and manage legitimate vendors in changing environments (Fogarty and Bell 2014). Recent insights tend to emphasize a dynamic yet transient approach that relies on formal, contractual governance through measures such as establishing efficient organizational processes for engaging and employing diverse vendors, creating sufficient incentives, and developing IT platforms for integrating the products and services delivered by a portfolio of vendors (Su et al. 2016) whereas informal, relational governance are not as prominent in these emerging strategies. Contrariwise, the present study highlights the strategic value of relational governance even in the contemporary, increasingly agile form of outsourcing that represents a widely-adopted response to an uncertain business environment.

Finally, our theoretical model and its empirical findings, which were developed to substantiate the two aforementioned contributions, also point s to an opportunity to advance the ITO literature by revealing a plausible mechanism through which governance affects outsourcing performance. The existing literature on outsourcing, summarized by Cao and Lumineau's meta-analysis (2015) of 143 articles on linking interorganizational governance (specifically, contractual and relational governance) to performance, discovers a consistent direct effect of relational governance on performance but mixed effects of contractual governance on performance (see also Gulati 1995; Klein 1996). In keeping with literature that studies the direct performance impact of governance strategies, we tested *post-hoc* a model that links the two types of outsourcing governance directly to outsourcing performance,

as shown in Appendix J. Results reveal that the effect of relational governance on performance is significant while the effect of contractual governance on performance is insignificant, generally consistent with the literature. However, this otherwise significant direct effect of relationship governance on outsourcing performance becomes insignificant when we incorporate vendor legitimacy as a mediator and then test all relationships between the two governance types and the three legitimacy factors, between the three legitimacy factors and outsourcing performance, between the two governance types and outsourcing performance, one at a time. In fact, our analysis suggests that the three types of vendor legitimacy fully mediate the linkages between governance and outsourcing performance (see the full *post-hoc* mediation analysis in Appendix I).

This mediation analysis hints that the reason why prior literature finds a direct effect of governance, particularly relational governance, on ITO performance but our study does not is because prior literature does not account for the legitimacy perspective. Following this line of thought, it is possible that prior thinking about the relationship between governance and outsourcing performance is incomplete unless it accounts for vendor legitimacy as an important underlying mechanism. Indeed, research that examines the impact of mechanisms of governance on performance in other IS contexts has come to the conclusion that governance mechanisms alone may not immediately influence performance outcomes because they are procedures that do not have a proximal, productive, or actionable element to them. For instance, Wu et al.'s (2015) study of ITO strategies finds that the impact of IT governance on firm performance is not direct, but fully mediated by strategic alignment between business and IT. Inspired by this insight and informed by the interesting results in the *post-hoc* analysis, our study suggests a more nuanced vendor legitimacy-based depiction of the mechanisms by which governance shapes performance in the ITO context.

Performing a sophisticated substitution/complementary analysis that would add considerable value to this requires a highly granular approach to study each specific governance component.<sup>11</sup> This might explain why our results show that the interaction effects between contractual governance and relational governance in the mediation model tested just above are not positively significant nor in the model only including the direct effects of

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<sup>11</sup> When theorizing the substitutive and complementary relationship between contract and relational governance, Poppo and Zenger (2002) focus on the role of "contract customization" and "contractual complexity" as they interacted with relational governance when they state: "[T]he critical test of the relationship, as complements or substitutes between relational governance and contractual complexity, hinges on the sign and significance of coefficients for relational governance and contractual complexity" (p.719). Rai et al. (2012) found support for certain relational factors serving as substitutes for specific contractual governance factors. They further suggest that work aiming to reconcile the inconsistent findings on the substitutive and complementary relationship between these two governance strategies should adopt "a granular approach" to study the interaction among specific elements of contractual and relational governance.

Governance → Performance, as shown in Online Supplement Appendix L. We believe that future research could investigate how particular components of contractual (e.g., contract complexity and goal expectation) and relational (e.g., information exchange and conflict resolution) governance could serve as substitutes or complements in determining vendor legitimacy.

Collectively, these findings highlight the pivotal role of legitimacy within client-vendor relationships as a powerful mechanism for achieving and sustaining ITO success. Putting it all together, future research could take our findings into account when further investigating the mechanisms through which governance strategies affect outsourcing performance, a long-standing topic of interest in ITO research.

From the perspective of practitioners, our findings present an imperative to actively manage legitimacy in ITO. Overall, they argue that outsourcing managers should become sensitized to the multifaceted nature of client-vendor relationships. Based on the typology of vendor legitimacy advanced in this study, organizations need to adapt and vary their governance strategies and related managerial practices to facilitate and leverage client-vendor interactions and achieve success. Specifically, organizations should first foster and maintain the awareness among outsourcing managers of the different types of vendor legitimacy. Managerial perception of vendors as strategically-aligned, long-term oriented, tightly-integrated partners, in particular, is critical (Bianchi and Johnson 2016). At the operational level, the client should collaborate with vendors to design and establish routines to undergird the client managers' perception of a high level of vendor legitimacy (Jogani et al. 2017), especially cognitive legitimacy.

Second, the study prescribes and highlights specific measures for ITO governance. Recent practitioner insights have emphasized crafting well-designed contracts and incentives and creating robust digital infrastructures and platforms to facilitate collaboration with an increasingly diversified and dynamic portfolio of vendors (Drentin et al. 2018). Our study suggests further that relational governance can play a critical role for attaining procedural justice, ethical standards, and fairness in the interorganizational collaboration.

Finally, the above implications suggest that creating a dedicated corporate function or organizational structure (Dyer et al. 2001) for continually assessing and overseeing a portfolio of vendors and swiftly monitoring and responding to potential issues and crises related to vendor legitimacy might be a worthwhile investment. Client organizational capability to evaluate, establish, and enhance different types of vendor legitimacy can contribute to their organizational transformation toward a more agile model of ITO (Himmelreich et al. 2019).

## **8. Limitations, Future Research, and Conclusion**

There are, of course, scholarly limitations, some of which suggest directions for future research. First, this study is a snapshot that does not capture the changing nature of outsourcing relationships. Ideally, longitudinal studies that track the evolution of outsourcing relationships are needed. Such research could provide a deeper understanding of the dynamic features of the outsourcing relationship and their influence on outsourcing success over time. Second, this study collected data only from client organizations. Although the client is commonly considered to be primary actor and the key informant who evaluates and enacts governance strategies of governance strategies in the ITO literature (Goo et al. 2009; Rai et al. 2012), the inclusion of data from the vendor side could allow a more nuanced and comprehensive examination of client-vendor relationships. Further research from the vendor's perspective would yield additional insights into the connections between governance strategies, vendor legitimacy and outsourcing performance, as in Koh et al.'s qualitative study (2004).

Third, there are limitations associated with the cultural factors embedded in the empirical national context here, i.e., South Korea. Obtaining data from a single national setting may limit the general applicability of our conclusions. Future research should extend work across different cultural settings to enhance generalizability and external validity. The fourth limitation is that there were no previously-developed questionnaire items for vendor legitimacy; thus, new measures were created based on the definition of constructs from relevant research. However, several measure items had to be removed after the pre-test and pilot tests, which might have resulted in slightly lower alignment between the original definitions of vendor legitimacy and their measures. Further research can improve on our work by adding to and refining measures of vendor legitimacy. Future studies can also create brand new measures, an approach that potentially increases the robustness of findings and nomological validity (Straub et al. 2004).

Another limitation of this study is related to the focus on behavioral attributes in relational governance without including other psychological characteristics such as trust and commitment in our model. Results of our study could be more comprehensive and robust if trust measures were to be included and/or controlled in the model (Clarke 2009). However, the rationale for the omission of trust measure was on the basis of our theorization on the sharp distinction between legitimacy and trust as well as of the focus on strategic actions in managing vendor legitimacy. That being argued, we do recommend that future studies incorporate trust into their models for further testing the relationship between trust and legitimacy.

Study findings also suggest several other directions for future research. First, future studies can explore the antecedents or determinants of vendor legitimacy across different characteristics of organization. For instance, contextual factors such as the organizational or national cultures of the client and vendor could shape different types of legitimacy. Second, another research direction would be to investigate how particular components of contractual governance (such as contract complexity or goal expectations) and relational governance (such as information exchange or conflict resolution) serve as substitutes or complements in shaping vendor legitimacy. As noted above and given our targeted research objective, we did not take this more granular approach (as suggested by Rai et al. 2012) to study each specific component in these two governance strategies. Building on our work and prior research, future studies can examine more detailed and nuanced interaction effects, including complementary and substitute effects, of different specific components of governance strategies on vendor legitimacy in particular and interorganizational exchanges in general.

Third, future research can examine the variation in legitimacy within a single organization. Diverse stakeholders within the client, such as managers holding different positions in the organizational hierarchy might vary in the perception of vendor legitimacy; future research can compare perceptions across different roles and investigate the interplay of legitimacy and intraorganizational dynamics. Finally, future research can take a process perspective to disentangle the emergence and evolution of the different types of legitimacy, their interactions with the intraorganizational and interorganizational practices within and between the client and the vendor, and the impacts of legitimacy on outsourcing performance over different time frames. There are many meaningful questions that remain to be explored in the area of legitimacy in ITO.

In conclusion, the notion of vendor legitimacy in ITO relationships represents an understudied but increasingly important area of inquiry in information systems. This study reveals how different types of vendor legitimacy exert differential effects on outsourcing performance and how contractual governance and relational governance play differential roles in managing legitimacy.

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