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ORGANIZATIONAL POWER IN LOCAL GOVERNMENT: ITS EFFECT ON IT STRUCTURE

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Abstract

In order to get things done in an organization, one must have access to resources. Access to budgetary resources is one key way to obtain resources. Sub-unit power is an important determinant of budget allocations within organizations (Pfeffer and Salancik 1974). Accrual of power allows a sub-unit some influence over organizational decision, including information technology (IT) adoption and structure. It has been argued that "The matching of IT structure, or the distribution of electronic communication, processing, and storage capabilities, with needs of the firm is one of the most critical decisions of a corporation (Fielder 1996). Resource dependence theory, as a special case of strategic contingency theory, will be applied in evaluating the power base(s) of sub-units within the county government organization (Salancik and Pfeffer 1974) and their influence on the IT structure adopted by the organization.

Keywords: Power, IT structure, resource dependence, county government

Power

Hickson, et al (1971) argue that power accrues to departments that manage the crucial factors and events in the operations of an organization. Accrual of power affects an organization's ability to achieve its goals. This strategic contingency perspective includes circumstances that impose major uncertainties on an organization. Those that manage the uncertainties become important (i.e. powerful). Pfeffer and Salancik (1974) present a resource dependence model of organizational power: a department will have more power if there is a greater dependency on it, it has more control over financial resources, it has greater centrality to the important activities of the organization, there is less substitutability of services, and it has a larger role in coping with important uncertainties facing the organization. The acquisition of resources and hence power form a self-reinforcing loop. Acquisition of critical resources leads to power. Power in turn allows more resources to be acquired.

Resources can be acquired external or internal to the organization. In the case of county government, one critical resource is the acquisition of budgetary funds (Pfeffer and Salancik 1974; Rainey 1997). For some departments within county government, funding is entirely internal to the organization while for other departments funding is available from external sources such as the State and Federal government. Additionally, some departments may be given a lot of discretion in allocating and spending their budgetary finds while others have very detailed guidelines to follow. Discretion in spending budgetary funds may be a source of uncertainty for some departments. In other departments, budgetary discretion may be seen as a source of power. The funds can be spent to purchase resources that are both valuable to the organization and also available within the organization. However, if a department purchases its own resources, those resources come under the control of the department making them less dependent on other sub-units within the organization. Salancik and Pfeffer (1974) found that outside funding was the best predictor of sub-unit power. Thus,

> **Hypothesis 1:** Departments receiving external funding will be perceived as more powerful, by other department heads and IT acquisition decision-makers, than departments funded entirely internally.

Ability to obtain financial resources is not the only base of power within an organization. Ffrench and Raven (1968) identified five bases of social power. Reward power is the power to confer or withhold rewards that want, such as pay. Coercive power is the ability to take forceful action against another. A person holds referent power over others if they see him or her as a person

they wish to emulate. Expert power is derived from the control of knowledge, information, and skills that others need. A person holds legitimate power if others accept his or her authority to tell them what to do.

Within county government there are certain department heads that are elected while the BOS or the Chief Executive Officer (CEO) appoints other department heads. If a department head is appointed, the appointing body may hold some degree of coercive power over the appointee. Elected department heads may also hold a higher degree of legitimate power. An appointed department head has only to answer to the appointing body whereas the elected department head has to answer to the whole voting constituency. Thus,

> **Hypothesis 2:** Department heads that are elected will be perceived, by other department heads and IT acquisition decision-makers, as being more powerful than department heads that are appointed.

Since a department receiving external funding may have either an elected or appointed head, and since budgetary funds are a critical resource, it follows that,

> **Hypothesis 3a:** Departments receiving external funding and having an elected head will be perceived as more powerful, by other department heads and IT acquisition decision-makers, than other departments.

> **Hypothesis 3b:** Departments receiving external funding and having an appointed department head will perceived, by other department heads and IT acquisition decision-makers, as more powerful than departments receiving internal funding.

> **Hypothesis 3c:** Departments receiving internal funding and having an elected department head will be perceived as having more power, by other department heads and IT acquisition decision-makers, than departments receiving internal funding and having an appointed head

Structure

"At any given time, the structure of an organization is providing access to and control of valued resources, while behaviors to acquire and strategically use those resources are occurring" (Brass 1993). Two types of structural power have been identified: formal and informal. Formal or hierarchical power is closely associated with authority or legitimate power. The power resides in the position, not in the incumbent. Of more interest to this article is informal or network power. In this approach is based on the concept of patterned, repeated interactions among individuals. Over time, these social interactions take on an informal institutionalized quality (Brass 1993). People in central positions in the network have greater access to and potential control of resources such as information. This puts them in a position whereby others come to depend on them. This increased dependence of others increases their power.

Brass and Burkhardt (1993) identified three measures of centrality: alternatives, access (or closeness), and control (or betweenness). Increasing one's alternatives increases one's power. Another way of stating this that by increasing alternatives, dependence on others is decreased. Access refers to how dependent others in a network are on you. This measure includes both direct and indirect links, though both are not weighted the same. The control measure looks at how often you stand between two members of the network who need to communicate with each other. In other words, for the communication to occur, it has to occur through you. From a dependence perspective, interdependence within the network is based on the exchange of information (Brass 1993). If a sub-unit has access to critical budgetary resources and those budgetary resources are allocated to obtaining other resources that are critical to the organization, the sub-unit becomes central to the network. So, control over budgetary resources can affect the structure of the organization, the network, depending on the decisions made on how to use the resource. Power is exercised.

IT Structure

Computing can be defined in terms of its functions of communication, processing, and storage (Fielder 1996). Matching IT structure and organizational structure is important to an organization so that it is prepared to take advantage of opportunities for new technology deployment. The past decade has seen improvements in all areas of computing. Storage is less expensive and more efficient. Improvements in communication have enabled the explosive growth of the Internet and e-commerce. Improvements in processing technology have enabled the production of inexpensive yet powerful and user-friendly desktop,

laptop, and even handheld computers. These improvements in processing coupled with the improvements in communication and storage have created an environment where exchange of data is nearly seamless (Fielder 1996). While the evolution in computing has occurred at a phenomenal rate, organizations have been unable to keep pace. If IT is to achieve its purpose of supporting the firm, it is imperative that capabilities and characteristics of the IT structure match the requirements and nature of the organization (Fielder 1996).

To this end, Fielder et al. developed an empirically based taxonomy for matching IT structure to organizational structure. Their analysis identified four distinct IT structures: centralized, decentralized, centralized cooperative, and distributed cooperative. Centralized systems are characterized by highly centralized processing, low communication, and low data- and application-sharing. Decentralized systems are characterized by dispersed processing, low communication, and low data- and application-sharing. Cooperative processing is characterized by high communication (networking) and high data- and application-sharing. Cooperative processing can be either centralized or decentralized. Centralized cooperative processing would have highly centralized processing in addition to high communication and high data- and application-sharing. If processing is decentralized, or dispersed, the term distributed cooperative processing is used.

Fielder et al. found that organizations with extreme decision-making structures will have IT structures that have a reduced capacity for communication and resource sharing – centralized or decentralized computer processing. They found partial support for their proposition that organizations with higher levels of interdepartmental integration will have IT structures that have a greater capacity for resource sharing. Partial support was also found for the proposition that organizational structures as represented by matrix, product, and functional forms will be related to different IT structural types. Specifically, matrix organizations would be associated with distributed cooperative computing structures; product organizations would be associated with decentralized computing structures; functional organizations would be associated with centralized computing structures.

IT Structure, Organizational Structure, and County Government

Functional organizational forms divide an organization into its basic corporate functions (e.g. accounting, finance, and marketing). Functional forms are characterized by hierarchy of authority, unity of command, functional specialization, and coordination. They function best in an environment where there is limited uncertainty. They would require less computer-supported communication and resource sharing. They would be associated with a central processing environment (Fielder 1996).

Product organizational forms divide the organization into product lines. These product lines are then organized internally by function. They would be associated with reduced task uncertainty and need for information processing and dispersed processing. Matrix organizational design combines the product and functional structures. It is characterized by a dual reporting system that would require increased information and coordination. This need for increased information and coordination would be facilitated increased communication, resource sharing and processing distribution (distributed cooperative processing).

In county government, most departments could be considered to have a product form. They produce a product (in most cases a service) that is separate from other product lines. For example, the Assessor produces property assessments and tax bills while the Jury Commissioner's office is responsible for providing a pool of potential jurors to hear trials. According to Fielder et al (1996), they would be best served by a decentralized computing structure.

Further, departments, and sub-units within departments, that control crucial organizational resources such as information or external funding have the ability to increase their power by leveraging these resources. By building their own IT structures, these departments and sub-units can increase others dependence on them which, at the same time increases their power. By building their own IT structure, these departments gain control over their data and who that data is shared with. Therefore,

> **Hypothesis 4:** Sub-units perceived by department heads and IT acquisition decision-makers as being powerful will build their own IT structures thus creating a dispersed IT structure.

Dispersed computing takes on two forms – decentralized and distributed. Even though a sub-unit would creates its own IT structure, it may have reason to desire a computing system that is capable of sharing data. For example, the departments that come under the umbrella of "justice," namely Sheriff, District Attorney, Public Defender, Courts, and Probation, may want to share information to facilitate such activities as scheduling court appearances. Therefore,

> **Hypothesis 4a:** If there is a high degree of interdependence between powerful sub-units, they will adopt a distributed rather than a decentralized IT structure.

Discussion and Conclusion

This paper looks at the impact of sub-unit power on IT structure. It posits that most county government sub-units fall under the product form and so would benefit by a dispersed computing structure. Several hypotheses are put forth regarding the bases of sub-unit power with the county government structure. Most of these are based on budgetary resources being critical to the county government. However, it also looks at election vs. appointment to department head as a potential base of sub-unit power. It is important for organizational and IT structures to be aligned so that IT can perform its task of supporting the organization.

As yet there has been no clear conclusion drawn about the causal relationship between IT structure and organizational structure. So, that would be one area where further research could be conducted. Additionally, since cooperative processing offers so many benefits over decentralized processing, it would be both interesting and useful to determine which mediating variables would cause a sub-unit to choose a distributed cooperative computing structure over a decentralized computing structure.

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