Power and Politics: Do CIOs Have What It Takes to Influence the Executive Team's Commitment to IT Initiatives?

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ABSTRACT

Despite the central role of information technology (IT) in contemporary firms, many Chief Information Officers (CIOs) still lack the influence over their executive teams that is enjoyed by other executives that report to the CEO. In this study, we propose power and political skill are related to the CIO's influence over the executive team's commitment to strategic and technical IT initiatives. We use Multivariate GLM to empirically examine these relationships using data collected from 127 CIOs. The results suggest the CIO's formal position in the firm, the CIO's business and technical knowledge, and the important connections the CIO has established relate to the CIO's influence over the executive team's commitment to IT initiatives. We also found political skill moderates the relationship between the CIO's power and influence over the executive team's commitment to IT initiatives. We discuss the implications of these results for research and practice.

Keywords

Chief Information Officer (CIO), power, political skill, influence, IT decision-making

INTRODUCTION

In the early 1980s, companies recognized information resources were a vital corporate asset that needed to be managed by high-ranking individuals (i.e. the CIO) (Synnott and Gruber 1981). While companies didn’t originally know how to exploit the CIO role, companies eventually accepted the central role of Information Technology (IT) in business strategy and process (Applegate and Elam 1992) and acknowledged CIOs could offer vision for the joint development of business and IT strategies (Banker, Hu, Pavlou and Luftman 2011). Despite the CIO position's strategic potential, many CIOs struggle with eliciting the commitment they need from the executive team so they can apply the firm's IT resources in such a way that both supports and is supported by business initiatives (Carter, Grover and Thatcher 2011).

In an attempt to have a greater effect on their executive teams' commitment to IT initiatives, some CIOs have started to evaluate how they can leverage their position in the hierarchy, what knowledge they should possess, the social network they have developed, and their political abilities (Medcof 2008). Regarding their hierarchical position, CIOs who report directly to their CEOs and are active members of their executive teams may have the greatest impact on the joint development of business and IT strategies (Peppard 2010); however, it may be better for the CIO to report to another c-level executive (e.g. CFO, COO) to bridge the gap between IT and those business functions (Banker et al. 2011). Second, CIOs may need to be more than technology experts because they may also need to understand how IT can drive business change and, more specifically, be able to express how the company can benefit from the use of IT in business language (Kaarst-Brown 2005). Third, CIOs with strong social networks may be able to establish lines of communication that allow them to fully understand the business (Preston, Chen and Leidner 2008); alternatively, these relationships may have little or no effect if the CIO is viewed as a newcomer who is unequal to other high-level executives or if the CIO's ideas conflict with those of the business (Enns, McFarlin and Huff 2007). Finally, CIOs may need political savvy to build support for their ideas and effectively convince their colleagues about the merits of IT (Enns, McFarlin and Sweeney 2011); this means CIOs’ reporting structure, knowledge, and a solid social network may not be sufficient for them to understand and mobilize the interests of the executive team, particularly in a highly political business environment (Van de Ven 2005). Given these different CIO attributes, we focus on the following research question:

What are attributes of CIOs who successfully build executive team commitment to IT initiatives?
The remainder of this paper is organized as follows. In the next section, we present our research model of how power and political skill affect the CIO’s influence on the executive team’s commitment to IT initiatives. We then present our method and results. We conclude with a discussion of the implications for theory and practice.

THEORETICAL DEVELOPMENT AND HYPOTHESES

Many researchers have discussed how power can be used to influence the behavior of others (Jasperson, Carte, Saunders, Butler, Croes and Zheng 2002), particularly regarding decision-making (e.g. Chen, Preston and Xia 2010; Finkelstein 1992). In this study, we posit CIOs may need to develop and use power bases such as formal position (i.e. structural power), knowledge (i.e. expert power), and connections (i.e. prestige power) to influence the executive team to influence their peers’ commitment to strategic and technical IT initiatives (Emerson 1962; Finkelstein 1992), where influence over executive team commitment to technical IT initiatives is defined as the degree to which the CIO effectively convinces executive team members to follow the CIO's advice such that the CIO affects the decisions made about the firm's IT architecture, IT investments, IT infrastructure, application development, and IT outsourcing and influence over executive team commitment to strategic IT initiatives is defined as the degree to which the CIO effectively convinces executive team members about the strategic potential of IT such that the CIO affects the firm's strategic IT decisions. See Appendix A for some example items.

Structural power is the "CIO’s level of legitimate power due to his or her formal position within the hierarchy of the organization" (Chen et al. 2010 p245). This type of power is "legitimate" and focuses on the position rather than the person (Finkelstein 1992; French and Raven 1959). If a CIO has structural power, it would mean the CIO is in a position to be heard by the executive team (Chen et al. 2010), has access to the information and personnel resources necessary to carry out the executive team’s strategic IT initiatives (Lines 2007), and is given the authority to influence subordinates (Yukl and Falbe 1991). Since executive teams may be more dependent upon CIOs to provide IT resources (e.g. IT personnel), we expect CIOs will have more structural power such that they can influence the executive team’s commitment to strategic and technical IT initiatives; therefore, we posit:

\[ \text{H1a: } \text{CIOs with higher levels of structural power will report a greater influence over executive team commitment to strategic IT initiatives.} \]

\[ \text{H1b: } \text{CIOs with higher levels of structural power will report a greater influence over executive team commitment to technical IT initiatives.} \]

Expert power is the ability of CIOs to deal with strategic contingencies of the firm through the development of their business and technical knowledge (Finkelstein 1992; Medcof 2008). Business knowledge refers to the gathering of information about how the business functions, whereas technical knowledge refers to the CIO’s understanding of technology. In particular, a CIO who possesses knowledge about the business is more likely to understand the business priorities, opportunities, and needs for strategically using IT; in turn, the CIO can communicate the strategic importance of IT to the executive team (Smaltz, Sambamurthy and Agarwal 2006). Additionally, if the CIO can speak in a language the executive team understands (i.e. business knowledge), the team may be more likely to directly access the technical knowledge of the CIO. In turn, the CIO may be able to help the team envision how IT can facilitate business goals and strategies so the team can make more informed IT decisions (Preston and Karahanna 2009). As a result, the executive team may be more dependent upon the CIO’s technical and business knowledge since the CIO is better suited to advising the executive team about IT issues; as such, we expect the CIO will have greater influence over the executive team’s commitment to IT initiatives. Hence, we propose:

\[ \text{H2a: } \text{CIOs with higher levels of expert power will report a greater influence over executive team commitment to strategic IT initiatives.} \]

\[ \text{H2b: } \text{CIOs with higher levels of expert power will report a greater influence over executive team commitment to technical IT initiatives.} \]

Prestige power is defined as the "managers' reputation in the institutional environment and among stakeholders” (Finkelstein 1992 p510). Prestige power is greatest when the CIO is connected to powerful people outside and inside the firm. Specifically, external connections may create a dependent relationship between the executive team and CIO since the executive team often needs to reduce any uncertainty about hiring new employees or implementing new systems by consulting external partners with prior experience. Additionally, internal connections may create a similar dependent relationship between the executive team and CIO because the CIO may be more integrated into and accepted by the team (Perrewe and Nelson 2004), which may increase the CIO's status as an exchange partner (Stam and Elfring 2008). As a result, executive teams may be more dependent upon CIOs with strong external and internal connections because the team trusts the CIO’s judgment. Since we expect the relationship between prestige power and influence over strategic and technical IT initiatives will be positive, we posit:

\[ \text{H3a: } \text{CIOs with higher levels of prestige power will report a greater influence over executive team commitment to strategic IT initiatives.} \]

\[ \text{H3b: } \text{CIOs with higher levels of prestige power will report a greater influence over executive team commitment to technical IT initiatives.} \]
H3a: CIOs with higher levels of prestige power will report a greater influence over executive team commitment to strategic IT initiatives.
H3b: CIOs with higher levels of prestige power will report a greater influence over executive team commitment to technical IT initiatives.

Political Skill as a Moderator

Political skill is “the ability to effectively understand others at work, and to use such knowledge to influence others to act in ways that enhance one’s personal and/or organizational objectives” (Ahearne, Ferris, Hochwarter, Douglas and Ammeter 2004, p311). While formal position, knowledge, and connections may partly determine the CIO's influence over the executive team's commitment to IT initiatives, CIOs may also need to navigate highly political environments since executive team members frequently have conflicting goals that are often resolved by following the desires and choices of the most powerful people (e.g. Eisenhardt and Zbaracki 1992). This suggests CIOs may also need to engage in political activity to enhance their power to influence the executive team's commitment to IT initiatives (Eisenhardt and Zbaracki 1992; Pettigrew 1973; Pfeffer 1981). In particular, we argue political skill is a key measure of the CIO's political ability and that CIOs use political skill to enhance their structural, expert, and prestige power as a way of increasing their influence over the executive team's commitment to strategic and technical IT initiatives.

In regard to structural power, research has shown a CIO who uses hard tactics like authority or edicts is less successful than one who uses soft tactics like persuasion or consultation (Enns, Huff and Higgins 2003b). This suggests the use of structural power to influence the executive team may need to be tempered with political activities that reduce the appearance of conflict (Eisenhardt and Zbaracki 1992). In other words, we posit the combination of position power (i.e. structural power) with personal power (i.e. political skill) will strengthen the CIO's influence over executive team commitment to strategic and technical IT initiatives (Enns, Huff and Golden 2003a). Hence, executive team members may be more likely to defer to the CIO if the CIO is politically savvy. Therefore, we propose:

H4a: CIOs with political skill will enhance (positively moderate) the relationship between structural power and influencing executive team commitment to strategic IT initiatives.
H4b: CIOs with political skill will enhance (positively moderate) the relationship between structural power and influencing executive team commitment to technical IT initiatives.

Research has suggested CIOs can more successfully navigate the organizational environment by having a clear understanding of the business in addition to demonstrating technical knowledge (i.e. expert power) (Preston and Karahanna 2009). Yet, acquiring technical and business knowledge is not sufficient because the knowledge itself does not account for the social context inherent in the upper levels of management (Enns et al. 2011; Xu, Kim and Kankanhalli 2010). To deal with this political aspect of the business, CIOs may need to use their political skill to develop contextual knowledge that complements their technical and business knowledge (Enns et al. 2011). For example, CIOs who combine political skill with their business and technical knowledge may be able to adapt their knowledge to specific situations and, therefore, deal with the uncertainty of their leadership challenges more effectively than CIOs who are grounded only in technical or business knowledge (Blass and Ferris 2007; Karimi, Somers and Gupta 2001). These CIOs may also be more likely to appropriately interpret the behavior of their business partners (King 2008), influence their executive peers using business language (Preston and Karahanna 2009), and draw those peers into a networking relationship (Applegate and Elam 1992). By politically engaging the executive team, CIOs may give credence to their knowledge such that the team may be more likely to champion IT (e.g. participate in IT-related management decisions) and seek the participation of IT executives in their business management decisions (Bassellier, Benbasat and Reich 2003). Since this indicates CIOs with political skill may enhance the relationship between their expert power and the influence they exercise over the executive team's commitment to IT initiatives, we posit:

H5a: CIOs with political skill will enhance (positively moderate) the relationship between expert power and influencing executive team commitment to strategic IT initiatives.
H5b: CIOs with political skill will enhance (positively moderate) the relationship between expert power and influencing executive team commitment to technical IT initiatives.

Finally, while the CIO's reputation (i.e. prestige power) may play a role in influencing the executive team's choices to utilize technology (Enns et al. 2003b), new technology initiatives may conflict with the existing business practices, causing political tensions (Eisenhardt and Zbaracki 1992). As such, the CIO may need more than reputation to build relationships of trust with the executive team. In other words, the CIO may need to leverage political skill as a way of coping with any political tensions that exist. For example, the CIO may need to actively participate in networking (one component of political skill) so the CIO becomes well-connected and centrally located in many, diverse social networks (Smaltz et al. 2006). By developing connections to important people within and outside the firm, CIOs may be able to further extend their understanding of the
social context that surrounds their companies. As such, the CIO may be able to address issues in more compelling ways, using real-world examples from other companies (i.e. using external contacts), such that the CIO may have a greater influence over the executive team's commitment to IT initiatives (Smaltz et al. 2006). Hence, we propose:

\[ H6a: \text{CIOs with political skill will enhance (positively moderate) the relationship between prestige power and influencing executive team commitment to strategic IT initiatives.} \]

\[ H6b: \text{CIOs with political skill will enhance (positively moderate) the relationship between prestige power and influencing executive team commitment to technical IT initiatives.} \]

Taken together, the model proposes that structural, expert, and prestige power are main antecedents to the CIO's influence over the executive team's commitment to strategic and technical IT initiatives. Furthermore, these relationships will be moderated by political skill.

**RESEARCH METHOD**

In June 2011, the lead author administered a *Survey Monkey* questionnaire to the most senior IT professional in the firm. These IT executives had titles such as CIO, Director of IT, Vice President of IT, and Chief Technology Officer (e.g. Banker et al. 2011; Preston and Karahanna 2009). The respondents were contacted by a third-party national market research firm, *Research Now*, with a CIO panel of almost 2,500 members. Of the 1,077 CIOs who received the survey via e-mail, 218 panelists clicked on the survey link page that sent them to the survey. Of these, only 127 responses were useable (e.g. failure to respond completely, screening question elimination). While this response rate of 11.8% is low, this is consistent with research conducted on CIOs where response rates range from 7 to 20% (Oh and Pinsonneault 2007; Preston, Karahanna and Rowe 2006). Additionally, we used wave analysis to assess the potential non-respondent bias in our survey and found the early respondents were not significantly different from the late respondents, such that response bias should not pose a substantial threat to this study. We also attempted to control for common method bias through the design of our study's procedures (e.g. a cover letter and separating the items) and through statistical controls (we performed a Harman one-factor test) and concluded common method bias was not particularly problematic in our study.

**RESULTS**

We used Multivariate General Linear Modeling (GLM) in SPSS 15.0 for Windows Grad Pack (LEADTOOLS 2006) to analyze our model's main effects (H1-H3) and moderators (H4-H6) using procedures and test statistics recommended in prior research (e.g. Carte and Russell 2003). We tested the main effects of structural (H1a and H1b), expert (H2a and H2b), and prestige (H3a and H3b) power on the influence over executive team commitment to strategic and technical IT initiatives. Our general linear model results indicate structural power (H1a: $\beta = 0.43$, p<0.0001; H1b: $\beta = 0.50$, p<0.0001) and expert power (H2a: $\beta = 0.14$, p<0.05; H2b: $\beta = 0.25$, p<0.05) are significantly related to executive team commitment to strategic and technical IT initiatives. Prestige power is significantly related to executive team commitment to strategic IT initiatives (H3a: $\beta = 0.11$, p<0.05) but not significantly related to technical IT initiatives (H3b: $\beta = 0.01$, n.s.). Additionally, we did not expect to find any direct effects from political skill to our dependent variables. Therefore, H1a-H3a are supported while H3b is not. The $R^2$ for the strategic and technical initiatives components (not including moderators) are 50.2% and 39.5%, respectively.

**Moderation Effects Analysis**

We proposed political skill was a critical moderator between power and the CIO's influence over executive team commitment to strategic and technical initiatives (H4a-H6b). Our general linear model results, illustrated in Figure 1, indicate political skill is a significant moderator in all cases except between prestige power and technical IT initiatives (H6b). Thus, H4a-H5b are supported, H6a is partially supported, and H6b is not supported. The $R^2$ for the strategic and technical initiatives components including the moderation effects are 53.1% and 46.5%, respectively. The change in $R^2$ from the main effects analysis to the moderator analysis is 2.9% and 7.0% (Adjusted Change = 1.6% and 5.6%), respectively for strategic and technical IT initiatives.

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1 This survey is a subset of data collected in a larger questionnaire from the lead author’s dissertation (Gerow 2011).
DISCUSSION

We began this paper with CIOs considering how they can obtain executive team commitment to IT initiatives. Due to the unstructured and ambiguous nature of IT initiatives and the political environment inherent in every firm, we determined reporting structure (i.e. structural power), business and technical knowledge (i.e. expert power), social networking (i.e. prestige power), and political abilities (i.e. political skill) may be important attributes associated with the CIO's ability to gain executive team commitment to IT initiatives. These attributes are discussed in the following paragraphs.

For the relationship between structural power and executive team commitment to IT initiatives, the results suggest CIOs who are positioned on the executive team have greater influence over both strategic and technical IT initiatives. To gain a better understanding of these relationships, future research should consider other factors that may provide further explanations for why executive teams depend, or don't depend, on CIOs who are on the executive team. For example, it may be interesting to see how outsourcing impacts the CIO's influence on the executive team's commitment to IT initiatives. Outsourcing may increase the availability of alternative sources of IT knowledge and connections such that the CIO's influence decreases. Alternatively, the role of IT in the firm may change the dependence the executive team has on the CIO. For firms that only use IT to support their business processes, the executive team may be less inclined to commit to IT initiatives such that the CIO will have little influence. For firms using IT more strategically, the CIO may have much more influence over the executive team's commitment to IT initiatives. Therefore, we suggest adding outsourcing as another measure of availability and the role of IT as another measure of executive team dependence on the CIO.

Our results suggest expert power doesn't influence the executive team's commitment to strategic IT initiatives as much as it does technical IT initiatives. This may mean CIOs need more than just technical and business knowledge to have a greater influence over the executive team's commitment to strategic IT initiatives. For example, they may need more knowledge about the competitive environment or customer buying habits to more effectively influence the executive team. Therefore, future researchers should consider including competitive knowledge as an additional dimension of expert power.
Unlike structural and expert power, the relationships between prestige power and IT initiatives were not significant at 0.05. Due to the inconclusive findings for these hypotheses, future research is needed to explore these relationships further. Potentially, future researchers may need to measure the executive team's perceptions of the CIO's connections, the uncertainty surrounding strategic IT initiatives, and the executive team's propensity to outsource the firm's technical IT initiatives if the CIO is already leveraging these external sources.

Our results indicate political skill is useful in enhancing the CIO's structural and expert power, which suggests political skill may help reduce unhealthy conflict among the executive team members. Therefore, researchers should consider measuring conflict between the CIO and executive team. Specifically, our results indicate conflict should be reduced the most when the CIO is on the executive team and slightly less reduced if the CIO has business and technical knowledge.

In terms of practical implications, our research offers additional insights into what attributes a CIO may be able to use to successfully build executive team commitment to IT initiatives. First, this research suggests CIOs should make a case to their CEOs about the importance of being on the executive team as a means of giving IT a more central role in the organization. Through this position power, they may be able to receive additional resources that are necessary to implement strategic and technical IT decisions made by the executive team. Second, CIOs should also strive to have a thorough understanding of technology and the company's business strategies and processes. CIOs need to not only be familiar with the technology available, but they should also learn to speak the language of the business so they can explain to the business how technology can improve the business and affect its strategies. Third, CIOs should also focus on improving their reputation and increasing the number of contacts they have with executive team members inside and outside the company when it comes to influencing the executive teams' commitment to strategic IT initiatives. This means CIOs should ensure they are valuable assets to their companies and that their personal qualities, ideas, and opinions are respected by those around them. Finally, this research indicates political behavior tends to have negative connotations in that the most powerful person is pushing his choices on others. However, this study indicates CIOs with political skill can enhance their structural, expert, and prestige power such that the executive team's commitment to IT initiatives is more likely.

CONCLUSION

In this paper, we investigated the relationship between CIOs' attributes and their influence over the executive team's commitment to strategic and technical IT initiatives. We found a direct report to the CEO, formal involvement in executive team activities, and establishing role importance within the firm (i.e. structural power) were significantly related to the CIOs' influence over the executive team's commitment to IT initiatives. Our results also indicate CIOs with a greater understanding of business and technology may be more likely to influence the executive team to commit to their strategic and technical initiatives (i.e. expert power). We also found CIOs with good reputations and connections with executive team members inside and outside the company also tend to have a greater influence over the executive team's commitment to strategic IT decisions (i.e. prestige power). Additionally, our results demonstrate that CIOs with political skill may be able to enhance their structural, expert, and prestige power such that they have additional influence over the executive team's commitment to IT initiatives. Hence, this study addresses how CIOs can leverage different types of power and their political skill to successfully influence the executive team's commitment to IT initiatives.

REFERENCES


APPENDIX A: EXAMPLE ITEMS FOR INFLUENCE

Technical Initiatives:

I guide the decision-making process our executive team uses concerning the IT infrastructure.

Our executive team follows my advice on investing in IT.

My advice impacts the application development decisions for the firm.

Strategic Initiatives:

Our executive team follows my advice on strategic IT initiatives.

I make decisions for our executive team in regard to using IT to support and enhance the firm’s strategy.

My advice impacts executive team decisions on using IT to positively impact the firm’s strategic direction.