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Harvey Enns University of Western Ontario

Sid Huff University of Western Ontario

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CIOs' Power, Influence, and IS Strategy Implementation

Harvey G. Enns Sid L. Huff Richard Ivey School of Business University of Western Ontario

Abstract

The increased attention given to information technology (IT) in the business environment has propelled information systems (IS) and Chief Information Officers (CIOs) into prominent positions in many firms. Yet, little is known about CIOs' sources of power, how they exercise influence, and their part in implementing IS strategy. This paper addresses power and influence issues through its focus on two research questions: 1) What role do CIO power sources play in the exercise of influence? and 2) What CIO influence behaviors contribute to successful IS strategy implementation? This paper, which forms the backdrop for a larger research project, develops a research model designed to explore these research questions. The paper introduces a brief literature review of power and influence, a research model, preliminary findings and propositions, and a description of future plans.

Introduction

The ability of the CIO to obtain the cooperation and commitment of others is critical to successful IS strategy implementation. An important consideration in this is the CIO's power, which underlies his or her ability to influence peers or others in the organization. While previous research has examined the CIO's impact on the development of IS strategy to support the business strategy (e.g., Feeney et al., 1992), surprisingly little emphasis has been directed toward understanding the sources of CIO power, or the ways CIOs use their power to influence the behaviors of others. This paper addresses the question of CIO power and influence behavior in the context of IS strategy implementation.

Organization Theory Contributions

Power can be defined as the capacity to influence (Yukl, 1994; Finkelstein, 1992). This potential to influence is derived from a variety of sources such as: formal position (French and Raven, 1959); possession of important information (Pettigrew, 1973); departmental membership (Hickson et al., 1971); and informal networks (Brass and Burkhardt, 1993). However, managers have to exercise this potential to influence in order for it to be useful (Kanter, 1983; Pfeffer, 1992). Power is exercised via numerous influence behaviors (Pfeffer, 1981; Brass and Burkhardt, 1993; Kipnis and Schmidt, 1988). Results from influence behavior studies suggest that some behaviors are more effective than others (Kotter, 1982).

Few studies of power and influence in the organizational behavior literature have systematically examined top executives' influence behaviors. Most of what we know about this topic comes from anecdotal evidence (Kotter, 1982; Cohen and Bradford, 1990; Pfeffer, 1992). The findings from these studies provide some guidelines for differentiating effective from ineffective influence behaviors. However, these authors acknowledge the limited generalizability of these findings to all top executives. Furthermore, there is evidence that studies with middle-level manager samples are not generalizable to top executives (Pavett and Lau, 1983).

IS Research Contributions

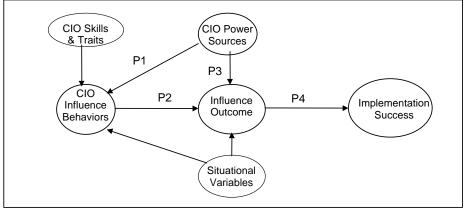
IS research in the area of power and influence has been especially sparse. A few studies have examined the power of the IS department (Lucas, 1984; Saunders and Scamell, 1986), typically concluding that the IS department is not very powerful relative to other departments in the organization. Furthermore, power may be underutilized by the IS department, partially due to its managers' ignorance of the sources and amount of power they have (Huff, 1991). Such a lack of, or misunderstanding of one's power would likely result in ineffective or even dysfunctional attempts to influence the organization's IS strategy implementation.

Other related studies have explored the CIO's role and effectiveness. These studies have drawn some attention to sources of CIO power such as: membership in the top management team (Applegate and Elam, 1992); knowledge about the business (Armstrong and Sambamurthy, 1996); and informal networks (Stephens, 1995). However, these studies have not primarily focused on CIO power or influence. In addition, they have not generally explored the role of the CIO in the implementation process. Keen's (1981) discussion of the 'fixer' role is an exception. The 'fixer' refers to the senior IS executive who has control over resources used to bargain with others and is required for successful IS project implementation. Clearly, the CIO can play the role of 'fixer' in the implementation of IS strategy.

Finally, there is some work on power, politics, and tactics used in IS project implementation. Markus (1983) demonstrated the superiority of the interactionist theory's political variant to explain resistance to IS implementations. This political variant suggests the selection of tactics that are appropriate for the situation. Keen (1981) also suggested tactics to overcome resistance by organizational participants. These include: 1) bargain with IS department resources; 2) co-opt opposition; and 3) establish personal credibility.

Yukl's Theory of Power and Influence

Yukl's (1994) theory of power and influence has been used to evaluate the impact of leader behaviors on a target's level of commitment to a project or proposal (see Figure 1). Yukl argues that the leader's choice of influence behavior depends on: the amount of leader power; leader traits (e.g., self-confidence) and skills (e.g., ability to use different influence behaviors); and the situation (e.g., influence objective). A leader's influence tactics directly affect the target's attitudes and behavior (e.g., commitment, compliance, resistance). The reaction of the target depends on the situation (e.g., target shares leader's objectives). In addition, leader power may directly affect target attitudes and behavior. Finally, the target's reaction affects the organizational result (e.g., group success or failure).



Yukl's (1994) theory of leader power and influence is an appropriate lens through which to view the power and influence of the CIO in the IS strategy implementation process. It can be used to identify CIO sources of power, and the impacts of influence attempts by CIOs. The theory has the latitude to account for other variables in the implementation arena as well. Aspects of the theory have been tested in other contexts, and have generated reliable and valid measurement instruments adaptable to IS strategy implementation.

Figure 1. Conceptual Model (adapted from Yukl, 1994)

Conceptual Model

The conceptual model (see Figure 1) depicts the relationships between CIO power sources, CIO traits and skills, CIO influence behaviors, situational variables, influence outcomes and implementation success.

Since CIO power and influence have not previously been systematically studied, we performed some initial fieldwork with top executives. The original intent was to examine CIO power and influence with respect to IS project implementation. Yukl's (1994) theory and other pertinent literature were employed to generate a structured interview protocol subsequently used in a set of 14 interviews with CIOs and other non-IS top managers (2 interviews / company). The interviews provided initial insight into CIO power sources, CIO influence behaviors, influence outcomes, and implementation success; findings were consistent with anecdotal evidence concerning aspects of CIO power, influence, and success in other situations. For example, CIOs derive power from membership in the top management team (TMT) (Applegate and Elam, 1992) and enlist support from individuals to indirectly present their views of IS to targets (Fiegener and Coakley, 1995). Therefore, it is reasonable to predict that CIO power sources and influence behaviors used in these contexts would also be utilized to carry out IS strategy implementation.

Research Model and Example Propositions

The findings from the interviews, coupled with other literature, suggest a number of preliminary propositions for this study. The P's in Figure 1 indicate the relationships in the research model that are affiliated with the propositions outlined below.

CIOs can draw on a number of sources of power to choose influence behaviors. These include formal sources such as hierarchical proximity to the CEO (Synnott, 1987) and informal sources such as expertise in IT (Armstrong and Sambamurthy, 1996). The more effective CIOs in the initial fieldwork suggested they leverage informal sources of power, like IT knowledge, more than formal sources to accomplish tasks. Furthermore, CIOs without a solid background in IT are limited in their ability to be effective (Moad, 1994). Thus, IT expertise encourages the use of rational persuasion, with IT content in it, so the expertise can be demonstrated.

Proposition 1: High CIO knowledge of IT leads to more use of rational persuasion with IT content.

CIOs educate others about the potential strategic impact of IT (Lederer and Mendelow, 1988) in the formulation of IT strategy, and exhibit consultation behavior to communicate key IT issues to others (Earl and Feeney, 1994). The initial fieldwork discovered these same tactics being used for successful IT project implementation. For example, effective influence behaviors included personal consultation. Therefore, influence behaviors used in these contexts would also be utilized by CIOs to implement strategy.

Proposition 2: The more a CIO uses consultation, the greater the target's commitment to implementation.

Personal sources of CIO power include a solid track record of deliverables (Fiegener and Coakley, 1995). In the interviews, this source of power was taken into account when other members of the organization decided to commit to IT projects. Similarly, if the CIO has not demonstrated the ability to execute projects that are derived from the strategy, the target will be reluctant to commit to a new strategy.

Proposition 3: The greater the CIO's credibility, the greater the target's commitment to implementation.

Individual commitment to change has been demonstrated to predict the success of IS project implementation (Ginzberg, 1981). The type of commitment that Falbe and Yukl (1992) identify as being important is characterized by the target's enthusiasm, demonstration of unusual effort, and persistence. The commitment of important stakeholders, usually the heads of the functions most affected by the IS project, was identified as crucial for implementation success in the interviews. This is predicted to hold true as well for the IS strategy implementation context.

Proposition 4: The greater the target's commitment, the greater the probability of implementation success.

Summary and Future Directions

It is important for CIOs to understand the nature and use of influence in organizations. Having power and effectively exercising influence are preconditions for accomplishing tasks in organizations (Huff, 1991). The CIO who exercises influence well can potentially be more effective in future IS strategy planning and implementation efforts. This study contributes to IS strategy and implementation research in two ways:

- Its overall examination of CIOs' power, and influence on the implementation of IS strategy.
- Identification of the types of effective CIO influence behaviors that contribute to successful IS strategy implementation. The next phase of this research project will test the research model and propositions using data collected from a North

America-wide survey.

References

References available upon request from first author (henns@ivey.uwo.ca).