International Journal of Education and Social Science; Vol. 11 No. 2; August 2024
ISSN 2410-5171 (Online), 2415-1246 (Print)
Published by Research Institute for Progression of Knowledge

# Pushing for the Firm's IT Orientation: Role of IT Managers in Enhancing the Firm's Business Performance

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**Abstract**

*Although information technology (IT) plays a critical role in running an organization today, it is still considered by senior executives as a secondary support function and often is pushed aside in the executive group. To a large extent, such subservient position in an organization is attributed by their own posture of IT managers, who narrowly focus their role and activities in their organization on solely handling technology problems and passively resting on their mere solutions. Upon close examination of a few proactive technology managers who actively promote an enhanced role of information technology in the contemporary aggressively innovative organization, we propose in this thesis that the IT managers should actively promote the organization's IT orientation in order to gain power and influence in the organization and that the enhanced IT orientation enhance the business performance. We also propose that the IT managers' power and influence in an organization should increase as they increase their accountability for the performance, innovativeness of the company's products and processes, customer connectivity, and facilitating inter-department collaboration. We will elaborate on theoretical foundation of these claims and discuss on further studies and practical implications.*

## Introduction

Information technologies have brought about extraordinary returns for some organizations and have strengthened the activities of other organizations. In today's internet-based society, information is power. The IT department in a firm owns and controls the technology that produces the information required by the firm. Even in cases where the IT infrastructure may be outsourced to a third-party service provider or a leasing company, the ultimate ownership of the service rests with the IT department of the company. Most firms cannot function without an IT department; activities performed by the IT department are cross-functional and involve products, processes, and people interconnected strongly with the firm's overall business strategy (Croteau & Bergeron, 2001; Lefebvre, Mason, & Lefebvre, 1997; and Sibanda & Ramrathan, 2017). Also, the IT department's activities are both strategically and operationally critical to present-day firms (Bharadwaj, 2000). This implies that the IT department can exert significant influence on the organization (Luftman, Lyytinen, & Zvi, 2017; and Reich & Benbast, 2000). However, while the IT systems and the activities performed by the IT department can be so critical to a firm's operations, the IT department is often considered secondary (Kaarst-Brown, 2005) and pushed aside in the firm's strategic decision making room.

There is no doubt in today's business operations that the use of information technology offers a great advantage in all aspect of business management: e.g., it would help retail companies to enhance product availability and to reduce cost via timely reshelving or even proper inventory shrinkage management (Wamba et al. 2008). And yet, the information technology (IT) managers are not yet playing in key role in their organization's strategic decision making; rather, they are frequently uninvited or pushed aside in the top executive's critical decision making circle. To a large extent, it is IT managers' own making, narrowly defining their role in the organization and focusing their energy in technical issues and problem solving the issues.

Upon a wide review of the recent literature on technology management by many innovative and entrepreneurial firms, we propose in this theoretical thesis that the IT managers must step out of their own 'bubble,' expand widely their functional horizon, and actively engage in promoting technology use and facilitating inter-departmental collaborations with use of the new technology available today. We have examined the factors that contribute to the IT department's influence within the firm and propose what the IT department can do to overcome this subservient treatment. Specifically, this study addressed the factors that determine the IT department's influence within a firm and the consequences of IT department's influence on the firm's IT orientation and business performance. To this end, we develop a complete model consisting of the IT department's power and influence as a dependent variable and IT department's capabilities such as accountability, innovativeness, customer connectedness, and partnering with other departments as antecedent variables. The model expands the IT department's power and influence as an independent variable which contributes to the firm's IT orientation and ultimately to the firm's business performance.

Power is simply a potential to influence others without expressing or implying of such influence whereas influence is an active expression of such intent by the person in power. Appropriate exercise of power by a person with power to influence others may continue to build power instead of the power being used up and exhausted. French and Raven (1959) offered interpersonal sources of power which come from possession or command of an actor in the interpersonal contexts such as tools of coercion, legitimate authority from one's organizational position, knowledge and expertise, and respect one commands. Other theories explain how power and influence relationship are established in the organizational settings: structural power, strategic contingency, and resource dependency explain such power relationship in and among organizations.

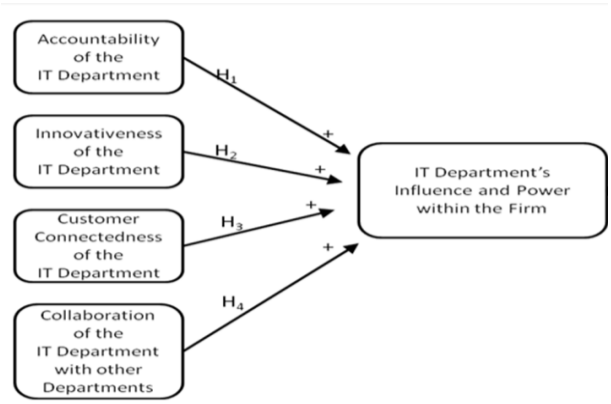
Information technology is a resource that people in today's firms value because of its ubiquity and utility to do business efficiently and effectively. It appears to be expected that, as the caretakers of information technology, the IT departments would be able, if they choose, to extract rewards from other departments who depend on it (Markus & Bjorn-Andersen, 1987). This reasoning reflects a theory of power known as "resource dependence" (Pfeffer & Salancik, 2003, 258).

On the other hands, the information technology department offers a critical tool to establishing and accomplishing the firm's strategic objectives: it significantly contributes to coping with uncertainty facing the firm both internally in terms of operations and externally estimating the dynamically evolving and changing environment, and the IT function for these critical tasks is indispensable. Naturally, according to the strategic contingency theory (Hickson, Hinings, Lee, Schneck, and Pennings, 1971), the IT department and its managers can gain power and influence over other units of the organization.

Whether it is critical resources others depend on or uncertain problems to be solved, the firm's chief information officers (CIOs) should actively engage in connecting their function and role to other parts of their organization and attempt to exercise their so-accumulated power to shape the strategies and structure of not just their own department but also the entire organization. In other words, for active participation in the strategic decision making for the firm, CIOs need to understand the structure and the dynamics of such inter-departmental power and influence. In order to help them, we propose a theoretical model with IT's department's power and influence within a firm as a focal construct, presenting its antecedent contributors and its consequences of the firm's IT orientation and the firm's ultimate business performance. Please see Figure 1 for graphic presentation of the theoretical model.

Figure 1. IT Department's Power and Influence within the firm

While structural power notes that power in an organization naturally comes to those in a key critical position in the flow of organization's work and process, the strategic contingency theory suggests that your act or decision should offer solutions to strategically critical problems or removing uncertainty in accomplishing of such strategic goals. Following are such acts that contribute or demonstrate their contribution to accomplishing strategic goals of an organization.




**Accountability**

Information Technology department and its managers have been used to playing the traditional support function, stepped aside from the main operational line, and have been comfortable with the consultative role in their company. When an external competition gets stiff and the cost reduction drive is put at a high gear, many support functions and their high expense frequently become targets by the top management and the IT department falls right on the lap of the top management. Lacity, Wilcox, and Feeny (1996, page 13) illustrated in their study of the U.S. Petroleum, Gas, and Chemicals: "All we see is this amount of money that we have to write a check for every year. Where is the benefit? IS says, 'Well, we process data faster than we did last year.' So what? Where have you increased revenue? All you do is increase costs, year after year, and I am sick of it. All I get are these esoteric benefits and a bunch of baloney on how much technology has advanced. Show me where you put one more dollar on the income statement."

Increasing high speed and efficiency is not just an esoteric benefit or a bunch of 'baloney' in this rapid-paced contemporary life and competitive world: it does improve customer relationship. At least, it prevents valuable customers from 'fleeing' away to the other competitors or improve processing more customers with high quality services expected. IT managers and CIOs now need to actively seek data and relate them to their contribution to customer accountability. So that, we propose that the accountability of the IT department is positively related to influence and power of the IT department within the firm.

Innovativeness and the role of IT department

For survival and success in today's highly competitive and saturated market, innovation is very important, not just in inventing and creating new products but also in processing and delivering them timely to their customers and clients (D'Attoma & Teva, 2020; Grover, Henry, and Thatcher, 2007; Miller, Miller, and Dismukes, 2006). Quite certainly, the IT department can play a key role in designing, developing, implementing, and installing information systems and software application that enable to innovate products and processes. Continually and fast evolving new technology, particularly internet and intranet technology, are both sources and targets of innovation: they offer a great tool to integrate, disseminate, and coordinate all the activities and actors in the innovation endeavor and process. (Berners-Lee, Hendler, & Lassia, 2001; and Miller, Miller, & Dismukes, 2006).

IT departments' ability to innovate products and processes and to coordinate other innovators to support each other enhances their contribution to the firm's strategic goals. In addition, they create and maintain dependencies of other innovators on them for technology use: Pfeffer and Salancik (2003) note that such dependency creates power and influence in an organization. Thus, we propose that the innovativeness of the IT department be positively related to influence and power of the IT department within the firm.

Customer Connectedness and IT Department's Influence and Power

There is no doubt that the critical and strategic needs to establish and maintain business and personal relationship with current and potential clients have not changed: what has changed today is the life style and the way to get connected among all people both internally and externally among people outside the firm. Use of technology available today and continually evolving is not just spreading information but offers a social platform through which all these people are continually interacting, sharing information, seeking solution to their problems, and maintaining satisfying social relationships. IT managers are in the perfect position to connect their firm to its customers and potential customers and translate their needs into customer solutions, or relate them to appropriate internal departments who could and would offer solutions.

An original equipment manufacturer (OEM), for instance, needs to work with a contract manufacturer to introduce a new product into the market. A new product idea should be tested in the market or with potential customers before it is manufactured in a large quantity. The IT department can get involved even in this early stage and use the technology platform to introduce and share the idea and help distribute a small quantity of prototypes through the technology network to all those who might be interested in the product. The IT managers continue to work on the products and the process via technology to facilitate and support OEM's time-to-market strategy. This marketing strategy traditionally belong to the firm's sales and marketing department; but the IT departments can work closely with the sales and marketing, utilizing today's internet and intra-net technology. In short, they are actively participating in the supply-chain management and enhance their contribution to the firm's strategic operation. Thus, we propose, the customer-connecting capability of the IT department is positively related to influence and power of the IT department within the firm.

**Collaboration**

Facilitating inter-department collaboration certainly was not a role and function of the information technology department; rather the IT department was portrayed as 'working in an island,' offering technical support services only when they were asked or invited to a problem (Peppard, 2001 & 2007). However, in today's business environment, information technology is an indispensable tool for practically all of us particularly in business; and yet it needs constant updates and maintenance services, IT managers can step forward and take a more active role in using the technology or even promoting its use for inter-departmental collaboration. The effective use of the technology would facilitate internal and external collaboration, enable the organization's knowledge diffusion, and strengthen communication and teamwork along the firm (Andres, 2012; Ergun, et.al, 2014; Rothwell, 1994; and Schilling, 2015).

In a comparative study with Japanese companies, Bensaou and Earl (1998) reported that Japanese managers and administrators no long treated IT as something separate, independent, and special in their organization; but it rather was fiddled, installed, and managed closely by whoever used it in their business and administration. In other words, all members of an organization participate in installing, maintaining, training, and developing hard-wares, soft-wares, and even human expert-power. In short, Japanese managers and administrators focused on 'shared understanding and continued relationship building' even with technology establishment and its use, whereas American and western companies favored the centralized IT function separate from their main business operations.

Many researchers (e.g., Andress, 2012; Cross, Earl, and Sampler, 1997; Lee, Trauth, and Farwell, 1995; Peppard, 2001; and Schilling, 2015) suggest that IT professionals come out of their own island, learn additional management skills, interpersonal or communicational, and transform themselves into 'hybrid managers' or business consultants. Change is not easy: particularly change of IT department and IT managers have been slow in change recent years.

However, because practically all departments continually use and heavily depend on technology today, IT managers are naturally connected to all these departments and can effectively function to facilitate and support collaboration among them all. Thus, we propose, the partnering and collaborative capability of the IT department be positively related to the power and influence of the IT department in the firm.

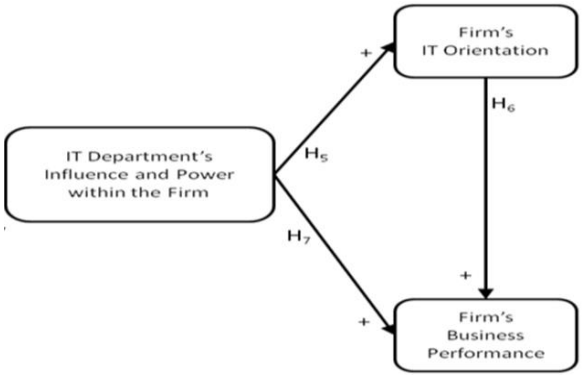
These four factors (i.e., accountability, innovativeness, connectedness, and collaboration) when demonstrated and recognized allow the IT department and its managers with power and influence in the organization.

Power is a potential of influence by one over another actor which is recognized in the social and organizational network with or without his/her intent of using it. Unlike power, influence implies an act with an intent of one with power over another. In other words, in this context of IT managers and others in an organization, when IT managers accumulate power acquired by demonstrating their accountability for their firm's performance and other three factors (i.e., antecedents), they may be able to use the power or influence to push their other organizational agenda (i.e., consequences). They may push the IT orientation of their firm, which in return improve, arguably, the firm's business performance.

**Power of IT Department and the firm's IT Orientation**

The IT orientation is a business culture that a) pervasively use information technologies to achieve and maintain a high level of business performance, and that b) has strong support from the top management to use information technologies in their daily operational activities and strategic decision making process (Weil and Aral, 2004)). Such pervasive and extensive use of information technologies are quite visible when all managers and employees use many electronic tools and media such as emails, wireless communication devices, intranets and other electronic devises on a daily basis. Another less visible and yet equally pervasive characteristic of high IT orientation is constantly manifested enthusiasm among employees and managers to exploit every opportunity to convert traditional manual operations and transactions into electronic ones. For instance, many routine and repetitive business operations such as customer orders, purchasing orders, shipment notifications, invoices, account payables and receivables, employee travels and other expense reimbursements, and so on are transformed into electronic data interchange (EDI) system. And, any new task is designed with an electronic processing system in mind.

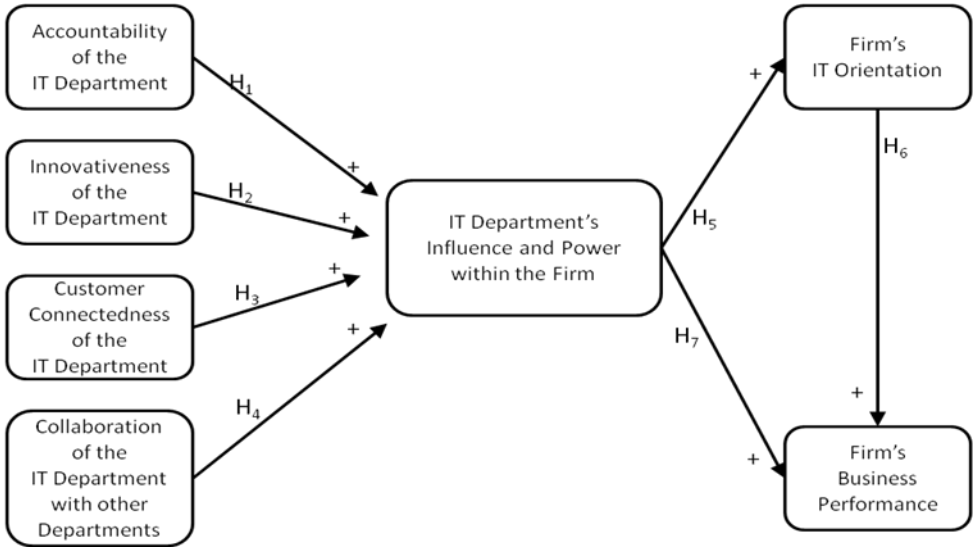
The third characteristics of the IT orientation includes the extensive use of internet technology. This web-based technology is beyond the direct control of any firm but it is widely available without much direct investment other than designing the company web platform. Current and potential future customers are relatively easily connected, promoted, and recruited. Even many traditionally internal administrations such as human resources management or training and development can be established via internet with appropriate security measures. The high level of IT orientation, therefore, offers the organization opportunities for cost savings, productivity increase, and enhanced business performance; and the IT department would exercise their power and influence to push their firm's IT orientation. Thus, we propose that the more power the IT department has in the firm, the stronger the IT orientation of the firm become.




The IT-orientation of the Firm and the Business Performance

As argued earlier, the appropriate use of information technology eventually achieves significant cost savings, improves operational efficiencies thereby productivity increase, and contributes to overall business performance. When the IT department and its managers actively engage in the firm's strategic decisions and operations and exercise their power and influence in promoting technology use, some or all of these organizational outcomes can be achieved. Thus, we propose that the power and influence of the IT department be positively related to the business performance of the firm in general, and that the firm's IT orientation positively contribute to the firm's business performance. All these propositions are succinctly summarized in the following theoretical diagram:

**Figure 2. Antecedents and Outcomes of IT Department's Power and Influence within the Firm**




**Discussions for Further Studies**

Many separate studies are integrated in this thesis into a comprehensive theoretical model surrounding the role and the power of Information Technology department and its managers in their firm. While information technology managers and its technology staff find comfort in their traditionally passive supporting role and retreat to the backroom of the corporation, scholars and practitioners promote the idea of more active participation in the corporation's strategy making process and earn appropriate credits in order to exercise their influence in the firm. We have identified antecedents that contribute to the power and influence potential for the information technology managers, and articulated organizational outcomes that can be achieved by the exercise of the power earned through such antecedents.

While some studies documented positive correlations of the variables involved in this model, we need to collect more systematic and comprehensive data to assure the integrity of the model. Measures must be carefully constructed on the presented constructs in the model and be tested of their reliability and validity first before testing the integrity of the model. It is also recommended to target actual technology managers at all ranks and to collect their response data in the natural setting on the field. Performance measures are recommended to be collected independently from the survey responses in order to avoid errors such as the common method variance.

Implications of the study for field managers are significant: instead of narrowly focusing on the technical aspect of their job, information technology managers must change their perspective and be willing to train themselves as a person-manager, actively playing the role of interpersonal and interdepartmental facilitators and power broker in and around their firm. Considering the role of technology in the contemporary organization and the heightened business competition in the market place, it is too naïve and even irresponsible to say we the information technology managers are not in the front line. Just as everything changes in this highly dynamic and volatile world today, the role and function of the information technology changes and its managers must learn and adapt to the changes happening around them.

In conclusion, we propose that the information technology department and its managers gain power and influence in and around their organization through demonstrating accountability of their work for the firm's performance, innovativeness, connectivity to and collaboration with other departments of their work for the firm's performance. Through exercise of their power and influence so accumulated the IT managers push their firm further towards the stronger IT orientation and thereby contribute more to enhancing the firm's business performance. In order to successfully carry out this rather new mission, the IT managers must develop interpersonal skills, though seemingly quite the other side of their technical training, and actively engage in relating and facilitating departments around them toward close and intimate collaboration with the ever-changing technology of which they are the most expertise.

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