Corporate Culture, Organizational Dynamics and Implementation of Innovations: A Conceptual Framework

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Abstract: When a new idea is developed as a result of discovery or invention, it may be discarded or implemented. The process of implementing an innovation normally involves effort at education and persuasion and to be able to elicit actions calculated to implement the new idea. There is also a need to establish relevance of the innovation to the goals of the organization, which encourages us to look at the subject with direct reference to the organizational factors. The purpose of this research is twofold: one to investigate select organizational variables which could promote or hinder the implementation process in an organizational setting; second to stimulate research on the subject by providing a conceptual framework, which is the base for any empirical analysis.

Key words: Organizational dynamics, implementation of innovations, conceptual framework, empirical analysis

INTRODUCTION

When a new idea is developed as a result of discovery or invention, it may be discarded or implemented. The process of implementing an innovation normally involves effort at education and persuasion and to be able to elicit actions calculated to implement the new idea (Evan and Black, 1967). There is also a need to establish relevance of the innovation to the goals of the organization, which encourages us to look at the subject with direct reference to the organizational factors. Implementation of innovation has attracted limited attention from business researchers in the past, but its importance is growing with the increase in the rate of technological innovation which has increased manifold in the recent past (Rogers, 1995; Van De Ven, 1986). Implementation of innovation is complex, involving a high degree of uncertainty as the organization incorporates the innovation into its daily activities (Rogers, 1995) and it requires the organization to transform its structures and practices, leading to potential conflicts over scarce resources, reshuff[ing] departmental personnel and other adaptations (Rogers, 1995; Van De Ven, 1986). This uncertainty caused by the newness of the innovation leads to resistance both at the organizational level and the individual level (Rogers, 1995). While it seems natural to consider implementation an extension of adoption, it does not follow automatically and additional research into factors contributing to successful implementation is necessary (Rogers, 1995). There is lack of research on why and how implementation of innovation has a low success rate, given the importance of the same in a very dynamic and ever changing business environment, where customers not only demand new products and services but also newness in the product offering (Rogers, 1995; Gill, 2003). This newness is the consequence of innovation in organizations.

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Implementation of any innovation leads to incorporation of changes in an organization and requires a significant change in behavior (Gill, 2003) as the new idea is actually put into practice. Most problems in actually using the innovation develop at the implementation stage, where a certain degree of uncertainty about the expected consequences of innovation still exists. Problems at the stage of implementation are much more serious when the adopter is an organization rather than an individual (Gill, 2003). The rationale for investigation of this phenomenon in organizations is interesting and important since it affects the rate of success of new technology and allied processes in modern day businesses. With technology revolution around the globe, business researchers and practitioners ought to understand the interface of organizational variables with respect to the implementation of these innovations (Farbortz, 1991). As the environment changes and demands organizations to change and adapt to new conditions, innovations are the vehicle to introduce change into outputs, structure and processes and factors at different levels- individual, organizational and environmental. Implementation of innovations requires organizational members to acknowledge the changes mandated by the decision to adopt and such acknowledgment to accept this change could be enhanced by organizational variables (Farbortz, 1991).

Implementation of a technological innovation in an organization leads to a mutual adaptation of the organization and the innovation. The organization experiences changes during the sub-process of implementation and as a result, innovations adapt to existing organizational and industrial arrangements as well as transforming the structure and practice of these environments (Van De Ven, 1986). This change requires an interface of people, organizational factors and innovation where the main issue becomes the unlearning the old system and learning something new, letting go old attitudes and values and learning new ones (Bridges, 1991), making the whole process very people centered, who are required to learn new processes and unlearn some old one, expecting them to walk out of their comfort zone and adapt to the changes made in the organization. There is limited research on the subject, which is emerging as an area of concern with the rapid pace of innovation the industry. This low rate of success with implementation is important to understand and investigate and this research looks at select major organizational variables that promote or hinder the implementation process. The purpose of this research is twofold: one to investigate select organizational variables which could promote or hinder the implementation process in an organizational setting; second to stimulate research on the subject by providing a conceptual framework, which is the base for any empirical analysis. Specifically, this study draws from organizational behavior theories to uncover variables potentially affecting the implementation process including corporate culture issues, such as formalization, decentralization, functional differentiation, leadership, job satisfaction and job involvement and organizational dynamic issues, such as resources and communication.

**MODEL DEVELOPMENT-IMPLEMENTATION OF INNOVATION**

The issue of implementation was discussed in detail by Rogers (1995) when he defined the entire adoption process as one in which the adopting unit passes from first knowledge, to attitude formation, to an adoption/rejection decision, to implementation and to confirmation. According to him, until the implementation stage the adoption process is strictly a mental exercise, generating no positive outcomes for the organization. It is the installation of the adopted idea into a sustained recognizable behavior pattern with in the organization (Pierce and Delbecq, 1977) and can be divided into an initial stage, whereby organizational processes are in a state of flux and sustained implementation, where the processes are again stable, but different (Rogers, 1995).

Change and implementation of innovation as a recurring and pivotal process in organizations has engaged the attention of organization scholars for a long time (Susman, 1972) and the preceding observations suggest that implementation is a complex, people centered process which demands
changes in the organization and its people. We go on to investigate some of the variables in the organization theory literature which deemed significant for the implementation (Fig. 1).

Corporate Culture Variables

The first group of variables we discuss are the corporate culture variables. These are variables that have been discussed by change management theorists. Corporate culture is an ordering characteristic reflected in the employees attributes and understanding, policies and practices implemented; and are frequently described as a deep, less conscious set of meanings about the context of work in an organization (Schein, 1985). Culture resides in the organizations objects, systems and structure and change will arise in new objects new functions and in the adoption of new operational mechanisms in response to this change reality (Schein, 1985) and change also involves concerns and fears about people’s ability to cope with the threat and insecurity attendant upon change and also leads to creations of new objects and relationships (Gill, 2003). Whenever there is a change being contemplated and/or implemented, it is significant for the organization to allay these fears.

Achieving and sustaining the goals of implementation in organizations is difficult for most. It refers to the behaviors, habits and rules, which a group of coworkers uses to interact with each other. It is a set of values, norms, standards of behavior and common expectations that control the ways in which individuals and groups in an organization interact with each other and work to achieve organizational goals (Jones and Jennifer, 2003).

Effective implementation changes operation, systems and procedures and this is clearly connected to organizational culture. Making this connection not only enables effective implementation but also embeds change in the day-to-day life of the organization, preparing members of an organization to readily accept and facilitate change. Creating a connection between culture and change requires passing proposed changes through a cultural screen to identify how best to implement and incorporate changes in the organization (Galpin, 1996).

Cultural values structures help give organizations their coherence, strength and stability and their particular characters. Kabanoff and Waldesee (1995) offer managers a framework for conceptualizing the nature and purpose of organizational change. Organizational values are central for understanding the structure, functioning, creation and change in organizations and their cultures. Shared values are a key feature of a strong organizational culture that supports a common purpose and engenders commitment along with creating a sense of belonging, necessitating that the change in structure and culture be synchronized (Schein, 1985). Varey (1995) identified a number of difficulties in the effective implementation of major new plans which inevitably imply and require change, organizational culture and capability being important ones. Given the importance of organizational culture in the process of implementing change, we discuss specialization, centralization, functional differentiation, leadership, motivation, job satisfaction and empowerment and job involvement.
Formalization

Formalization reflects the structure of rules and procedures in conducting organizational activities and is measured by rules manuals and job descriptions, or the degree of freedom available to organizational members (Cohn and Turyn, 1980). It is the degree of codification specifying who is to do what, when and where and the degree of diligence exerted in enforcing these rules and a low level of the same is conducive to idea generation. It is measured by the presence of rule manuals and job descriptions, which support implementation since it would facilitate establishment of procedures leading to better coordination of actions and a singleness of purpose for effective adoption and implementation (Kim, 1980). In contrast to more creative aspects of innovation, implementation requires a high degree of coordination of action, formal rules and established procedures add an element of structure to the organization and help in reducing stresses associated with the uncoupling processes inherent in implementation (Corwin, 1975; Evan and Black, 1967; Zaltman et al., 1973).

Due to its reliance on rules and procedures, formalization limits the discretion of lower level members and facilitates implementation by reducing conflict (Zmud, 1982). For generating ideas, for planning and problem solving the organization or unit would unstructured itself, but for implementation the organization needs a higher degree of coordination of action and the organization could restructure itself into more hierarchical form, tightening up its lines somewhat (Zaltman et al., 1973). In organizations once the innovation has crossed the adoption stage, formalization would be an asset for implementation, since it helps in delineation of authority and responsibility, reducing conflict of opinions and interests.

P1a: Formalization is positively related to the implementation of an innovation in an organization.

Decentralization

Decentralization is conceptualized in terms of hierarchy of authority and the degree of participation in the decision making processes of the organization (Fariborz, 1991), which promotes participant’s understanding and commitment to the change process and helps the employees translate the decisions into more specific actions. A higher degree of decentralization facilitates the implementation initiation phase (Pierce and Delbecq, 1977), since greater work unit and individual autonomy coupled with less restricted communication flows contribute to innovation and in addition to this greater number of sources of information in a decentralized network. Participativeness seems to generate greater ego involvement and commitment to facilitate the implementation stage (Gill, 2003), since it will encourage the employees from acquiring a sense of work ownership which facilitates proposals for improvements in methods of implementation of innovation (Dewar and Dutton, 1986).

Since decentralization pushes decision making to the lowest levels capable of making a rational decision improving commitment, morale, involvement and motivation, it also broadens the perspectives and initiatives of lower level members potential to process information. Logically decentralization leads to participation, which leads to satisfaction, which in turns promotes productivity (Kim, 1980), leading to translation of decisions into more specific forms and evokes commitment to work through difficult implementation. This implies that decentralization is positively related to implementation of innovation, inhibiting the processes which make up the change management possible.

P1b: Decentralization is positively related to the implementation of an innovation in an organization.

Functional Differentiation

The next variable within the corporate cultural realm is functional differentiation which represents the extent to which an organization is divided into different units, normally measured by the different number of units under the top management (Kimberly and Evansko, 1981). It refers to the distribution
of work across units and could be either structural or horizontal differentiation. Functional differentiation refers to the distribution of work across units and could express either horizontal or structural differentiation (Aiken and Alfes, 1970). Vertical differentiation represents the number of levels in an organization’s hierarchy and is measured by the numbers of levels below the chief executive level. It helps in a constructive conflict and cross fertilization of ideas, which is a facilitator in implementation of innovations, since new processes require new ideas and thinking. Different technologies are possible in different units of an organization simultaneously (Farnoorz, 1991) and functional differentiation creates a coalition of professionals the sufficiently differentiated units (Baldrige and Burnham, 1975) which could help to elaborate on the innovation used by the units. The more functionally differentiated the organization, it is likely that the higher would be the rate of implementation.

Differentiation is conducive to innovations since it creates a critical mass or coalition with in technical or professional subsystems with sufficient resources to pressure the organization into higher level of adoptions and innovations (Pierce and Delbecq, 1977). The larger the number of levels in an organization, the easier it would be for the organization to implement an innovation, since a coalition of professionals is created within the differentiated units (Baldrige and Burnham, 1975) which would help elaborate on the innovation at hand to be used by the units. Consequently, the more functionally differentiated the organization the higher would be the rate of implementation of innovation. Social-psychological theory suggests that individuals will allow groups to make decisions which they would not make themselves as individuals (Krell, 2000). This logic applies to organizations, since this diffuses responsibility away from a group to other groups working in tandem on the innovation’s implementation and more the differentiation in an organization, the easier it would be to implementation innovation, with distributed responsibility and reducing the perceived risks involved.

PL1c: Functional differentiation is positively related to the implementation of an innovation in an organization.

Leadership
The leader is a key issue in an organization’s life due its ability to drive and manage change (Gill, 2003). Effective leadership requires intellectual and cognitive abilities to produce vision, mission, shared values, strategies for pursuing the leader’s vision (Gill, 2003) and motivates and inspires people to do what needs to be done. It would also require emotional intelligence to understand oneself and other people along with self control to facilitate implementation (Gill, 2003). The leader needs to yearn and seek meaning and a sense of worth that animate people in what they seek and do and be able to instill feeling of confidence and commitment to enable them to get done what they want to achieve. It is defined as the ability to influence a group towards the achievement of goals (Robbins, 1998). The source of this influence may be formal or informal; often the ability to influence that arises outside the formal structure of the organization is often as important as or more important than formal influence. Leading change is one of the most important and difficult responsibilities of the leader and efforts to implement change are more likely to be successful if the leader understands the reasons for resistance to change, the sequential phases in the change process and the different strategies of change (Robbins, 1998). Leaders influence the culture of an organization by communicating their priorities, values and concerns, using their own actions especially showing loyalty self-sacrifice and service. A favorable attitude of the leader/manager towards change leads to an internal climate conducive to innovation and is specially required in the implementation stage when coordination and conflict resolution among individuals and units are essential (Robbins, 1998).

That is why participative leadership could be effective in the implementation process. It uses more group supervision instead of supervising each subordinate separately. Here the individual or
group is given the authority and responsibility for making a decision. This is likely to increase the quality of a decision when participants have information and knowledge that the leader may lack. Coordinating and sharing knowledge by the leader will depend on the extent to which participants trust the leader and view the process as legitimate and beneficial. Leaders also need to be credible, which is a result of perception of honesty and competence. Lawler (1986) argued that if employees participate they are more satisfied, committed and willing to accept change. It can be argued that environmental change is upsetting the traditional inducements/contributions balance in organizations and in return for extrinsic inducements elicit a positive response. Unless employees can participate and feel involved systemic change may not occur (Lawler, 1986), since participation provides better understanding of the nature of the decision problem, leading to employee involvement. Participative leadership leads to higher satisfaction (Lawler, 1986) and increases understanding of translating decisions into specific forms and evokes commitment to work through the difficult phase of implementation (Kim, 1980). Leadership has the ability to influence others through personal advocacy and vision and build a platform for change (Higgs and Rowland, 2001). Hausman and James (2003) found that participative decision making is more conducive to overcoming implementation resistance. The evidence shows that participation increases both satisfaction and productivity. Therefore, we posit that participative leadership will lead to easier change management which will facilitate implementation of innovation. Participative leadership is a participative process that uses the entire capacity of employees and is designed to encourage increased commitment to the organization’s success.

P2a: Leadership is positively related to implementation of innovation in an organization.

**Job Satisfaction**

Job satisfaction is a collection of feelings and beliefs that managers have about their current job and is determined by mentally challenging work, equitable rewards, supporting working conditions and supportive colleagues (Robbins, 1998). It results from the employees perceptions based on the work environment, which includes pay, job, promotional avenues, supervisor and co-workers (Robbins, 1998) and increases the commitment levels of the employee, significantly affecting the process of innovation implementation by mitigating the adverse effects of uncertainty concomitant with the evolving changes.

Job satisfaction involves an individual’s attitude towards elements related to work such as achievement, responsibility, advancement and growth (Herzberg et al., 1959) and if change is to be implemented it is imperative for the leadership to take job satisfaction into account. It could lead to taking charge of the change process, ensuring higher levels of efficacy and an internalized sense of responsibility.

Satisfied employees are likely are likely to be more committed to the organization and the job, leading to a higher degree of receptivity of new ideas and would help create visible improvements during the change process (Kotter, 1996). A strong psychological identification with one’s job could lead to higher levels of innovation and commitment towards implementation (Pierce and Delbecq, 1976), by unleashing the creative forces within the personality to accept the newness and the required adjustments, both at the personal and professional levels.

P2a: Job satisfaction is directly related to implementation of innovation in an organization.

**Job Involvement and Empowerment**

Job involvement and empowerment concern the degree to which an individual identifies with and actively participates in his/her job and considers his/her performance to be important to their self-esteem (Blau, 1986). It is giving people the power to enable them to do what need to be done in the
change process (Gill, 2003), including giving them the required knowledge, skills, freedom, self-confidence and resources to manage themselves and be accountable, stimulating the employees' intellect imagination and creativity (Kotter, 1996) and getting rid of obstacles to change. It removes the systems that undermine the vision and encourage risk taking and non-traditional ideas, activities and actions, which is the key to creating change (Kotter, 1996). Empowerment helps employees by directing them towards the goals with a better understanding of what is required and builds energy and alignment for the implementation process (Kotter, 1996).

The guiding principle of the change effort was job involvement and empowerment of the people (Kotter, 1996), since it is likely to produce a favorable attitude towards their job (Bauer and Green, 1996), leading to better sales and profitability. The logic here is involving workers in those decisions that affect them and by increasing their autonomy and control over their work lives employees will become more motivated and more committed to the organization.

P2b: Job involvement and empowerment is directly related to the implementation of innovation in an organization.

ORGANIZATION DYNAMICS VARIABLES

These variables exist at the kinetic level of the organization (Schein, 1985) and help in developing the necessary energy at the macro level of the organization to make changes and developments possible and results oriented.

Resources

The quest for competitive advantage has been the central tenet of strategic management (Porter, 1985). Resources would form the base of competitive advantage in an ever changing dynamic business environment. Organizational resources to include all assets, capabilities, organizational processes, firms' attributes, information, knowledge, etc., controlled by a firm and that enable it to conceive of implement strategies that are efficient and effective (Jay, 1991) and these could include finances, hardware, software and personnel (Dewar and Dutton, 1986). The greater the technical knowledge resources the more easily can new technical ideas be understood and procedures for their development and implementation be attained.

In resource based theory, organizations are seen as bundles of resources, which are defined as all tangible and intangible assets that are tied to the firm in a relatively permanent fashion (Caves, 1980) and resources can be combined or developed over time to generate unique capabilities that increase competitive advantage (Armit and Shoemaker, 1993). The depth of knowledge resources is an important predictor of the implementation of innovation. This along with the distribution of knowledge brings different perspectives to the discussion on the innovation, leading to a thesis and antithesis of different ideas, which permits a better understanding of new technical processes, encouraging implementation. Entrepreneurs should recognize that even though all types of resources are important for firm start-up and growth, certain ones are more salient depending on the goals of the organization (Lichtenstein and Bruh, 2001). It is important to identify the primary patterns of resource changes and their importance in understanding and tracking shifts in the organization over time. Once the basic precepts of these patterns of development in resources are understood, they can be used like engines of change or catalysts of growth, as tools to support the goals of the entrepreneur in implementation of innovation (Lichtenstein and Bruh, 2001).

As technology continues to fuel change in the environment, new ventures face increased choices in sources and combinations of resources. A better understanding of the ways that resources may be assessed, identified and combined can only help new ventures move towards success, which is the goal of all organizations.
P3a: Resources of an organization are directly related to the implementation of an innovation in an organization.

Communication

The variable reflects the extent of communication among organizational units and groups and is measured by various integration mechanisms, such as the number of committees in organization and the frequency of their meetings, the number of contacts among people at the same and different levels and the degree to which the units share decisions, (Aiken and Hage, 1971). It is directly related to implementation of innovation since it facilitates the rapid diffusion of information throughout the organization (Michael and Aiken, 1976). Research lends support to the notion that interpersonal communication is widespread (King and Summers, 1967) and that is often the most important source of information and influence as well as being a very important factor in diffusing information about a product (Arndt, 1967). The higher levels of internal verbal communication may promote implementation since it facilitates the rapid diffusion of information through the organization (Michael and Aiken, 1976) and would promote cross fertilization of ideas about possible solutions to the problems posed by the change. By definition change represents something different from what employees are accustomed to (Ahls, 2001), hence the need for clear well communicated vision and a path to implement change is obvious.

Given this discussion, we feel that communication is directly linked to the implementation of change in any organization, since it helps in mitigating fears among the participating individuals and make them better equipped with the new procedures and practices.

P3b: Communication is positively related to the implementation of the innovation in an organization.

CONCLUSIONS AND FUTURE RESEARCH

Our purpose was to theoretically construct a model with select organizational variables that would directly or indirectly affect the implementation process in organizations. The model in Fig. 1 provides a summary of the propositions and suggests that implementation is a group task and can seldom be achieved individually. The model makes it evident that we need the organizational variables supporting and coordinating the implementation process. The various organizational factors and variables that are listed are to be used in conjunction with each other rather than isolation, since implementation is an activity that is cross-functional. There is need for understanding the dynamics of the interaction of the variables in a firm or organizational setting. The dynamics could be different in different industries and countries, since the variables are likely to react differently upon interactions in different environments.

Organizations, which are more likely to implementing new practices and innovation, may like to have an understanding of these variables, which could affect their results in financial terms. Businesses might like to align their business plans, which involve implementation of innovation keeping the organizational variables in view.

We recognize this model has some limitations. First, this research looks at intra-organizational factors only. Since we chose not to look at inter-organizational implementation, the study is weakened since there are many implementation processes that involve more than one organization. We feel inter-organizational processes could be an area for future research. Second, the model could be expanded to look at additional organizational variables, which could be affecting the implementation of innovation in organizations. For this model, we selectively chose those that are posited to affect the implementation processes. Other organizational variables, such as planning, coordination and professionalism, should be an area of future research, which could contribute to the research stream.
Third, the model is based on a profit organizational context; it would be desirable to determine whether non-profit organizations would have a different setup in which some variables might be more important than the others or if there are variables relevant to the non-profit sector only.

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