
Strategic organizational change: the role of leadership, learning, motivation and productivity

Steven H. Appelbaum

Faculty of Commerce and Administration, Concordia University, Montreal, Quebec, Canada

Normand St-Pierre

Canadian Imperial Bank of Commerce, Montreal, Quebec, Canada

William Glavas

Pratt and Whitney Canada, Montreal, Quebec, Canada

Presents an overview of strategic organizational change (SOC) and its managerial impact on leadership, learning, motivation and productivity. Theoretical and empirical data presented are: the sources and determinants of strategic organizational change; the management implications of SOC; organizational leadership within the context of SOC; learning aspects of SOC; the impact of SOC on organizational and individual productivity; a model that explains the relationships between SOC, leadership, learning, motivation and productivity. Depicts strategic organizational change as an integrative process with all organizational elements such as human resources, systems and technologies being considered for successful change to occur. The proposed model for strategic organizational change is an attempt to link the software and hardware components of organizations. In view of the pressures being expected from the external environment and the critical vision of organizations, research suggests that top management needs to establish a flexible and adaptive infrastructure that should lead contemporary and complex organizations to optimum levels of performance. The largest barrier to "change" is not changes to technologies and work processes but changes involving people.

Introduction

For centuries philosophers have struggled with definitions of "change", ... To the ancient Greeks... tampering with the basic character of things - was, if not actually blasphemy, a sure path to disaster ... In modern Western culture, "change" is a more malleable notion, a means to bend fate to one's ends... (Kanter *et al.*, 1992).

In today's turbulent environment of organizations, change has become synonymous with standard business practices as long-term organizational ends have to be reformulated on an ongoing basis. With this in mind, this article will present a conceptual framework of the various elements of organizational change in order to obtain a better understanding of the management of organizations. As such, the purpose of this article is to present an overview of strategic organizational change (SOC) and its managerial impact upon leadership, learning, motivation and productivity.

The remainder of this article will be divided in six parts: the sources and determinants of strategic organizational change; a discussion of the management implications of SOC will be undertaken; organizational leadership will be addressed within the context of SOC; learning aspects of SOC will be described; the impact of SOC on organizational and individual productivity will be highlighted; finally, an attempt to develop a model that explains the relationships between SOC, leadership, learning, motivation and productivity will be presented. The discussion on strategic organizational change will be concluded by suggesting a need to develop more comprehensive models to study the impact of change on organizations.

The following section of the article will identify the critical determinants of organizational success and failure which are significant in understanding how strategic organizational change may be managed more effectively, thus avoiding potential pitfalls.

Critical determinants of organizational success and failure

The features of organizations that make for success are not always the same ones that lead to failure. Based on reports generated by professional consultants, it is possible to identify the specific factors that contribute most to success and failure. It is also possible to classify these factors as primarily environmental, structural, or management-oriented (Vecchio and Appelbaum, 1995).

Although a successful organization need not possess all of the positive attributes, most successful organizations show more positive than negative attributes. Successful organizations tend to focus on customers and their needs. They invest in ways to improve sales and provide superior service to clients, and they do not forget that their customers and their customers' needs underlie their organization's existence.

Successful organizations also adapt their structures to the needs of their missions. At the department level, controls may be simultaneously loose, in that managers have autonomy, and tight, insofar as specific performance goals may be set. Highly successful organizations often maintain a simple but appropriate structure that employs an adequate number of staff; they avoid empire building and padding with surplus staff. Also, entrepreneurship is encouraged within the divisions of the organization by rewarding successful innovation and encouraging risk taking (Vecchio and Appelbaum, 1995).

A major management feature that can lead to success is a deliberate bias toward implementing solutions to problems. Management discourages "paralysis through analysis" of alternatives, and, instead, emphasizes satisfying action that ensures goal attainment. Another management feature in successful firms is a commitment to the organization's original arena of expertise. This is called "sticking to one's knitting". It involves staying close to what the organization knows how

to do best and not being led down different paths in pursuit of attractive but uncertain alternative product lines.

Successful organizations also tend to stress a single value, such as delivering a quality product, reducing the cost of services to customers, or concern for each customer's unique need. By emphasizing a single dominant value in its promotional materials and in its training of employees, the organization establishes a useful, distinct reputation for excellence in a specific area.

Finally managers in successful companies often try to improve performance by achieving the agreement or consensus of employees. Thus, managers and workers may work together to set mutually agreeable performance goals. Employee suggestions are actively sought and a positive work-group spirit, which will serve as a basis for enhanced motivation, is encouraged (Vecchio and Appelbaum, 1995).

Different factors in an organization's environment, structure, and management may also lead to its failure.

Among the environmental factors, change in technology are a major cause of organizational failure. Technological innovations by competitors, as well as innovations that cannot be implemented within the organization itself, can lead to lost business.

Two forms of dependency – dependency on suppliers and dependency on a single customer – can also create problems. Difficulties in obtaining raw materials and financing from other institutions can prove fatal for an organization in a competitive environment. In addition, a customer who realizes that another organization is highly dependent on its business may use its resulting power to drive down prices or extract greater concessions by threatening to take its business elsewhere.

In terms of structure, inadequate control mechanisms may contribute to failure. For example, an organization may lack devices for sensing when changes occur that need to be corrected. As a result, product quality may suffer or change in employee or customer satisfaction levels may be ignored (Vecchio and Appelbaum, 1995).

Management factors may also contribute to failure. Courageous and decisive leadership can inspire an organization to overcome difficult situations or take quick action. In contrast, a tendency to overanalyze data or to take a "wait-and-see" attitude may cause a firm to lose ground to competitors and may exacerbate internal problems. The kinds of expertise that enable a young organization to thrive may become outdated as an organization matures.

The need for professional managers to aid, or replace, the founding group may go unrecognized, and the importance of hiring new talent to revitalize the innovative process may be ignored.

Conflict can lead to serious dysfunction if it is not well managed. Conflicting groups often suboptimize or set their own goals for political and personal gain ahead of organizational goals. For this reason, conflict should be managed to ensure that it remains in desired forms and at desired levels.

Success and failure factors are not evenly distributed across the three major sources. For example, more environmental factors may contribute to failure than to success. Conversely, more structural factors are potential sources of success than of failure. And an almost equal number of management factors seem to lead to both success and failure. This analysis, albeit simplistic, suggests a useful insight: Environmental factors are more likely to pose potential threats to an organization's well-being, while structural factors are an organization's major means of achieving success or, at least, coping with threats. It almost goes without saying that management-related factors are potential sources of both organizational success and organizational failure (Vecchio and Appelbaum, 1995). The origins of strategic organizational change will be the next focus of this article.

Conceptual framework of strategic organizational change

In order to define organizational change, one has to be able to appreciate the historical antecedents that brought about the current environment with which business firms have to negotiate.

After the Second World War, there was a drive to improve efficiency. Organizational theorists followed into the footsteps of Frederick Taylor in their attempts to define organizational effectiveness in terms of a scientific approach to the management of organizations. "This closed system approach (where the environment was ignored) resulted in control-oriented organizations with complex structures and simple, routine, monotonous tasks" (Volberda, 1992).

This approach to the management of organizations dehumanized the nature of work and subsequently favored the emergence of the human relations approach to the management of organizations. As Adam Smith and Karl Marx pointed out the "...simplification of work processes beyond a certain point could have diminishing returns and produce

feelings of alienation of workers” (Vecchio and Appelbaum, 1995).

In the 1970s the market place demanded quality in products and services. Organizations had to distinguish themselves from their competition through excellence as markets opened up and competition became fierce.

In today’s environment, the ability of organizations to respond to micromarkets’ demands, where choice to the consumer is preponderant, will depend on their ability to be flexible. “The transitory nature of ... market demands is an important reason that [change and] flexibility ... ought to be a defining characteristic of organizational effectiveness” (Volberda, 1992). Therefore, from an organizational perspective flexibility can be defined as the ability to react to change.

This section will also address conceptual origins and framework of change, internal and external determinants of change and directed/non-directed change.

Like the ancient Greek philosophers, contemporary theoreticians do not agree on what “is” change. Instead of defining change as a transformation from one state to another, which would be logically circuitous, this article is intended to depict the characteristics of its manifestations in order to develop a framework for further discussion.

Strategic organizational change will be referred to as a flexible strategic planning process as opposed to a static form of strategic planning. Because organizational change has become an integral part of the planning and formulation of organizational strategies, the classical strategic planning model just presented where planning came before formulation does not apply anymore:

In a turbulent environment strategic programs are insufficient and have to be complemented with strategic issue (or change) management or even contingency planning. (...) If these programs and issues have to be revised too often, contingency [change] planning is more suitable (Volberda, 1992).

It can therefore be suggested that strategic organizational change encompass ongoing initiatives that are directed from the top to the bottom of the organization and has a profound effect on the depth of the change effort. Examples of SOC could involve organizational transformations from mass production to lean production, the adoption of advance manufacturing technologies and the implementation of total quality management systems.

Strategic organizational change can emanate from two different sources: change

can either originate from the external environment such as changes in competitors’ actions, government regulations, economic conditions and technological advances. Organizations ... take inputs from the environment (e.g. suppliers), transforms some of these inputs, and send them back into the environment as outputs (e.g. products) (Johns, 1983). Change can also originate from within an organization. These changes could be new corporate vision and mission, the purchase of new technology, mergers and acquisitions and the decline in the morale of the company. Consequently, among the most common and influential forces of organizational change are the emergence of new competitors, innovations in technology, new company leadership, and evolving attitudes towards work (Vecchio and Appelbaum, 1995).

Strategic organizational change could be undertaken in either a reactive or proactive manner. In other words, management could either foresee the necessity for change and undertake the necessary steps to adjust their organization to meet the impending pressures of the environment. Or, management could resist change and be forced into an organizational transformation in order to survive. Directed change is intentional and consciously initiated, managed, and evaluated in relation to (organizations’) current and strategic objectives (Felkins *et al.*, 1993). Other authors have suggested that organizational change can be a continuous and evolving process encompassing: “approaches which view organizational change as an emergent phenomenon and the result of the interplay of history, economics, politics, business sector characteristics” (Wilson, 1992).

Strategic organizational change and its management implications

In light of all the different approaches to organizational change, we would like to point out a common thread that runs across all of them. In doing so, it is necessary to draw a parallel to the work of Frederick Taylor in the early 1900s and the emerging theories being espoused by contemporary theoreticians and practitioners of these SOC efforts:

The apparent re-emergence of certainty, and the process of management as a science, reminiscent of Taylor’s (1911) “one best way” of organizing. Today this certainty has arisen in a different guise from the original studies of scientific management. In place of Taylor’s various

efficiency-based routines, the “one best way” now proposed lies along more structural and cultural lines. The favored model propounded by many business schools as practiced in many large companies is that of the decentralized structure coupled with a task or project based culture. This requires managers to work increasingly in multi-disciplinary teams; to become generalists as well as functional specialists; and to develop a set of competencies as skills (Wilson, 1992).

The above proposition does provide a serious warning to today’s managers of organizational transformations: There is no “best” approach to strategic organizational change and effort should be undertaken to develop contingency or adaptive strategic planning models to organizational change.

Whether one adopts a proactive or a reactive approach to strategic organizational change, critical managerial variables have to be assessed in order to implement the proposed change. It has been suggested that some key management change variables should include goals and strategies, technologies, job design, organizational structure, and people (Johns, 1983). Other authors have argued that the management variables to be changed fall into so-called intervention strategies that assist the manager to implement the appropriate organizational change (Robbins, 1983). These strategies will be described in the “strategic organizational change process” section of this article. This section will illuminate vision, design/technology, management practices and organizational culture, the SOC process and resistance to SOC.

Organizational vision: goals and strategies

Although there is much talk about vision, mission, goals, and so on in most organizations, in too many those issues are not adequately articulated. An organization needs to understand the strength of its internal capabilities to properly communicate a vision and mission to its employees. The evolution of an organization’s leadership skills (e.g. technocratic versus “intrapreneurial”), training programs and investment capabilities will determine how the latter will set its goals and strategies.

The degree to which management sets goals and strategies to change the organization is contingent upon the organization’s historical goal setting process success in implementing changes (i.e. learning from past mistakes). Unrealized past goals, poor communication to lower levels of management, lack of commitment from top

management may impede the change process (Felkins *et al.*, 1993).

Others have proposed that strategic change and goal setting will be influenced by how a decision maker perceives issues related to the change strategy ... Through the combined effects of perceived attributes of an issue (magnitude, abstractiveness, simplicity, immediacy) and the political foundation of an issue (personal stake), goal setting will become part of an agenda-building process that will foster organizational change (Dutton, 1988). Leadership will affect how decision makers will pursue this agenda building process as discussed in the leadership section of this article.

Organizational design and technology

Organizational design consists of the decisions about ... formal structures, processes, systems, roles and relationships (Walton and Nadler, 1994). More specifically, the characteristics which will be affected by a change in the organization’s mission and strategy will encompass the organizational form (functional, divisional, matrix), the grouping of business units (function, product/service, target market), hierarchical levels (many, few), planning and control systems, job specialization, training and education programs, degree of centralization, delegation and participation (Volberda, 1992).

The degree to which the above organizational design variables are responsive to the change of an organization’s strategic objectives will reflect the flexibility of the structural design. For the management of organizations,

the success of organizational change ... depends on the extent to which every aspect of the system (design) – formal structure, information flows, rewards, recruitment, etc. – support the new definition of what the organization is to be and how it is to operate (Kanter *et al.*, 1992).

A new organizational design needs to be supported by appropriate technologies. A change readiness assessment should illuminate the factors that affect on an every day basis and how people use the technology in their job (Trahan and Burke, 1996). The change readiness assessment will highlight the extent to which people in the organization are ready to adopt and use the new technology and will determine the magnitude of the change efforts needed. According to other researchers:

productivity benefits derived from the incorporation of routine tasks into advance manufacturing technologies ... effectively intensifies the complexity in the remaining jobs

because the production hardware, its software, and their maintenance impose more complex technical requirements than most earlier production technologies... (Zammuto and O'Conner, 1992).

Therefore, the change readiness assessment may help identify people who lack necessary skills to evolve in the new organization.

By technology we are referring to: (1) hardware (like machinery and equipment) and the software (knowledge, techniques and skills) used in the transformation of material or informational inputs into various outputs (either goods or services) as well as (2) the configuration of the hardware and software (Volberda, 1992).

The extent to which a given technology promotes or impedes strategic organizational change will depend on how managers will succeed at optimizing the relationship between the social (people) and technical systems of an organization (Beekin, 1989). Of particular interest is how the knowledge of work procedures (software) are synchronized with the mode of production (e.g. small batch process), the physical layout of the facilities (e.g. line activities versus station layout) and means of transformation (e.g. specialized versus multipurpose) (Volberda, 1992).

Management practices and organizational culture

Strategic organizational change must also foster new management practices that are conducive to the achievement of the organization's new mission and strategy. Management practices could involve new job designs, interconnection between people and organizational processes, and the rules and principles (or culture) that govern how people do their work. When people are not motivated to do their jobs or do not understand how their job fits in with the larger goals of the organization, there is a "system disconnect" that needs to be addressed if the organization is to be successful in moving forward with change initiatives (Trahant and Burke, 1996).

In job design, as an example, one suggested approach is to make certain that the individual workers in the organization have some authority and accountability built-in into their jobs and that these elements are congruent with the new organizational strategies (Rogers and Byham, 1994).

The rules governing the organization or its culture might include its beliefs and the values (e.g. conservative to innovative), its leadership approach (e.g. instructive, consultative, participative), unwritten rules

(discipline, socialization, tolerance for ambiguity) and its external orientation (focus, planning attitude - from short-term to long-term) (Volberda, 1992). The extent to which these organizational cultural elements can assist managers in implementing strategic organizational change will explain their potential to contribute to the organization's success. It has been suggested that organizations try to establish a link between the above cultural elements and some critical success factors such as continuous improvement, customer service orientation, cost consciousness, quality, teamwork and people oriented (Rogers and Byham, 1994).

The strategic organizational change process

Organizational development (OD) is a distinct area within the field of organizational science that focuses on the planned and controlled change of organizations in desired directions. In general, outside consultants rather than organizational members are usually responsible for managing the development process. In essence, OD attempts to change an organization as a totality by changing the organization's structure, technology, people, and/or tasks. In reality, any facet of an organization is a legitimate target of OD. In this article, the focus will be primarily on change efforts that are directed at people rather than at tasks, structure, or technology. A popular definition of OD, which can be used for discussing the people side of planned change, has been offered by French and Bell (Vecchio and Appelbaum, 1995). For these authors, OD is a "long-range effort to improve an organization's problem-solving and renewal process ... through a more effective ... management of organization culture... with the assistance of a change agent ... and the use of the theory and technology of applied behavioral science (French and Bell, 1978).

Strategic changes impose a pressure or force on the organization. Two popular schools of thought have developed models to assist management in the understanding and implementation of change. Organizational development (OD) models are founded upon the principle of achieving consensus and participation between individuals in an organization. One model uses Lewin's force field analysis framework to help individual managers analyze change, predict the likely consequences and handle resistance and blockages along the way (Wilson, 1992). Lewin's model assumes that one must strike a balance between the sources of changes and

forces that resist change. According to some authors (Robbins, 1983) implicit in the unfreezing-changing-refreezing process is the recognition the mere introduction for change does not ensure the elimination of the prechange condition or the fact that the change will prove to be enduring. Therefore, from an SOC perspective, management has to determine how the organization will resist change and either increase the driving forces or decrease the resisting forces to have a lasting effect.

The behavior modification (BM) intervention is the normative essence of the wider concepts of motivation, reward, learning and organizational culture (Wilson, 1992). This second school of thought has its roots in the practices of behavior modification and is an attempt to understand and reduce complex change processes in the organization to explicit rules, procedures, and strategic actions to deal with all possible contingencies (Felkins *et al.*, 1993). The following is the process by which one can make changes to the organization.

First, managers articulate a vision of which kind of organization culture they want (based upon available models of culture and upon the assumed strategic consequences of a specific culture – environmental fit). Second, the process of change is one which individuals in the organization are persuaded to “buy in” to the desired culture. ... Third, the technique of BM is put in place to achieve the change process. Based upon Skinnerian psychological theories of learning (Felkins *et al.*, 1993).

Management often uses techniques such as modeling and also rewarding the appropriate behaviors in order to implement change. The modeling and the rewarding process has to be constant throughout the organization. Management should avoid giving mixed signals to the organization by promoting managers who do not support the change effort. This is an important consideration. A discussion of the viability of OD will be forthcoming in the concluding section of this article.

According to Beer and Eisenstat (1996), organizations tend to resist change unless the change is critical to the organizations' existence. The resistance usually manifests itself as a result of the organizations' politics and defensive routines. Ideas that challenge accepted assumptions, values, and norms regarding business strategy and management practice cannot be discussed openly among key actors. Lacking the capacity for open discussion, top team cannot arrive at a shared diagnosis (Beer and Eisenstat, 1996). Other authors have

suggested that senior management needs to articulate a crisis situation in order to lessen the resistance to organizational change. To succeed, senior managers need to communicate a sense of urgency, or as some have stated they must build a burning platform for change (Van Buren and Werner, 1996). Furthermore, to support this point, the resistance of middle managers and first-line supervisors is frequently identified as a major implementation barrier (Van Buren and Werner, 1996). Middle managers feel threatened due to the fear of losing their jobs and also due to the pressure that is applied by senior management in order to redefine their role from directing to coaching and counseling.

A method to minimize the resistance to change, may best be introduced piecemeal: The fewer the number of employees affected from the outset, the less the resistance to change and the greater the overall effectiveness of the intervention (Beekin, 1989).

Leadership and strategic organizational change

As pointed out earlier in this article, the articulation of an organizational vision is vital. This will be covered in this section as well as leadership dimensions and technology, culture and middle management perspectives. According to Hitt, senior management must articulate a clear vision of the future “ideal” organization in order to successfully implement SOC. Once the vision is established, senior management must establish and create understanding and commitment among organization members to share the vision of the ideal identity – and the actions that are necessary to achieve it (Hitt *et al.*, 1996). Other authors are in agreement that the actual transformation of a system occurs as a consequence of a “vision” of the corporation's future and the will to achieve it. It has also been suggested that organization leaders have roles to play in order to implement a clear vision: separate from the past, create a sense of urgency, develop enabling structures, communicate, involve people and be honest, reinforce and institutionalize change (Kanter *et al.*, 1992).

Leadership dimensions and technology

Two leadership dimensions (transactional and transformational) have been advanced to explain the impact the leaders of organizations have on the technological change process. First, transactional leadership sees technological change as needing primarily technical solving skills, with little attention

given to people problem solving (Beatty *et al.*, 1992). Under this leadership dimension, the manager lacks the skills required to influence the perception of organizational members exhibiting resistance to the change. Therefore, technical managers handling projects incorporating organizational change need to take time to hear out the protests and problems of others caught up in the change and listen to the views of subordinates who are likely to understand the implications of the new technology (Beatty *et al.*, 1992).

The second approach, transformational leadership, views technological change as needing a combination of technical and human relations aspects. This dimension contends that managers are given the role in translating top management's vision through exercising skills of pathfinding (give direction), problem solving, and implementing to introduce technological change (Beatty *et al.*, 1992).

Leadership culture and middle management

In general, there is no agreement as to the characteristics or character traits of leaders resulting in the explanation of leadership from its behavioral aspects. According to Vecchio and Appelbaum (1995), leadership is a process through which a person tries to get others in the organization to do what he or she wants. Sleeth *et al.* (1996) expand on this by stating the actions that link people and tasks to accomplish work is what leadership is all about.

It is through leadership that organizational members are able to achieve senior management's "ideal" vision of the future organization. The extent of the gap between the current organization and the ideal organization can have an impact on the success of the SOC initiatives. If the gap is sufficiently large, change efforts are likely to be frustrating and potentially devastating, because members will perceive the change either too threatening or impossible to achieve (Hitt *et al.*, 1996). Therefore, it is senior management's responsibility to "manage" the SOC effort by ensuring that the gap between the "as is" and the "to be" vision is wide enough to challenge the organization and not too wide to demoralize the change effort.

According to Katzenbach (1996), the ideal vision of the organization encompasses a conceptualization of the change effort, a definition of the core processes and even a definition of the appropriate team at the top of the organization. The most difficult aspect of the

change effort "lies in changing the people system – the skills and behavior of hundreds of employees. It relies on the ability and attitude of mid-level and front line managers' initiative (Katzenbach, 1996) to take on the leadership role to implement the SOC initiative.

Katzenbach (1996) further confirms that a leader must connect with the minds and hearts of their people, find the simple words that calm the anxiety and instill courage, and maintain the trust needed to bring about lasting change. If one looks again from the perspective of SOC, it is important to realize it is critical that middle management be involved in the leadership activities that are required to move towards the ideal organization.

Learning and strategic organizational change

This section of the article will examine learning to change, learning the new organizational vision and goals, organizational design and technology and organizational culture. The initial challenge will be to explore how organizations learn to change.

The implementation of a new vision and strategy via the involvement of senior and middle management will depend very much on how the individual players and the organization itself are motivated to learn. When people have the right attitudes and commitment, learning automatically follows (Argyris, 1991). Organizations themselves will also need to be part of the process as they try to learn to reformulate strategy and realign their organizations continuously, if they are to survive in an increasingly turbulent environment (Beer and Eisenstat, 1996).

At the organizational level, it has been argued that ideas which challenge the core elements of an organization's culture and its accepted management practices are rarely openly discussed among key managers (Beer and Eisenstat, 1996). This may be one of the core elements in identifying critical problems in need of solutions.

Among the reasons identified as being organizational barriers to learning are poor interfunctional coordination, poor vertical communication, unclear strategic priorities and poor teamwork (Beer and Eisenstat, 1996).

At the individual level, workers can be motivated to actively learn if the organization teaches how to break down their defenses that block learning: people must learn to identify what individuals and groups do to create organizational defenses and how these

defenses contribute to organizational problems (Argyris, 1991).

Learning the new organizational vision and goals

The motivation to pursue a new organizational vision by top management is closely linked to how managers perceive (self efficacy) they can influence corporate strategic objectives and goals. The degree of control that managers have over internal corporate factors such as sale, cost, marketing programs objectives will determine how committed they will become to organizational change. Approaches that use objective measures of performance are better motivators than those that use subjective measures (Lawler, 1994).

Concerns for motivating individuals to learn new skills can help to reduce the defenses that block learning: instead of being rewarded for moving up in the hierarchy, people are rewarded for increasing their skills while adapting them to change in organizational goals.

Learning, organizational design and technology

The role of the organization at this stage in the learning process is to create new training and education programs that will be in line with the new strategic vision. Strategic organizational changes that are not supported by rigorous training and educational initiatives will become harder if not impossible to implement and will result in failure. According to Rummler (1996), successful training can only take place if we emphasize the importance of developing behavioral objectives before deploying instruction. Now the key to performance (becomes) behavioral analysis and task analysis (Rummler, 1996).

The idea for training and education in the corporate world is best exemplified by Motorola's commitment in the late 1980s to invest \$120 million annually in training and education by creating "Motorola University". In the words of Motorola's corporate vice-president for training and education at that time:

...Our commitment is not buildings or a bureaucracy but to creating an environment for learning, a continuing openness to new ideas. We do teach vocational subject, but we also teach supervocational subjects – functional skills ... We not only teach skills, we try to breathe the very spirit of creativity and flexibility into manufacturing and management (Wiggenhorn, 1990).

In order to motivate people to learn a new technology, we must empower them with the right knowledge, technique and skills to implement the new technology. The current era of flexible manufacturing technologies requires that individual workers develop benchmarks (e.g. zero defects, total quality management, activity-based costing, etc.) and create evolving standards that will measure their ability to implement strategic organizational change throughout the organization.

Learning and organizational culture

The impact of learning on management practices and the culture of the organization are reflective of a transitional process between two learning modes.

The first learning mode is referred to as single-loop learning and consists of learning to detect and correct errors based on existing organizational norms and values. The entire learning mechanism is derived from the organization's previous experiences through repetitive reinforcement to detect casualties and correct the deviative pattern emerging thereof (Argyris, 1991). An example of a single-loop learning would be the traditional budgetary process that most organizations go through every year.

The second learning mode is referred to as double-loop learning. As the name implies, a double-loop is formed as one tries to identify the organizational processes that deviate from established values and standards, and second (i.e. second loop), questions the standards and the values themselves on which organizational processes are based (Argyris, 1991). A typical example of double-loop learning would be the utilization by an organization of a "zero-based" budgeting system.

In the context of strategic organizational change, when the fundamental norms and values are no longer appropriate, single-loop learning and the resulting use of standard operating procedures introduce significant response delays into organizations' decision systems (Volberda, 1992). As for double-loop learning, a potential is created for perpetual organizational change and flexibility.

Motivation, productivity and strategic organizational change

This final section of the article will discuss vision, performance management systems and technology and the linkage between motivation, performance and culture.

To implement a new organizational vision and strategic organizational change, it has been suggested that organizations should

undergo transformational change. By transformational (change) we mean areas in which alteration is likely caused by interaction with environmental forces and will require entirely new behavior sets from organizational members (Burke and Litwin, 1992). For senior teams of organizations, it will require the following of decision strategies that will lead to superior organizational performance. Such strategies might involve creating value by introducing new products, penetrating new markets, introducing flexible manufacturing capabilities and implementing activity-based costing within a new management control system framework.

The basic idea behind strategic organizational change is to provide a clear focus and to help establish the gaps in performance and the areas greatest concern and opportunity for change management (Felkins *et al.*, 1993). The success of strategic organizational change will in turn be measured by improving key strategic organizational variables such as market shares, sales volume, earnings per share, stock price, cost reduction and stakeholders (i.e. suppliers, customers, public at large, etc.) satisfaction.

Performance management system and technology

The importance of control systems in organizational design has been highlighted earlier in this article. As such, performance management systems are being introduced in order to monitor the performance of implemented transformational activities in the organization.

In a performance management system, strategic initiatives (are) broken into clearly defined accountabilities and responsibilities and then integrated into the performance objective of all employees who are responsible for turning them into actions (Rogers and Byham, 1994). For transformational change to occur, every employee in the organization needs to know what his/her responsibilities are, how his/her performance is to be evaluated and how his/her performance will be monitored against a predetermined set of goals.

At the organizational level, performance improvement will occur when management provides the entire work force with all the necessary training and technical infrastructure to support the transformational change initiatives. All is needed for (strategic organizational) change is to determine the right training program, technology (requirements) and the appropriate incentives for each situation (Felkins *et al.*, 1993).

Motivation, performance and organizational culture

The rules and principles governing how people accomplish their jobs in an organization can have profound impact on the latter's ability to introduce any type of strategic organizational change. As was stated earlier, the biggest challenge for management is to have their change initiatives supported by the employees of the organization. These change initiatives are likely to encounter serious resistance from various levels in the organization, and especially middle management. This has already been addressed in a prior discussion.

At the individual level, it has been argued that the organization members' willingness to buy into a culture of change can be facilitated by applying the principles of behavior modification. These principles, derived from operant conditioning concepts, are not applicable to all behavior modification attempts. In designing jobs, organizations have to assess individuals' capabilities to adapt to change. For example, it has been advanced that the degree to which individuals will translate organizational change initiatives into higher performance achievement (BM) is related to their "locus" of control. Since internally oriented individuals (internal "locus") believe that their own actions determine outcomes, internals are more likely to take an active posture with respect to their environment. Externals (external locus), in contrast, may adopt a passive role (Kren, 1992).

The ability of any organization to motivate individuals, whether they have an external or internal locus of control, to superior levels of performance is closely related to their reward systems. Therefore, strategic organizational change efforts must ascertain that different types of rewards are offered to employees who might have quite a different attitude set towards organizational change.

Although it has been suggested that ideal organizational climate would provide opportunities for independence, recognition, and responsibilities (Vecchio and Appelbaum, 1995), some employees' performance under an organizational change environment might still be motivated by extrinsic job satisfaction factors (e.g. pay, job security, fringe benefits, working conditions, explicit working rules, etc).

As pointed out earlier in this section, individuals need control over the job attributes (intrinsic or extrinsic) that will determine how successful they are at reaching their performance objectives. A careful assessment of an individual's ability to control

short-versus long-term performance, risk taking versus risk aversion, division performance versus total (organizational) performance, maximizing return on investment versus sales growth, and so on is requested (Lawler, 1994).

This article has examined and discussed the following:

- sources of strategic organizational change (SOC);
- SOC and management implications;
- leadership and SOC;
- learning and SOC;
- motivation, productivity and SOC.

At this juncture, the development of a proposed SOC model will be presented for potential application.

Conclusion: a proposed model for strategic organizational change

The quest to develop a model of strategic organizational change has resulted in the selection of elements from Burke and Litwin's (1992) "Causal model of organizational change" and Robbins' (1993) "Model of planned organizational change". The Robbins' model depicted the "how" of organizational change while Burke and Litwin's causal model presented the "what" of organizational change elements. An objective is to represent vision and strategy as organizational elements because of the importance that is placed on these in organizational theory and practice. In addition, it was decided not to represent the relationships between organizational elements in a matrix-like causal framework because similar to Burke and Litwin, that reality is much more complex than most, if not all, models can depict (Burke and Litwin, 1992). Furthermore, it was also decided that a model is needed that was relatively easy to understand for people who are required to manage change.

On the pages to follow, a description is made of how the external environmental pressures and the vision of top management initiate a change process which affects the goals of the organization, its design, technology, culture, management practices, task skills and resistance to change; all topics covered in this article. Subsequently, the change process interaction with organizational leadership and learning is presented with the ultimate impact on individual and organizational performance. All of this is reflected in the model presented (Figure 1).

The strategic organizational change process was depicted earlier in this article as

an organizational development underpinning and outcome. In discussing organizational change and strategies to manage it effectively, the success of organization development (OD) needs to be re-addressed in order to fully comprehend and appreciate the proposed model. A critical question to grapple with is does OD work? Despite difficulty of measuring the effects of OD efforts, it is possible to draw some tentative conclusions about the general value of OD in enhancing organizational effectiveness.

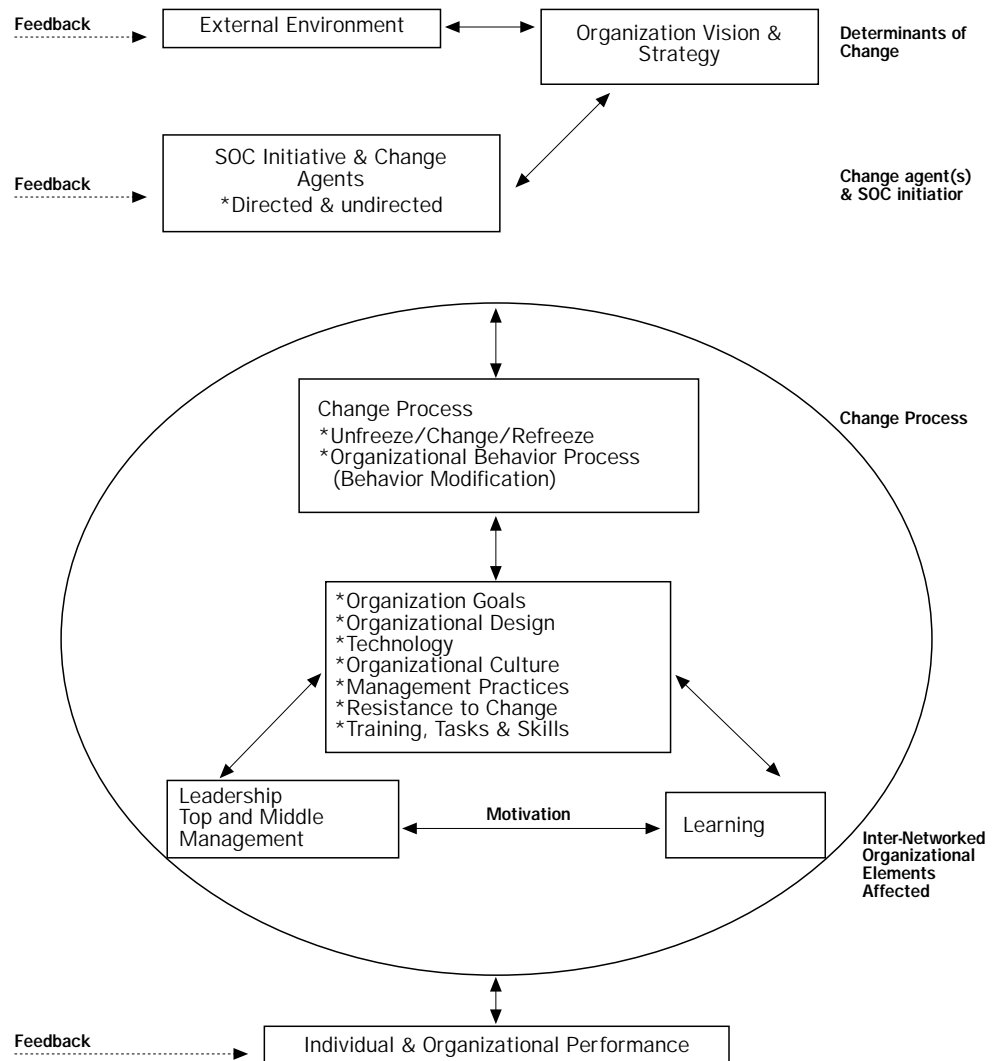
In their examination of 35 studies, Porras and Berg (1978) sorted the obtained results into outcome variables and process variables. Outcome variables refer to measures of productivity, efficiency, absenteeism, profits, and so on (relatively "hard" measures), while process variables refer to measures of trust, perceptions of leadership, motivation, and decision making (relatively "soft" measures). In addition, they further divided their sample of studies into categories based on whether the OD efforts were directed at groups, organizations, individuals, or leaders. Their analyses of these studies suggested that group outcome variables (e.g. group productivity) were most likely to be enhanced following OD interventions. Individual process variables also showed relatively positive improvement (e.g. individual job satisfaction increased in roughly 40 percent of the OD studies in which it was measured) (Porras and Berg, 1978).

A further analysis was made of these studies in terms of the impact of various OD procedures. By and large, Porras and Berg (1978) observed that the most common OD techniques, such as team building and survey feedback, were reported to have positive effects, while T-groups were somewhat less effective.

Porras and Berg (1978) also observed that OD efforts that used four or more techniques (the eclectic approach) were likely to produce more meaningful change. This suggests that a multifaceted approach to achieving organizational change is most appropriate. In addition, they noted that interventions lasting at least six days had superior results, with maximum benefits being reported when the duration was between ten and twenty days. This suggests that OD efforts should be neither too brief nor too extended.

Despite the methodological shortcomings of many of the studies that Porras and Berg examined and the tendency of OD specialists to report their results in the most positive light (OD failures are less frequently written up), these results suggest that the efforts are usually effective. As Porras and Berg's (1978)

Figure 1
Strategic organizational change model



Source: Adapted From Burke & Litwin (1992), Robbins (1993).

analysis suggests, the precise nature of OD's impact will depend on the type of technique, its duration, and the measure chosen to evaluate the intervention (Vecchio and Appelbaum, 1995).

Although Porras and Berg's review points to many positive conclusions, the value of OD as commonly conducted is often questioned by both managers and behavioral scientists. Some of this criticism derives from a healthy skepticism on the part of managers and behavioral scientists. However, other factors can partially account for this criticism.

First of all, OD is not a panacea for every difficulty an organization may face. Its successful use requires skill and expertise, and it is most applicable to interpersonal problems. When used by nonexperts and applied to

inappropriate situations, OD cannot be expected to succeed.

Users may also be disappointed to find that OD often does not live up to its stated ideal as described in articles and texts, but the flaw may be traceable to the users' approach. For example, OD is often performed at the lower levels of an organization, following top management's endorsement. The attitude that OD is a task to be delegated to lower-level managers is likely to minimize the impact of most such programs. Yet high levels of participation, support and concern for OD efforts from top-level management are fairly rare.

As discussed earlier, resistance to change is a significant obstacle to OD efforts. While resistance on the individual level may be

manageable, more difficult challenges arise when resistance stems from the total organizational system and its need to cope with its external environment. The external environment, of course, cannot be meaningfully changed by most OD efforts – and OD efforts are rarely intended to make such changes. Therefore, this larger constraint limits the progress that is possible within the organization (Vecchio and Appelbaum, 1995).

In the future, organizations may need to rely more heavily on the services of OD specialists as they are forced to undergo planned change. This need for managed change will result from a variety of emerging forces. Rapid changes in technology, for example, will require organizations to adjust their structure and processes. Also, the environment for many organizations will become more turbulent and uncertain. Contributing to this pressure will be an increasingly global business environment and a shrinking qualified labor pool (caused by both a “baby bust” and a struggling educational system). All of these forces will require organizations to be more flexible and responsive. The ability to effectively implement planned change will be of great importance in the years to come (Vecchio and Appelbaum, 1995).

In conclusion, it is critical to depict strategic organizational change as an integrative process, and all organizational elements, the soft (human resources) and the hard (systems and technologies), need to be considered for successful change to occur. The proposed model for strategic organizational change is an attempt to link the software and hardware components of organizations.

In view of the pressures being expected from the external environment and the critical vision of organizations, top management needs to establish a flexible and adaptive infrastructure that should lead tomorrow's organizations to higher levels of performance. The largest barrier to “change” is not changes to technologies, and work processes but changes involving people. To reach such level of performance, links between the environment, the vision of the organization, its leadership and learning processes are essential.

Further research is needed to identify systematic integrative models of strategic organizational change with predictive capabilities. These models could be utilized both by management and organizational researchers in order to facilitate the implementation of adaptive strategic change initiatives. This is the challenge.

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Application questions

- 1 Would you agree with the author that the largest barrier to change is people, not technology and work processes?
- 2 If planned change is the key to organization success, should people hold a defined change planning role?