

The Sidelineing of Top IT Executives in the Governance of Outsourcing: Antecedents, Power Struggles, and Consequences

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Abstract—This study attempts to highlight the paradoxical aspects of top management power contests within customer firms that outsource information technology (IT) work. Intraorganizational power theory forms the overarching theoretical basis for this study. The focus is on the antecedents and consequences of the relative power of business executives (Chief Executive Officer, Chief Financial Officer, and Chief Operating Officer) versus IT executives (Chief Information Officer, Head of IT) in the governance of IT outsourcing. Evidence from a field survey supports the existence of a paradox. When a firm's financial performance has been poor and the firm did not have a sizeable IT workforce, the business executives give themselves greater power and sideline the IT executives. Paradoxically, rather than leading to positive consequences, such power play weakens outsourcing performance. Outsourcing performance is best when power is solely with the IT executives group, a close second best when power is divided between the two groups (joint decision making), and worst when it is solely with the business executives group. Overall, when it comes to the outsourcing of IT work, business executives might find reasons to justify increasing their own power and reducing the power of IT executives, even though this can ultimately be detrimental to outsourcing performance. These findings lend credence to case studies and practitioner articles that have reported such occurrences.

Managerial relevance statement: Under pressure due to their firm's poor performance, business executives often blame IT executives by labeling in-house IT as a cost burden. IT executives are sidelined in decisions related to IT outsourcing due to suspicions that IT executives would be overprotective of their turf. Here, business executives might argue that they are acting in the interest of their firm. Paradoxically, findings suggest that an increase in dominance by business executives leads to a decrease in outsourcing performance. Hence, IT executives need to make a strong case with various stakeholders that they deserve considerable power in the governance of IT outsourcing.

Index Terms—Agency theory, Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Information Officer (CIO), Chief Operating Officer (COO), information technology (IT), outsourcing, politics, power, top management team, transaction cost theory, upper echelon theory.

I. INTRODUCTION

INTRAORGANIZATIONAL power theories highlight conflicts of interest and power struggles among top management

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executives [1]–[3]. Power is the energy needed to translate intentions into reality, and executives crave power to implement their own idiosyncratic intentions [3]. Top management executives are ambitious for power [4] and the associated power politics are not easily visible to outsiders [5]. The striving for power by one group of executives is often at the cost of reducing the power of another group of executives [1], [2]. Executives have a stake in protecting their own power and covertly participate in a power tournament that is often unseen to outsiders [1], [5].

Reviews of the literature on outsourcing have noted that the role of intraorganizational power in outsourcing remains a black box [6, p. 44], [7], [8]. This study attempts to contribute by highlighting the paradoxical aspects of top management power contests within customer firms that outsource information technology (IT) work. Intraorganizational power theory, which endorses the existence of “push and pull of interests” and “shifting coalitions and interest groups” [3, p. 31], forms the overarching theoretical basis for this study.

Top management power contests within a customer firm play an important role in budgetary spending decisions that determine where and how the firm's IT work gets performed [7], [9], [10]. One option is outsourcing, which is defined as a customer firm paying a supplier firm to perform certain work as per stated requirements, instead of getting the same work performed in-house [8], [11]. In this study, *governance* is defined as a managerial process at the upper echelons whereby certain top executives of a customer firm exercise formal authority over decisions on IT spending [12], [13]. *Decision-making power* of a customer firm's top executive is defined as the extent of formal authority that the top executive has in the IT spending decisions [3].

The focus of this study is on the governance of existing outsourcing relationships. The decision-making power of a certain group of top executives can be greater than that of another group of top executives in the governance of the outsourcing [11]. Consistent with the procedure by Lacity and Willcocks [11, pp. 160–162], top management executives are classified into two groups: “business executives” (Chief Executive Officer [CEO], Chief Financial Officer [CFO], and Chief Operating Officer [COO]) and “IT executives” (Chief Information Officer [CIO], Head of IT).

The purpose of this study is to address the following two research questions.

- 1) *Antecedents:* What antecedent conditions can influence the relative decision-making power of a customer firm's “business executives” versus “IT executives” in the outsourcing of IT work?

- 2) *Consequences*: What is the impact of the relative decision-making power of “business executives” versus “IT executives” on outsourcing performance?

To address these research questions, this study identifies antecedents that can influence power contests between groups of top executives within a customer firm. The antecedents are the customer firm’s financial performance prior to outsourcing and the size of its in-house IT workforce. *Business executives* feel inclined to exercise greater power and control over the outsourcing of IT work when the firm’s financial performance has been poor. *IT executives* derive power by virtue of leading a sizeable in-house IT workforce, but feel pressured to relinquish power when the firm performs poorly and the business executives want the power. Findings suggest that when business executives sideline IT executives in the governance of outsourcing, it eventually hampers both the quality and efficiency of outsourcing. Hence, a paradox becomes evident. When it comes to the “outsourcing” of IT work, the business executives might find reasons to justify increasing their own power and lowering the power of IT executives, even though this can ultimately be detrimental to the outsourcing activity.

II. BACKGROUND: EXECUTIVE DECISION-MAKING POWER IN OUTSOURCING

Often, firms need to engage in outsourcing relationships with suppliers from whom they can access a variety of resources such as tangible and intangible assets, technical capabilities, and expertise [14], [15]. It has been shown that the competitive advantage of a customer firm is at least, partly, due to its capabilities in governing its outsourcing relationships with supplier firms [13, p. 649]. The scope of this study is the outsourcing of IT work. This is an environment with “rapid and discontinuous change in demand, competitors, technology, or regulation, so that information is often inaccurate, unavailable, or obsolete” and hence “political processes would accelerate in such dynamic conditions” [16, p. 738]. This gives us an opportunity to test the antecedents and consequences of top management power contests in the governance of outsourcing.

A. Power

An executive’s formal decision-making power within an organization is also referred to as structural, hierarchical, or legitimate power [17], [18]. It is captured by virtue of “one’s position within the organization” whereby the “position in the organizational hierarchy is easily recognizable” [18, p. 100]. This is based on the assumption that “subordinates obey superiors not so much because they are dependent on the latter, but because they believe that the latter have a right to exercise power by virtue of their position” [17, pp. 105–106]. This is “very similar to the notion of legitimacy of authority that has long been explored by sociologists” [19, p. 159]. This has been the principal construct to capture executive level power, and has been found to be the strongest indicator of actual power [3], [18], [20]. In the literature, it has been captured using single-item statements such as “I comply with my supervisor’s directives because he has a right, considering his position, to expect subordinates to

do what he wants” [21, p. 190], or the person “has a legitimate right, considering his position, to expect that his suggestions will be carried out” [22, p. 130], or simply that the person “has the formal authority” [23, p. 218]. This study focuses on top executives of a customer firm exercising formal authority over IT spending decisions [12], [13]. Hence, consistent with the literature, decision-making power of a customer firm’s top executive is defined as the extent of formal authority that the top executive has in the IT spending decisions.

B. Power Contests: Relative Power of Business Executives Versus IT Executives

Certain top management executives of a customer firm can wield the decision-making power needed to govern the outsourcing of IT work. In accordance with the case studies by Lacity and Willcocks [11, pp. 160–162], this study classifies these executives into two groups: business executives and IT executives. Job titles in the *business executives* group include the CEO, CFO, and COO. Job titles in the *IT executives* group include the CIO and the Head of IT.

On one hand, each group of executives is united by shared self-interests. That is, the executives within a group “are aware of the commonality of their goals and the commonality of their fate beyond simply their interdependence with regard to the conduct of work” [24, p. 8]. For instance, the *business executives* are held accountable for the firm’s financial performance by the firm’s shareholders/owners [5], [25]–[32]. Here, the CEO, CFO, and COO have a strong incentive to stick together and defend their grouping [26], [27].

On the other hand, there is often a conflict of interest between the two groups because contrasting criteria determine their value both within the firm and in the external labor market. For example, while *business executives* are accountable for the firm’s financial performance, the *IT executives* are accountable for the firm’s technology capabilities [11], [33], [34]. Similarly, in the external labor market, career prospects of business executives are a function of capabilities to assure a firm’s financial performance, whereas career prospects of IT executives are a function of capabilities to lead a sizeable IT workforce. Overall, the minds of business executives are dominated by financial concerns that are distinct from the technical concerns of IT executives [9], [11], [31]. IT executives often see this divergence with business executives as an inevitable “techie” versus “non-techie” mismatch. Such contrasting priorities lead to conflicts of interest and power politics between the two groups of executives. The striving for power by one group of executives is often at the cost of reducing the power of another group of executives [1], [2].

In such power contests, “who gets how much power” has been discussed in the contingency theory of intraorganizational power [35]. Here, “power derives from the contingencies facing an organization and when those contingencies change so do the bases of power” [36, p. 17]. The contingency theory suggests that both external and internal contingencies determine decision-making power [35]. Accordingly, later sections will justify two important antecedent conditions, namely a firm’s prior financial



Fig. 1. Theoretical design of study as per power literature.

performance (an external contingency) and the size of the in-house IT workforce (an internal contingency).

C. Theoretical Design of Study

Power has been a prominent criterion in the literature [1]–[3], [24], [36]–[38], and has sustained its prominence in recent research [4]–[6], [8]. This study adopts the theoretical design recommended by the intraorganizational power literature, where power is an “intervening variable between an initial condition . . . and a terminal state” [37, pp. 168–169]. This is illustrated in Fig. 1. The “initial conditions” are the antecedents that determine each actor’s relative power, the intervening “power” variable identifies the actors with higher or lower power, and the “terminal state” is the outcome [3, p. 28]. More specifically, the intervening “power” variable is the *decision-making power of business executives relative to IT executives* for governing the outsourcing of IT work. The theoretical development proceeds as follows: First, hypotheses regarding the antecedents of relative decision-making power are presented. This is followed by hypotheses regarding the influence of this relative decision-making power on the terminal state of outsourcing performance.

III. ANTECEDENTS OF RELATIVE DECISION-MAKING POWER OF EXECUTIVES

As discussed earlier, the contingency theory of intraorganizational power suggests that “power derives from the contingencies facing an organization” [36, p. 17] and that these contingencies can be external and internal [35]. A firm’s prior financial performance (an external contingency) and the size of the in-house IT workforce (an internal contingency) are considered as antecedents, because the literature suggests that “when those contingencies change so do the bases of power” [36, p. 17].

A. Firm’s Poor Financial Performance Can Determine Relative Decision-Making Power

Poor financial performance is defined as the extent to which a firm’s financial performance is lower than the firm’s own performance expectations and lower than the industry’s performance [39]. Poor financial performance of a firm *prior to* outsourcing can lead to greater power dominance by business executives and the sidelining of IT executives in the governance of the outsourcing of IT work. First, the threat-rigidity literature on intraorganizational power [40], [41] suggests that

when business executives are faced with threats, they respond in domains over which they can wield greater control [25]. Business executives can react in two ways when threatened by poor financial performance: 1) modify the external environment (such as developing new customers and markets); or 2) modify the organization’s internal structure and decision-making roles [25], [42], [43]. Actions attempting to modify the external environment are cumbersome because they have less control over the uncertain environment [25]. Relatively speaking, actions attempting to modify the firm’s internal structure and decision-making roles are favored because they are easier to implement and less risky [25]. Hence, under conditions of poor financial performance, business executives become overly conscious about efficiency [40] and impose authority over activities such as outsourcing. This is because they see potential for cost cutting and budget tightening [28], which would give them a feeling of higher control and lower risk [25].

Second, the literature highlights how the threat of organizational decline can influence the behavior of business executives [44]. The literature suggests that a firm’s poor financial performance can fuel power politics, can make the business executives insecure [44], and in the fear of losing their jobs the CFO and COO ally with the CEO and defend their grouping [26], [27]. In addition, the behavioral attribution literature suggests that though business executives tend to attribute success to their own personal qualities, they tend to attribute failure to other causes [45], [46]. An easy target for blame would be the IT executives [9], [46]. Interviews with business executives have suggested that they often perceive the in-house technology departments to be a cost burden [9, p. 196222]. Toward this end, business executives sometimes suspect that the IT executives will be overprotective of their turf in order to safeguard their own jobs and departments. This results in the IT executives being given lesser representation or being kept out of the loop while the business executives make the critical IT outsourcing decisions [9], [11].

Hence, the threat-rigidity and organizational decline literatures of intraorganizational power seem to suggest that the lower the financial performance of a firm prior to outsourcing, the greater the possibility that the business executives will want to play the dominant authoritative role in the governance of outsourcing and negate or dilute the authority of the IT executives. Hence, the association between a firm’s past financial performance and the decision-making power of business executives relative to IT executives will be negative.

Hypothesis 1. The lower a firm's financial performance prior to outsourcing, the greater will be the decision-making power of business executives relative to IT executives in governing the outsourcing of IT work.

B. Size of IT Workforce Can Determine Relative Decision-Making Power

A sizeable in-house IT workforce can help prevent IT executives from being sidelined by business executives in decisions regarding the governance of outsourcing. Earlier sections explained the concept of formal decision-making power, which is also referred to as structural, hierarchical, or legitimate power in the literature [3], [17]–[19]. The literature suggests that IT executives who lead a sizeable IT workforce will have greater legitimacy to demand such power and thereby resist interference or dominance by business executives.

First, the literature suggests that the leader of a sizeable population is more likely to demand and obtain greater power [3], [17], [19]. Prior research suggests that the “power of the departments or, more particularly, representation on major committees might be a function of the size of the department” [47, p. 146]. This supports the possibility that top IT executives in a firm will find representation in the firm's important decision-making bodies if he/she leads a sizeable IT workforce. Command over a sizeable IT workforce gives legitimacy and hence power to top IT executives, because it is more difficult to ignore the leader of a sizeable population [1]–[3].

Second, the resource-based view literature suggests that human resources are very valuable and that a sizeable portfolio of human resources that are bundled together can play an influential role in the firm [48]–[50]. Further, the knowledge-based view of the firm [51] suggests that knowledge resides within an organization's large base of human resources, and that subunits with large knowledge bases can wield tremendous influence within the firm. Therefore, an important source of power that a firm's top IT executives have is the sheer size of the in-house IT workforce that they lead [1], [3].

Hence, IT executives who lead a more sizeable IT workforce are likely to obtain greater power in the organization, and they can use this power to resist interference or dominance by business executives. Accordingly, the association between the size of the IT workforce within the firm and the decision-making power of business executives relative to IT executives will be negative.

Hypothesis 2. The greater the size of the in-house IT workforce within a firm, the lower will be the decision-making power of business executives relative to IT executives in governing the outsourcing of IT work.

The first two hypotheses suggest that there are competing pressures arising from the antecedent conditions, which can determine “who has how much power” over the firm's IT spending decisions and correspondingly over the outsourcing of IT work. On one hand, business executives attempt to exercise greater power and control over the outsourcing of IT work when the firm's financial performance has been poor, but they may find it difficult to do so if the firm has a sizeable in-house IT work-

force. On the other hand, the IT executives derive their power by virtue of leading a sizeable in-house IT workforce, but they might feel pressured to give up their decision-making power when the firm performs poorly and the business executives want to exercise their authoritative power. Thus, power is personified in the decision-making power of business executives relative to IT executives. The next section will theoretically develop hypotheses regarding the influence of decision-making power on the performance of outsourcing of IT work (see Fig. 1).

IV. EXECUTIVE DECISION-MAKING POWER AND OUTSOURCING PERFORMANCE

Transaction costs literature suggests that the relational contracts used in the outsourcing of IT work are necessarily “incomplete” [52, p. 237]. This is because relational contracts need to adapt to continually changing requirements that cannot be anticipated in advance [52, p. 237], [53]. Hence, effective governance of the outsourcing relationship requires efforts to craft adaptive coordinating mechanisms [12, p. 279]. In other words, the role of the customer firm's top executives is to ensure that the specifications in the contract are adapted over time as per changing needs, to achieve higher quality and efficiency [54], [55]. A consequent question is—will certain top executives do a better job of governing such relational contracts?

Different top executives are better at governing different functional areas based on their expertise. Thus, there needs to be a “who governs what” fit. The upper echelons theory suggests that a top management executive brings to his or her job an expertise that has usually developed from experience in some primary functional area [14], [56, p. 199]. Top executives with backgrounds that are not integrally involved with a functional area would have relative deficiencies in hands-on experience in that area [56, p. 199].

This “who governs what” fit is important not just for the governance of activities within the firm's hierarchy, but also for the governance of activities such as outsourcing to external suppliers [11]. Ultimately, good governance of outsourcing involves making the right decisions that simultaneously ensure both *product quality* (by providing “an overall set of planning and control techniques covering software product qualities”) and *outsourcing efficiency* (by “controlling software budgets, schedules, and work completed”) [57, p. 1462]. Accordingly, upcoming hypotheses focus on the influence of decision-making power of executives on two key dimensions of outsourcing performance: outsourced product quality and outsourcing efficiency [57, p. 1462].

A. Influence of Relative Decision-Making Power on Outsourced Product Quality

Product quality is the extent to which the attributes of the product meet the required specifications in a relational contract [54], [58]. Case studies by Lacity & Willcocks [11, pp. 160–162] suggest that the lesser the dominance of “IT executives” in governing the outsourcing of IT work, the lower will be the outsourced product quality. As noted earlier, outsourcing happens through relational contracts that are necessarily “incomplete,”

because not all requirements for a complex IT product can be anticipated in advance and much of the requirements evolve over time [52, p. 237]. As requirements evolve, there is a continual process of deal making between the customer and IT supplier. In this context, *business executives* make poor deals because of their lack of competence in IT matters. For instance, case studies suggest that “while these ‘CEO-handshake’ deals may have saved money in the short term, the relationship deteriorated in several cases as the consequences of a poorly negotiated deal became evident” [11, p. 161]. This is due to business executives falling prey to the tall promises and inducements of IT suppliers, because they do not have the in-depth expertise to understand the complexities behind the development of technology products [11, p. 161]. On the other hand, IT executives are mindful that technology requirements change rapidly in today’s fast-paced world. Constant supervision and even micromanagement is required to ensure the supplier develops products that are not obsolete and meet requirements [33], [54], [59]. Accordingly, the association between decision-making power of business executives relative to IT executives and the outsourced product quality will be negative.

Hypothesis 3. The greater the decision-making power of business executives relative to IT executives in governing the outsourcing of IT work, the poorer will be the outsourced product quality.

B. Influence of Relative Decision-Making Power on Outsourcing Efficiency

Outsourcing efficiency is defined as the extent to which outsourcing transactions meet budgetary goals by ensuring operational efficiency and avoiding hidden costs [58], [60]. Good governance of IT outsourcing requires effective decisions on IT spending in a manner that lowers transaction costs and helps achieve outsourcing efficiency [12]. Case studies highlight that in contrast to business executives, the IT executives have healthy skepticism and considerable knowledge regarding current IT costs and services to make good selective outsourcing decisions [11, p. 163]. By virtue of their expertise and experience in managing technology projects, the IT executives are better at making governance decisions. These better decisions help minimize hidden costs, ensure operational efficiency, and ensure that the budget for product development is not exceeded during outsourcing [14], [59]–[61]. Hence, reduced power of IT executives in governance will hurt outsourcing efficiency. Accordingly, the association between decision-making power of business executives relative to IT executives and outsourcing efficiency will be negative.

Hypothesis 4. The greater the decision-making power of business executives relative to IT executives in the governing the outsourcing of IT work, the lower will be the outsourcing efficiency.

V. METHODS

A good setting to test these hypotheses is the outsourcing of customized software development, since this area accounts for a large portion of the growth of outsourcing activities over the past decade [33]. The customer firm normally provides the business level requirements, and the supplier firm collaboratively writes

and tests the software to develop a customized product that adheres to the customer’s requirements. The customer firm pays the supplier firm for the services received, and also monitors and, continually, evaluates the work performed in collaboration with the supplier. The customer firm’s top management executives need to ensure that the money spent on customized software product development is utilized in a manner that is both efficient and allows the development of a quality product. The identity of the top executives who have such decision-making power may vary from case to case. At one extreme, the power may lie solely with the business executives (and not IT executives), while at the other extreme, the power may lie solely with the IT executives (and not business executives). In between these extremes, there is an intermediate situation where the power is divided between the business executives and IT executives, compelling them to make decisions jointly. The sample and procedure fit nicely with the described setting.

A. Sample and Procedure

The sampling process for the field survey began with the gathering of contact data of random managers in the U.S. from a directory published by Applied Computer Research, which has been used previously in the literature [62], [63]. The managers listed in this database are key informants who are associated with the planning for technology-related activities of US firms and hold a variety of managerial titles. Since there has been a visible increase in outsourcing of information IT work over the last decade [6], this population was chosen because of the likelihood that a top manager listed in the database might have information on an outsourcing contract of his/her respective firm.

Surveys were sent to 934 randomly selected managers through postal mail in 2005. Since outsourcing performance (outsourced product quality and outsourcing efficiency) needs to be measured in this study, a precondition for contacted managers was that they should belong to a customer firm that has outsourced IT work to a supplier, and that they should be in a position to evaluate the outsourcing performance. Further, they need to have knowledge about the antecedent conditions prior to outsourcing, and knowledge about which top management executives in their firm have the power to govern the outsourcing of IT work. Of the 934 randomly selected managers, 620 replied that they did not meet the preconditions, 151 were unwilling to participate, and 163 managers participated. Each of the 163 participating managers is employed by a distinct firm and has information on a specific outsourcing relationship. Summary data about the participating firms are provided in Table I. The average number of employees in the sampled firms is approximately 8800, which is similar to the average number of around 8200 employees per firm in the archival database Compustat’s population. This indicates that the sample is a reasonable representation of the population.

B. Field Survey Biases: Mitigation and Testing

The procedures recommended in the literature were carefully followed to mitigate potential elements of bias that might affect

TABLE I
SUMMARY OF ATTRIBUTES OF SURVEYED FIRMS

Demographic Information about Firms	
Demographic	Mean
Age of organization, in years	68.1
Number of organizational employees	8831
Number of IT employees in organization	117
Number of months firm has outsourced	11
Number of outsourcing contracts signed in last 5 years	6.8
Amount spent on IT across the organization in last 5 years	\$17,204,447

Number of Firms per Industry	
Industry	Frequency
Manufacturing	33
Education	31
Health Care	17
Public Administration	14
Wholesale and Retail	11
Finance and Insurance	11
Utilities	5
Professional Scientific and Technical Services	5
Agriculture and Mining	3
Transportation and Warehousing	3
Information Technology	3
Construction	2
Real Estate	2
Entertainment	2
Respondent left blank	1
Management	0
Other	20
Total	163

Demographic Information about survey respondents	
Demographic	Mean
Number of years respondent had been employed in his or her firm	12.8
Number of years respondent had been in his or her current position	5.8
Age of respondent, in years	46.5
Gender of respondents	28% are female

field surveys [64]–[66]. These are outlined in Table II. First, to mitigate any nonresponse bias, this study surveys key informants most knowledgeable about the topic of interest, promises anonymity to motivate involvement and cooperation, and uses noncomplicated survey questions [64], [65]. No evidence of nonresponse bias is found when the spread of industries represented in the sample is compared to the population. Further, no evidence of nonresponse bias is found during post hoc testing of the difference in means between early responders and late responders for key variables listed in Table II [64]. Second, to mitigate any retrospective bias the managers are asked to respond to the survey items regarding a specific and recent outsourcing contract that they have been involved in during the

past three years (which is a short timeframe for more enhanced recall) [65].

Third, to mitigate any common method bias, factual data were collected in addition to perceptual data [66]. Factual data are collected regarding who has the “decision-making power,” the “size of IT workforce,” and “duration.” Perceptual data are collected using Likert-type scales for the latent variables (outsourced product quality, outsourcing efficiency, and firm performance prior to outsourcing) and two other control variables (inexperience and strategic importance). As an extra precaution, various post hoc empirical tests are carried out to check for common method bias among the latent variables that used perceptual data [66]. These include 1) Harman single factor test

TABLE II
PREVENTION AND TESTING OF FIELD SURVEY BIASES

Non-response bias (Armstrong and Overton, 1977; Huber and Power, 1985):

Design precautions (a priori):

- Respondents are key informants, Anonymity, Non-complicated, Recent

Tests (post hoc):

- Compare spread of industries in sample to population: No evidence of non-response bias
- ANOVA of difference in means (Armstrong and Overton, 1977): Respondents were categorized by response time. Early responders were those whose instruments were received in the first 25% of responses, while late responders were those whose instruments were received in the last 25% of responses. A comparison of means was conducted using one-way ANOVA.

	Early Responder's Mean	Late Responder's Mean	F	Sig.	Conclusion
Duration (years)	5.7	4.263	0.112	0.739	No evidence of non-response bias
# of IT employees	178.3	111.9	0.411	0.523	No evidence of non-response bias

Common method bias (Evans, 1985; Podsakoff et al., 2003)

Design precautions (a priori):

- Collect factual data in addition to perceptual data

Tests (post hoc):

- Empirical tests using factor analyses (Podsakoff et al., 2003):

Test	Results	Conclusion
Harman single factor test using exploratory factor analysis (one factor for all items combined, with varimax rotation and maximum likelihood estimation)	Goodness of fit test (p-value < 0.01) rejects the null hypothesis that the model fits the data.	No evidence of common method bias
Comparing a single-factor model to a multi-factor model (separate factors for each of the constructs) using confirmatory factor analysis	<ul style="list-style-type: none"> • Single factor Model: Same as model 2 of Table III; this is a poor fit. • Multi factor Model: Same as baseline model of Table III; this is a good fit. 	No evidence of common method bias
Podsakoff et al.'s single-common-method-factor approach	RMSR = 0.13, RMSEA = 0.15, CFI/TFI = 0.8	No evidence of common method bias

using exploratory factor analysis; 2) comparing a single-factor model to a multifactor model (separate factors for each of the constructs) using confirmatory factor analysis; and 3) Podsakoff *et al.*'s single-common-method-factor approach. The results of these empirical tests are shown in Table II, and they do not indicate the presence of common method bias [66].

C. Measures

1) *Decision-Making Power of Business Executives Relative to IT Executives:* In the survey instrument, the respondents were asked to consider the most recent outsourcing contract they were associated with, and identify one or more top management executives who have the formal authority over decisions on IT spending. The available choices were the CEO, CFO, COO, CIO, and Head of IT. The response to this question was coded as either 1, 0, or, -1, in accordance with the case studies by Lacity & Willcocks [11, pp. 160–162]. The coded value was “1” if the power was limited only within the group of business executives (CEO, CFO, or COO) and “-1” if the power was

limited only within the group of IT executives (CIO, Head of IT). An intermediate value of “0” was assigned if respondents chose executives from both groups, which indicates divided power with neither group having full dominance (that is, governance decisions needed to be taken jointly, with both groups trying to wield influence).

This coded categorical (ordinal) variable having values [1, 0, -1] is used as the measure of decision-making power of business executives relative to IT executives [11]. A modified measure where the CEO is excluded from the business executives group is done later as part of post hoc analysis.

2) *Firm Performance Prior to Outsourcing:* Firm performance is measured using two reverse scaled items on 7-point Likert-type scales. The two items are “our organization performed poorly financially just prior to the initial outsourcing decision,” and “our organization performed poorly financially, relative to the industry, just prior the initial outsourcing decision” [39]. Past performance is measured in this manner for two reasons: 1) it serves the purpose of capturing the extent of threat or pressure due to the firm’s poor financial performance;

TABLE III
MEANS, STANDARD DEVIATIONS, AND CORRELATIONS

Constructs	Mean	S.D	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Performance of Outsourcing Alliance</i>									
1 Outsourced Product Quality	4.93	1.53	1						
2 Outsourcing Efficiency	4.47	1.47	0.61**	1					
<i>Top Executives with Power</i>									
3 Decision Making Power of Business executives relative to IT executives	-0.43	0.66	-0.17*	-0.17*	1				
<i>Antecedent Conditions</i>									
4 Firm Performance Prior To Outsourcing	5.86	1.32	0.11	-0.00	-0.15*	1			
5 Log (Number Of IT Employees)	3.82	1.29	0.07	0.11	-0.14*	0.06	1		
<i>Possible Controls</i>									
6 Log (Duration of Outsourcing)	1.31	0.80	0.22**	0.05	0.03	0.04	0.07	1	
7 Customer Inexperience in Outsourced Work	4.39	2.18	-0.02	-0.04	-0.10	0.02	0.02	-0.19*	1
8 Strategic Importance of Outsourced Work	5.04	1.56	0.04	0.03	0.03	0.08	0.05	0.08	0.16*

Sample size n = 163 firms (outsourcing contracts); with one sided directional tests

† p < 0.10

* p < 0.05

** p < 0.01

and 2) archival data (such as return on assets or return on equity) could not be accessed due to the anonymous nature of the survey. The interitem reliability of this two-item construct is 0.98.

3) *Size of IT Workforce*: The size of the IT workforce is measured as the number of IT employees in the firm as reported by the respondent. This value is log transformed to account for its skewed distribution. A ratio measure is used instead of this absolute measure in a post hoc analysis described later.

4) *Outsourced Product Quality*: Outsourced product quality is the extent to which the software product developed in partnership with the supplier meets the specifications of the contract. It is measured using four items on 7-point Likert-type scales adapted from existing research [54, p. 1467]. The items are “the software reliability met the specifications of the contract,” “the software capability met the specifications of the contract,” “the software usability met the specifications of the contract,” and “the software performance met the specifications of the contract.” The reliability of this 4-item latent construct is 0.96.

5) *Outsourcing Efficiency*: Outsourcing efficiency is measured using three items on 7-point Likert-type scales. Of these, two items measured the extent to which the supplier in the outsourcing relationship “adhered to the budget” and “operated efficiently” [61], and one reverse scaled item measured the “hidden costs, or costs resulting from services paid for outside the contract” [60]. The reliability of this 3-item latent construct is 0.81.

6) *Control Variables*: Three potential control variables are considered: duration, inexperience, and strategic importance. The organizational learning and experience curve research [67] suggests that as the duration of an outsourcing relationship increases, the firm will learn to manage outsourcing better. Accordingly, *duration* is measured as the total time (in years) that

IT work has been outsourced to the supplier, and this value is log transformed to account for its skewed distribution. In addition, existing research suggests that a customer firm would consider outsourcing a certain type of IT work if its in-house staff is inexperienced in that particular type of work. Accordingly, *inexperience* is measured using a single item on a 7-point Likert-type scale by asking for the extent to which the customer’s in-house development staff lacked experience in the type of work outsourced. Further, a customer firm would be especially careful in outsourcing any activity that is important for the firm’s strategic competitiveness [68]. Accordingly, *strategic importance* is measured using a single item on a 7-point Likert-type scale by asking the importance of outsourced work for the customer firm’s strategic competitiveness.

VI. RESULTS

Structural equation modeling (SEM) is used because it is, particularly, effective for testing models that contain latent constructs measured with multiple items, it allows for the simultaneous estimation of the relationships between the exogenous variables and endogenous variables, and accounts for any measurement error. The MPlus 3.01 software for SEM is used because it allows the inclusion of the categorical (ordinal) variable “decision-making power of business executives relative to IT executives” that has values of [1, 0, -1] [69]. For models that include ordered categorical variables, the default estimator in MPlus is “a robust weighted least-squares estimator” that estimates “probit regressions” and gives good performance even with smaller sample sizes and is capable of handling any non-normal data [69, p. 23, 48–49].

Table III provides the correlations among the constructs measured for this study. The significant correlations show support for the hypotheses. An examination of the correlations between the

TABLE IV
COMPARISON OF MEASUREMENT MODELS: CONFIRMATORY FACTOR ANALYSIS

Model	Factors	χ^2	df	χ^2/df	$\Delta\chi^2$	WRMR	RMSEA	CFI	TLI
Null Model	(each survey item/indicator is a factor)	4529.57**	12	377.46					
Baseline Model	Three Factors from Theoretical Model (Prior Financial Performance, Outsourced Product Quality, Outsourcing Efficiency)	10.72 ($p = 0.22$)	8	1.34		0.783	0.046	0.999	0.999
Model 1	Two Factors: Outsourced Product Quality and Outsourcing Efficiency combined into one factor	35.99**	9	3.99	25.27**	1.422	0.136	0.994	0.992
Model 2	One Factor for all indicators combined	432.78**	9	48.09	422.06**	5.695	0.537	0.906	0.875

Sample size $n = 163$ firms (outsourcing contracts)

Significant χ^2 implies poor model fit (rejection of null hypothesis that model is a good fit)

Significant $\Delta\chi^2$ implies that theorized baseline model is a better option

† $p < 0.10$

* $p < 0.05$

** $p < 0.01$

control variables and the dependent variables suggests that two control variables, “inexperience” and “strategic importance,” do not have a significant effect. However, the control variable “duration” does have a significant effect. Hence, in accordance with recommended practice, only “duration” will be included in SEM analysis as a control variable. A two-step approach will be adopted to validate the model using SEM, where the first step is the specification of the measurement model comprising the latent constructs (confirmatory factor analysis), and the second step is the analysis of the structural model to estimate the hypothesized relationships.

A. Measurement Model—CFA, Discriminant Validity, and Reliabilities

Table IV presents the CFA results [69]. The theoretical model has three hypothesized latent factors, namely, prior financial performance, outsourced product quality, and outsourcing efficiency. The theorized three-factor baseline model fits the data very well. The chi-square test of model fit ($\chi^2 = 10.729$, $df = 8$, p -value = 0.2174) is nonsignificant and thereby fails to reject the null hypothesis that the structural model fits the data. The ratio $\chi^2/df = 1.34$ is less than the typically recommended upper limit of 3.0. The weighted root mean square residual (WRMR = 0.783) is less than the recommended upper limit of 1.0. The root mean square error of approximation (RMSEA = 0.046) is lower than the typically recommended upper limit of 0.08 for a good fit. The comparative fit index (CFI = 0.99) and the Tucker–Lewis index (TLI = 0.99) are higher than the typically recommended lower limits of 0.90. In addition, to confirm that the theorized constructs have discriminant validity, the theorized baseline three-factor model is compared against two alternative models (that is, two-factor and one-factor models). The details are shown in Table IV. The fit indices are best for the theorized three-factor model and the differences in chi-squares of the alternative models with the baseline three-factor model are significant, thereby providing evidence of the construct distinctiveness of the three latent factors.

Finally, the standardized coefficients for the items loaded under their respective latent factors and the reliabilities of each of the latent factors are shown in Table V. The “composite reliability” statistic estimates the internal consistency of a latent factor and is analogous to Cronbach’s alpha without the assumption of equally weighed indicators [70]. All items loaded under their latent factors are significant. Further, all of the latent factor scales have composite reliabilities much higher than the typical lower limit of 0.6.

B. Structural Model and Hypotheses Testing

The structural model shown in Fig. 2 is used to perform path analysis to test the hypotheses. As discussed earlier, “duration” is included as a control variable. All of the fit indices of the structural model meet the desirable criterions ($\chi^2 = 12.528$ with $df = 11$ and $p = 0.325$, $\chi^2/df = 1.14$, WRMR = 0.722, RMSEA = 0.029, CFI = 0.99, TLI = 0.99), and the good fit of the model allows testing of the hypothesized paths among the constructs. The hypotheses tests are one tailed because the theorized hypotheses are directional. Table VI lists the control paths and hypothesized paths in the structural model, and the signs and significance of the coefficients provide good support for the hypotheses. As shown in Table VI, Hypothesis 1 (H1) is supported ($\beta = -0.227$, $p < 0.05$), which suggests that the lower a firm’s financial performance prior to outsourcing, the greater will be the decision-making power of business executives relative to IT executives for governing the outsourcing of IT work. H2 is supported ($\beta = -0.204$, $p < 0.05$), which suggests that the greater the size of the IT workforce within a firm, the lower will be the decision-making power of business executives relative to IT executives for governing the outsourcing of IT work. Both H3 ($\beta = -0.238$, $p < 0.01$) and H4 ($\beta = -0.150$, $p < 0.05$) are supported, which suggest that the greater the decision-making power of business executives relative to IT executives for governing the outsourcing of IT work, the poorer will be the outsourced product quality and outsourcing efficiency. In sum, all four hypotheses were supported.

TABLE V
STANDARDIZED COEFFICIENTS OF INDICATORS AND RELIABILITIES OF LATENT CONSTRUCTS

Latent Construct / Survey Indicators	Standardized Coefficient ^a	Z = Estimate / S.E. ^b	Reliability ^c
Outsourced Product Quality			0.96
• Reliability	0.941	-	
• Capability	0.956	68.315 **	
• Usability	0.914	68.402 **	
• Performance	0.890	60.995 **	
Outsourcing Efficiency			0.81
• Hidden Costs (reverse scaled)	0.410	-	
• Adherence to Budget	0.859	6.491 **	
• Operational Efficiency	0.954	6.276 **	
Firm Performance Prior to Outsourcing			0.98
• Poor Financial Performance (reverse scaled)	0.977	-	
• Poor Financial Performance relative to Industry (reverse scaled)	0.952	4.165 **	

^a Standardization using variances of both latent and observed constructs
^b Coefficient of leading indicator for each construct is set to 1.0 to establish scale.
^c Denotes 'composite reliability'.
 Sample size n = 163 firms (outsourcing contracts)
 † p < 0.10
 * p < 0.05
 ** p < 0.01

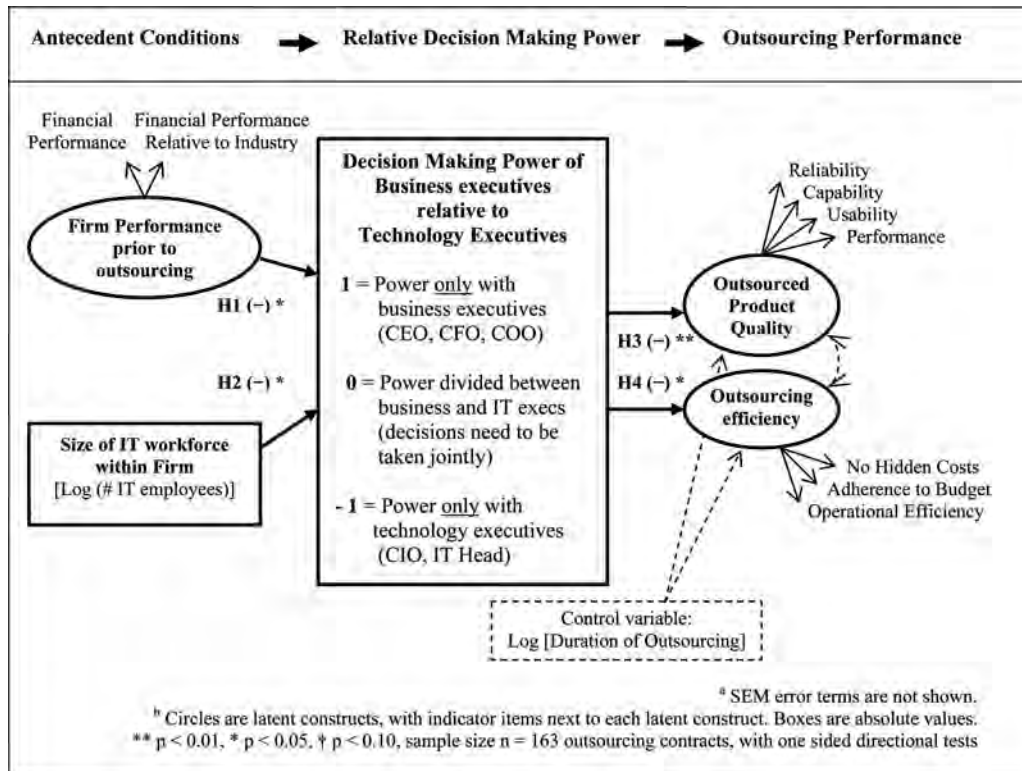


Fig. 2. Structural model.^{a,b}

C. Comparison With Results From Lacity and Willcocks's (2001) Case Interviews

Table VII compares the results of this study with the results from case interviews by Lacity & Willcocks [11]. The findings are similar. The governance of outsourcing should reside exclusively or at least partially with IT executives. Outsourcing outcomes are most satisfactory when power is solely with the IT executives group, second best when power is divided between the two groups (joint decision making), and worst when

it is solely with the business executives group. While exclusive power with the IT executives is the best alternative, joint decision making is a close second. Hence, outcomes tend to be satisfactory as long as business executives do not attempt to gain absolute power by completely sidelining the IT executives. As a corollary, if business executives are currently not participating in the governance of outsourcing, but are tempted to participate, they can do so with almost similar outcomes so long as they do not assume exclusive power.

TABLE VI
STRUCTURAL MODEL RESULTS FOR HYPOTHESES: PATH ANALYSIS

Structural Equation Model : Path Analysis		Standardized Coefficient ^a	Result
Control Paths			
Log (Duration of Outsourcing) → Outsourced Product Quality		0.206 **	
Log (Duration of Outsourcing) → Outsourcing Efficiency		0.081†	
Outsourcing Efficiency ↔ Outsourced Product Quality		0.739 **	
Hypothesized Paths			
H1: Firm Performance (Prior) → Decision Making Power of Business vs. IT Execs		-0.227 *	Supported
H2: Size of IT Workforce → Decision Making Power of Business vs. IT Execs		-0.204 *	Supported
H3: Decision Making Power of Business vs. IT Execs → Outsourced Product Quality		-0.238 **	Supported
H4: Decision Making Power of Business vs. IT Execs → Outsourcing Efficiency		-0.150 *	Supported

^a Standardization using variances of both latent and observed constructs; one sided directional tests
 Sample size n = 163 firms (outsourcing contracts)
 † p < 0.10
 * p < 0.05
 ** p < 0.01

TABLE VII
OUTSOURCING PERFORMANCE AS A CONSEQUENCE OF POWER STRUCTURE: COMPARISON OF RESULTS

Decision making power of business executives relative to IT executives			Outsourcing Performance Results of empirical field survey (sample size = 163 firms)				Equivalent info from case interviews by Lacity and Willcocks (2001, p. 161) (sample size = 85 cases)		In terms of trend/direction, are results consistent with Lacity & Willcocks's (2001) interviews?
Power	Coded Value	Description of Coded Value	Mean of 'outsourced product quality' (on a scale of 1 to 7)	% of Firms having 'outsourced product quality' > overall mean of 4.93	Mean of 'outsourcing efficiency' (on a scale of 1 to 7)	% of Firms having 'outsourcing efficiency' > overall mean of 4.47	% that say "yes, most expectations met" from outsourcing	% that say "no, most expectations not met" from outsourcing	
Greater Power for Business executives ↑ ↓ Greater Power for IT executives	1	Firms where power is solely with the <u>business executives group</u> (i.e, business execs have sidelined IT execs)	3.94	26.7%	3.44	20.0%	33%	42%	Yes, performance is poorer when power to govern outsourcing is solely with business execs
	0	Firms where power is divided between <u>business executives group and IT executives group</u> (i.e, governance decisions need to be taken jointly; both groups try to influence decisions)	4.94	63.5%	4.53	55.6%	74%	21%	Yes, performance is intermediate when power to govern outsourcing is divided (decisions need to be taken jointly)
	-1	Firms where power is solely with <u>IT execs group</u> (i.e, business execs have delegated away all power to IT execs)	5.09	70.6%	4.60	58.8%	78%	11%	Yes, performance is better when power to govern outsourcing is solely with IT execs
	<i>Entire sample</i>			4.93		4.47			

D. Post Hoc Analyses: Alternative Measures

Post hoc analysis was performed utilizing an additional measure of IT workforce size: the ratio of the number of IT employees to the number of total employees. A ratio measure captures the relative size of IT workforce as opposed to the absolute

size in the original measure. A lower sample size of 148 was utilized because the denominator of this ratio, number of total employees as reported by the respondents, had missing data for 15 records. The first post hoc analysis in Table VIII uses this alternative measure, and the results support all four hypotheses.

TABLE VIII
POST HOC ANALYSIS

Post-Hoc Structural Equation Models : Path Analysis	Std. Coeff. ^a (Effect Size)	Result
POST HOC MODEL 1^b: Size of Tech Workforce Measured as Ratio rather than Absolute Value in H2		
<i>Control Paths</i>		
Log (Duration of Outsourcing) → Outsourced Product Quality	0.211 **	
Log (Duration of Outsourcing) → Outsourcing Efficiency	0.084†	
Outsourcing Efficiency ↔ Outsourced Product Quality	0.740 **	
<i>Hypothesized Paths</i>		
H1: Firm Performance (Prior) → Decision Making Power of Business vs. IT Execs	-0.152 *	Supported
H2: Ratio of Number of IT to Total Employees → Decision Making Power of Business vs. IT Execs	-0.281 *	Supported
H3: Decision Making Power of Business vs. IT Execs → Outsourced Prod Quality	-0.240 **	Supported
H4: Decision Making Power of Business vs. IT Execs → Outsourcing Efficiency	-0.144 *	Supported
POST HOC MODEL 2^c: Exclude CEO from Business Executives Group, when Measuring Decision Making Power of Business Execs (CFO, COO) vs Technology Execs (CIO, Head IT) in H1, H2, H3, and H4		
<i>Control Paths</i>		
Log (Duration of Outsourcing) → Outsourced Product Quality	0.219 **	
Log (Duration of Outsourcing) → Outsourcing Efficiency	0.099†	
Outsourcing Efficiency ↔ Outsourced Product Quality	0.716 **	
<i>Hypothesized Paths</i> (with CEO excluded from business exec group in power measure)		
H1: Firm Performance (Prior) → Decision Making Power of Business vs. IT Execs	-0.302 **	Supported
H2: Size of IT Workforce → Decision Making Power of Business vs. IT Execs	-0.192 *	Supported
H3: Decision Making Power of Business vs. IT Execs → Outsourced Prod Quality	-0.247 **	Supported
H4: Decision Making Power of Business vs. IT Execs → Outsourcing Efficiency	-0.160 *	Supported

^a Standardization using variances of both latent and observed constructs; one sided directional tests

^b POST HOC MODEL 1: Sample size n = 148 firms (outsourcing contracts) — excluded 15 records where values for number of total employees (denominator of the ratio in alternative measure used above) were missing.
Correlation between the ratio variable and power variable used in H2 was -0.154 (p = 0.03)

^c POST HOC MODEL 2: Sample size n = 156 firms (outsourcing contracts) — excluded 8 records where only CEO had power (none of the other execs had power) because these records end up having a missing value for power variable when CEO is excluded from business exec group (as required by the post hoc analysis).

† p < 0.10

* p < 0.05

** p < 0.01

Another post hoc analysis was performed by excluding the CEO from the business executives group because, in an ideal world, the CEO's role is supposed to be general and unbiased (exerting evenhanded responsibility across all areas). Accordingly, the measure of decision-making power of business executives group relative to IT executives group was coded, but with the CEO excluded. This exclusion reduced the sample size to 156 because of the need to drop seven records where only the CEO had power (none of the other execs in either group had power). The coded value was "1" if the power was limited only

within the group of business executives (CFO, COO) and "-1" if the power was limited only within the group of IT executives (CIO, Head of IT). An intermediate value of "0" was assigned if respondents chose executives from both groups (that is, governance decisions needed to be taken jointly, with both groups trying to wield influence). This coded categorical (ordinal) variable having values [1, 0, -1] is used as the alternative measure of decision-making power of business executives relative to IT executives. The second post hoc analysis in Table VIII uses this alternative measure, and the results support all four hypotheses.

Note that in five of the seven dropped cases where the CEO was the sole decision maker, the outsourcing performance was below average. Overall, findings from both the original and the post hoc analyses suggest that outsourcing performance suffers with greater power to business executives and improves with greater power to IT executives.

VII. DISCUSSION

The focus of this study was on the governance of existing outsourcing relationships by the top executives of customer firms. The theoretical lens was intraorganizational power. All four hypotheses found empirical support. The findings suggest that under conditions of a firm's poor financial performance, the business executives tend to impose their power over IT executives. The IT executives can resist being sidelined if they have the support of a sizeable in-house IT workforce. Eventually, both outsourced product quality and outsourcing efficiency suffer if business executives impose their power and sideline IT executives. The next section suggests theoretical implications of the findings.

A. Theoretical Implications

The findings lead to two sets of theoretical implications. First, while the model draws support from the contingency theory of intraorganizational power, the findings also create a strong case for extending this theory. While contingency theory supports the suggestion that the power of top executives can be contingent upon various antecedent conditions [35], this study argues that the antecedent conditions can influence the power of executives in contrasting fashions. That is, a firm's poor financial performance increases the control and power seeking behavior of business executives, which in turn decreases the relative power of IT executives. In contrast, a sizeable technology workforce increases the power of IT executives, but this decreases the relative power of business executives. Business executives may blame easy targets (such as IT executives and "costly" in-house IT departments) for their firm's poor performance rather than admitting their own failures [9], [46]. IT executives might be able to resist such negative attributions and interference by exerting their own power derived from a sizeable in-house IT workforce [48], [51].

Second, this study also theorized regarding the influence of the decision-making power of top executives on outsourced product quality and outsourcing efficiency. While the transaction costs literature supports the suggestion that the governance of outsourcing requires monitoring and supervision by top executives [12, p. 279], it does not take into account the differences in managerial characteristics suggested by upper echelons theory [56]. Findings suggest that the governance of outsourcing should reside exclusively or at least partially with IT executives. Upper echelons theory suggests that there needs to be a "who governs what" fit in the governance of activities within the firm's hierarchy, because different top executives are better at governing different functional areas based on their functional expertise [56, p. 199]. Accordingly, the findings of this study extend and

integrate the transaction cost and upper echelon theories by suggesting that executive characteristics play an important role, not just for the governance of a firm's internal hierarchy, but also for the governance of outsourcing activities with external suppliers.

B. Recommendations for IT Practitioners

A firm's poor financial performance makes its business executives insecure [44]. This fuels power politics, whereby the CFO and COO ally with the CEO and defend their grouping [26], [27]. In addition, they shift the blame to targets such as the IT executives by labeling the IT workforce as a cost burden [9, p. 196222], [46]. Accordingly, the first hypothesis argued that the lower a firm's financial performance prior to outsourcing, the greater tends to be the decision-making power of business executives relative to IT executives in the governance of the outsourcing of IT work. Extensive case studies by Lacity and Willcocks [11] suggest that business executives are "often focused on the short-term financial aspects of outsourcing, primarily because their companies were in a poor financial position, and they saw outsourcing as a way to refinance the company" [11, p. 161]. This can lead to undesirable consequences. Practitioner magazines have lamented that "the real reason companies outsource is simple: they are in financial trouble," that "executives in companies with poor financial performance seem to concentrate on downsizing as the preferred method for restoring competitiveness," and how IT employees become "an attractive target when there is a quota on how many bodies must leave" leading to IT job losses [29], [30]. Under pressure due to their firm's poor performance, business executives shy away from the tougher route of modifying the external environment (such as by developing new customers or a new market), and instead prefer the easier route of modifying the organization's internal structure and decision-making roles [25]. To prevent such unfortunate scenarios, IT executives need to make a strong case that the governance of outsourcing should reside with IT executives. The business executives should be encouraged to take up the challenge of developing new customers and new markets, instead of spending their energies in sidelining IT executives.

The second hypothesis argued that the greater the size of the IT workforce within a firm, the lower would be the decision-making power of business executives relative to IT executives in the governance of the outsourcing of IT work. Although outsourcing of IT work is an important activity for many firms to stay competitive in this dynamic world, it should be done for the right reasons and in the right manner [6], [71]. Hence, IT executives should develop and protect their in-house IT workforce whenever possible so that they can use the power to resist any interference from business executives (apart from retaining their in-house IT knowledge and capabilities). This would allow them to carry out any required outsourcing activities in a healthy and selective manner using their own considerable knowledge about IT systems, processes, and costs. Without a sizeable in-house IT workforce, the business executives can easily impose their power, and this would reduce the power needed by the IT executives to carry out any outsourcing in the right manner.

Recent reports continue to suggest that business executives and IT executives often end up as competing groups with divergent goals. In numerous instances, the CEO, CFO, and COO have been found to collude with each other as a group to manipulate the firm's financial standing [32]. Further, an extensive "state of the CIO" report involving interviews with over 500 IT Chiefs by CIO magazine highlighted that "the disconnect between IT and the business is growing, and the response all too often is to put IT 'in its place'" [31, p. 12]. Hence, IT executives need to be proactive in preventing such disconnect. If all else fails, they should highlight their concerns to the owners and the board of directors of the firm, because only the owners and the board have the authority to discipline errant and overzealous business executives [72].

C. Limitations and Future Research

Although the conceptualization and operationalization of power in this study is grounded in theory and supported by the literature, a limitation is a lack of additional measures of power. The second limitation is that the firm's financial performance and the size of the IT workforce were the only antecedents of power. Thus, future research should explore the issues raised in this study using additional measures of power and additional sources of power.

Another limitation of this study is that it did not go one step further to check if poor outsourcing performance would lead to an even greater decline in a firm's financial performance, because the literature supports the possibility of a downward spiral. The intraorganizational power-politics literature notes the grim reality that "power—because of the way it develops and the way it is used—will always result in the organization suboptimizing its performance" [36, p. 21]. This is reflected in the rather paradoxical finding that after a firm's poor financial performance, business executives try to impose their control over outsourcing activities, but actually end up hurting the outsourcing efficiency and outsourced product quality. Such a setback in outsourcing can further worsen the firm's financial performance, leading to a downward spiral. Organizational failure can lead to power contests that aggravate the failure [73], making "corporate failures as downward spirals" a possibility [74, p. 1]. Hence, future research should check for the possibility of a downward spiral and look for ways to avoid such a spiral.

Poor financial performance has become an especially important criterion in recent times. In the present context, where economic downturns, uncertainties, and unanticipated volatility have enveloped the global economic landscape, business executives have come under tremendous duress. Under duress, the top management executives in organizations can end up as rival groups that trap themselves in self-fueled downward spirals. Responses to such threats may be in the form of cost-cutting initiatives such as layoffs, which can further aggravate the power politics due to reactions from the affected constituents and due to insecurity created among the survivors of layoffs. The anxiety and stress faced by business executives hamper their decision making, leading to "flawed perceptions, constriction of information flows, and erratic choices" [75, p. 1445]. Lindsley *et al.* [44]

proposed that when threatened, business executives become less sensitive to feedback, are unable to process complex information, fall back on previously popularized bandwagons (such as outsourcing of IT work just because others have done it), and therefore propagate the firm toward further decline. Organizational decline accompanied with reports of excessive interest of business executives in outsourcing may fuel internal fears leading to attrition across the hierarchy, which may in turn send negative signals to external stakeholders (such as distributors, buyers, suppliers, and the labor market), and thereby lead to continuing cycles of distress. Recent research emphasizes the need to find ways to avoid such distress by making strategic IT decisions in a manner that reflects the competence of IT executives [76]. In sum, the incentives that influence top management team members, the nature of interactions between its members, the context in which they operate, and the associated "power games" offer fertile ground for future research.

D. Conclusion

Given the findings, it might seem obvious that IT executives tend to make better decisions in IT-related work (just as the business executives would tend to make better decisions in some other business-related work). However, the primary importance of this study is in its suggestion that *when it comes to the "outsourcing" of IT work, the business executives might find reasons to justify increasing their own power and reducing the power of IT executives, even though this can ultimately be detrimental to the outsourcing activity.* This paradoxical aspect has found mentioned in case studies and practitioner literature. This study contributes by theoretically developing and testing the hypotheses from an intraorganizational power perspective. The findings support the theoretical suggestions that when a firm's financial performance in the past was poor and the firm did not have a sizeable IT workforce, the business executives give themselves greater decision-making powers and sideline the IT executives. Here, business executives might argue that they are acting in the interest of their firm. Paradoxically, however, rather than leading to positive consequences, lowering the power of IT executives leads to poorer outsourcing performance. Outsourcing performance is most satisfactory when power is solely with the IT executives group, second best when power is divided between the two groups (joint decision making), and worst when it is solely with the business executives group. Hence, the governance of outsourcing should reside exclusively or at least partially with IT executives.

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