

# PERSPECTIVES ON ORGANIZATIONAL CHANGE

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## Introduction

“The complexity of political regulatory and technological changes confronting most organizations has made radical organizational change and adaptation a central research issue” (Greenwood & Hinings, 1996, p. 1022). Indeed, the reality of organizational change at the start of the 21<sup>st</sup> century has redirected much of the energy of organizational development practitioners and theorists who now acknowledge that company success is directly attributable to the ability to manage and sustain strategic change (Worren, Ruddle, & Moore, 1999). Moreover, corporate executives are much more attuned to their role as change agents who must have the ability to detect early warning signs signaling the need for change in order to ensure the continuing survival of their companies (Goodstein & Burke, 1991).

Despite a strong consensus concerning the importance of organizational change, there remains

little if any consensus regarding a conceptual framework for understanding change or a preferred strategy for implementing change. It has been suggested that the educational and experiential backgrounds of those involved in organizational change have created a diverse range of paradigms, each of which offers its own view of how best to plan and implement change (Worren, Ruddle, & Moore, 1999). Table 1 provides a summary of some of the major themes that have emerged in the organizational change literature based on an analysis by Worren, Ruddle and Moore (1999). These authors argue for the integration of strategic, developmental and technological perspectives into a holistic model of change that is able to address all aspects of this complex phenomenon; however such a challenge is easier said than done.

Table 1: Mental Models Related to Organizational Change and Development

<u>Central Theme</u>	<u>Strategists</u>	<u>Organizational Developers</u>	<u>Technologists</u>
Primary Source of Organizational Ineffectiveness	Strategic logic	Cultural assumptions; mental models; organizational resistance	Business processes and supporting infrastructure
Focus of Attention	Competitive environment; customer needs; organizational structure	People and human resource support systems	Product characteristics; work processes; manufacturing technologies
Typical Change Intervention	A strategy report; a plan for restructuring	A management team session led by an OD facilitator	A new information technology system

There is a myriad of definitional challenges that must be addressed by those who would attempt to offer an all-encompassing model of organizational change, if such is even possible. Thus, the breadth section of this paper will begin with a discussion of the character of organizational change. This will be followed by an overview of the evolution of the field of organizational development and the change management movement. These sections are intended to provide a wider context in which to understand and compare three contemporary perspectives on organizational change which are influencing current practice in the field.

### The Character of Organizational Change

A good starting point for an exploration of organizational change is to recognize that there are many different frameworks that can be used to conceptualize change. These frameworks highlight different characteristics or elements that can be used to

describe change in organizations. For example, Ackerman (1986) distinguishes between three different types of organizational change: developmental, transitional and transformational (see Figure 1). Each of these is associated with a different purpose, a different set of interventions, and a different set of risks. She defines *developmental change* as the enhancement or correction of what already exists in order to ensure the continuing growth and strength of the organization. These improvements include the development of skills, methods or conditions that can be applied to individuals, groups or to the whole organization (e.g. training, team building, job enrichment). The term *transitional change* is used to describe the implementation of something new. In this instance, organizational change is likely to involve periods of careful analysis and planning that are intended to achieve the targeted change objective (e.g.



mergers, restructuring). Finally, *transformational change* refers to the emergence of a totally new organizational state. Ackerman (1986) suggests that this is the most complex kind of change involving a process of "birth, disruption, death and inspired rebirth" (p. 49). The implementation process is considered evolutionary, as the organization gradually lets go of the past and begins envisioning a new future. According to Ackerman (1986), organizations participate in all three types of change; however each is associated with its

own set of limitations. Thus, developmental change tends to be driven by a specific set of interventions and techniques that may not be sustained by the organization. Transitional change, on the other hand, can lead to an over emphasis on achieving a specified end state and a lack of awareness of the dynamic nature of change. Finally, Ackerman (1986) suggests that transformational change can result in significant chaos and resistance if the organization does not have a clear vision and a critical mass of support.

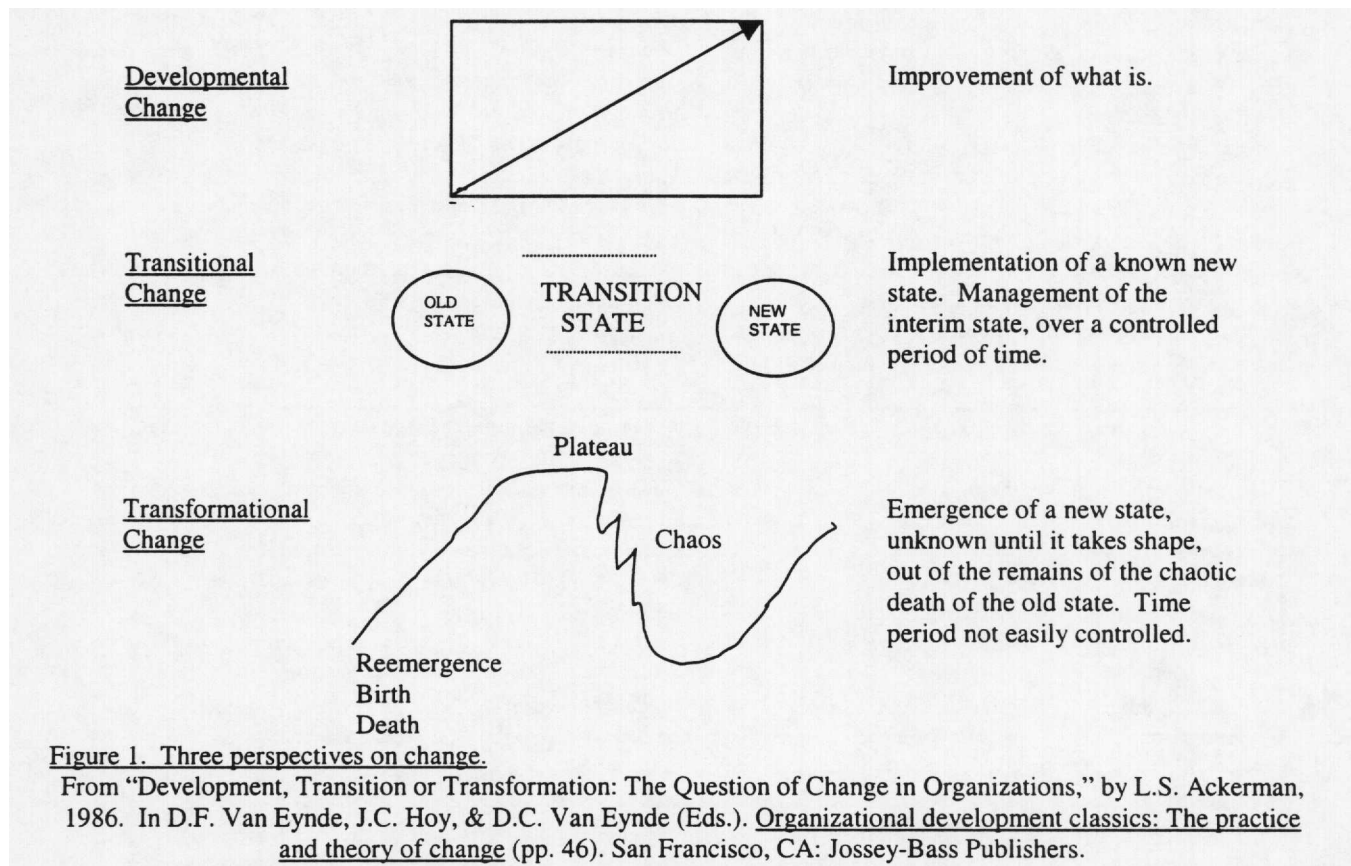


Figure 1. Three perspectives on change.

From "Development, Transition or Transformation: The Question of Change in Organizations," by L.S. Ackerman, 1986. In D.F. Van Eynde, J.C. Hoy, & D.C. Van Eynde (Eds.). *Organizational development classics: The practice and theory of change* (pp. 46). San Francisco, CA: Jossey-Bass Publishers.

A more comprehensive framework for understanding organizational change is offered by Wilson (1992). While Ackerman's (1986) framework differentiates change on the basis of its intended purpose, Wilson's (1992) view of change is based on two fundamental dimensions: planned versus emergent

and process versus strategy. These dimensions form the basis of a typology through which the author attempts to characterize a variety of approaches to organizational change (see Figure 2).

	The Process of Change	The Implementation of Change
Planned Change	<p>Cell 1</p> <p>Desired change can be stated in advance. The focus is on building commitment and support for the change.</p>	<p>Cell 2</p> <p>Desired changes can be stated in advance. The implementation of change focuses on reducing resistance.</p>
	<p>Cell 3</p> <p>Change is the result of an interplay of history economics, politics, and industry</p>	<p>Cell 4</p> <p>Change is the result of a variety of antecedent forces that shape the current context. The</p>



Emergent Change	characteristics. The focus is on understanding how change happens.	implementation of change is a function of contextual forces and processes (e.g. power).
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Figure 2. Approaches to organizational change.

From "A Strategy of Change: Concepts and controversies in the management of change," by D.C. Wilson (p. 10).  
New York, NY: Routledge.

Wilson (1992) argues that organizational change can be viewed as *planned* if one adopts the strategic choice/entrepreneurial perspective that acknowledges the role of human agency. This view assumes that individuals (managers) play an important role in determining organizational processes. Conversely, organizational change can be classified as *emergent* from the systemic perspective that views organizations as interdependent and part of a much larger whole that cannot be determined simply by the actions of corporate executives. The process versus implementation dimension raises another set of issues that must be addressed in order to clarify what is meant by the term organizational change. Wilson (1992) defines the *process* of change as involving the critical analysis of the context, antecedents and history of change that helps to clarify how change happens. The *implementation* of change, on the other hand, focuses attention on the management of individuals through the application of preconceived models/interventions that are intended to achieve predetermined outcomes.

In his analysis of approaches to organizational change, Wilson (1992) effectively argues that it cannot be assumed that change is a linear process that can be rationally planned and implemented. He suggests that such approaches ignore the political and/or irrational aspects of organization. "The political perspective argues that, even were the knowledge base to be optimized, processes of strategic change would still be predominately shaped, and outcomes largely determined, by the exercise of power and influence" (p. 54). Thus, a comprehensive model of change must acknowledge not only the implementation of goal-directed change strategies, but also the impact of contextual factors such as power, gender and accounting models used to define and control organizational performance.

The third and final framework presented here is based on the work of Daft (2001) who identifies four types of strategic change that can occur within organizations: technology, products and services, strategy and structure, and culture. This typology focuses on the outcomes of change where each factor is used by organizations to achieve a competitive advantage in the marketplace.

Every organization seeks to configure these four factors so that their impact on selected markets can be maximized (Daft, 2001). Changes in technology

include techniques for making products or services more efficient (e.g. work methods, equipment, work flow, etc.). Product and service changes relate to organizational outputs designed to increase market share or develop new markets/customers. Changes to strategy and structure focus on improving the administrative aspects of the organization (e.g. management, accounting systems, compensation strategies, downsizing, etc.). Finally, culture changes refer to changes in the values, beliefs, attitudes and actions of employees required to maximize the effectiveness of human resource systems within the organization (e.g. employee empowerment, quality management, etc.). These four types of change are interdependent; a change in one factor often triggers a change in another part of the organization. In all cases, however, strong leadership and a clear vision of the future are considered the building blocks of any successful change effort (Daft, 2001).

In sum, there are many ways to conceptualize organizational change. Different frameworks offer different perspectives and direct the researcher or practitioner to investigate or attend to different elements of organizational change. It is not possible to encompass all these perspectives into a single model, however these frameworks do provide a context within which to understand the work of different change theorists. Before doing so, however, a brief history of the evolution of thinking about organizational change beginning with the influences of organizational development and change management will be presented.

#### The Historical Context of Organizational Change

The emergence of organizational development (OD) in the sixties and seventies reflected a response to the growing recognition that organizations needed to find new ways to adapt to the challenges of changing technologies and markets.

"Organization development is a long-range effort to improve an organization's problem-solving and renewal processes, particularly through a more effective collaborative management of organization culture – with special emphasis on the culture of formal work teams – with the assistance of a change agent, or catalyst, and the use of the theory and technology of applied behavioral science" (French & Bell, 1973, p. 15).

The theoretical foundation of this systemic approach to managing change was influenced by a number of different fields. According to Margulies and Raia (1978), the major contributors to OD came out of four primary knowledge areas: planned change, action research, learning and consultation. Figure 4 depicts the nature of these influences on the evolution of this discipline.

The distinguishing characteristics of classic OD included a data-based approach to change that involved goal setting, planning, implementation, evaluation and taking corrective action when necessary. OD was viewed as a continuous process that would eventually change the day-to-day activities of the organization by altering how change was managed. The goal was to improve the organization by implementing changes in the technological, managerial, human and/or cultural subsystems which would, in turn, lead to increased productivity, satisfaction and growth (Margulies & Raia, 1978).

One of the most influential models underlying early OD theory and practice was Kurt Lewin's three-stage planned change process. Lewin (1951) was an applied social scientist who used the action research methodology to translate his research on change processes into practical improvement strategies for organizations.

Lewin (1997) assumed that organizations exist in a state of equilibrium that is not conducive to change. This equilibrium is the result of driving and restraining forces that exist at both individual and organizational levels and create a temporary state of balance. Restraining forces or forces against change can include fear of failure, loss of status, fear of the unknown, a strong culture or a rigid organizational structure. Driving forces or forces that direct behavior away from the status quo can include new personnel, changing markets, globalization, or new technologies.

In order to promote the right conditions for change, an imbalance must be created in which restraining forces are identified and selectively removed. Lewin (1997) referred to this as the *unfreezing* stage. The second stage of the change process is *movement* or the transition to a new set of behaviors or activity that is supported by the strength of driving forces at work within the organization. Once the desired future state has been achieved, the *refreezing* stage is triggered in order to consolidate the new organizational situation.

Lewin (1997) used the action research approach to elaborate and clarify the organizational change process. He combined the action processes of planning, implementation and evaluation with the research processes of problem identification, hypotheses formation and testing to define a sequence of steps that would help to identify critical steps required to initiate and implement organizational change. His three-phase

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process was eventually expanded into a seven-step planned change process by Lippitt, Watson and Westley (1958). Their adaptation of Lewin's model illustrates the essence of the planned change approach:

- (1) The development of a need for change – facilitating problem awareness, the desire for improvement, and a willingness to seek outside help.
- (2) The establishment of the change relationship – the development of a client-change agent relationship including an exploration of values and proposed methods to be used to facilitate change within the organization.
- (3) Diagnosis of the client system's problem(s) – gathering data to verify the exact nature of the problem.
- (4) Examining alternatives and goals of action – reviewing possible intervention strategies.
- (5) Action implementation – implementing change strategies and seeking ongoing feedback on their impact within the organization.
- (6) Generalization and stabilization of change – ensuring that changes are consolidated and planning changes on a broader scale.
- (7) Terminating the change agent relationship – evaluating the impact of changes and terminating outside support when no longer required.

Margulies and Raia (1978) summarized Lewin's (1997) planned change process in the following terms: "It is clearly a process of change which is built upon the premise that rationality provides a sound springboard for determining change goals and the subsequent action designed for achieving those goals" (p. 75).

While Lewin's (1979) work is still being used to implement change programs such as the successful turnaround of British Airways (Goodstein & Burke, 1991), in recent years scholars have begun to challenge some of the assumptions underlying the classic OD paradigm of organizational change. For example, Wilson (1992) criticized the planned change approach as representing an uncritical acceptance and reinforcement of managerial control within the organization. "the locus of change is assumed to emanate solely from the management cadre, and the task of implementing it, equally, to lie solely with managers" (p. 12). Furthermore, as mentioned previously, the assumption that organizational change is a rational, linear process has also been challenged.

Worren, Ruddle and Moore (1999) suggest that the lack of business understanding among many traditional OD practitioners limited their ability to draw the attention of the corporate world. Legitimate organizational change agents required a broader knowledge than that of the behavioral sciences. According to these authors, this limitation eventually



triggered the emergence of the change management era. This era in organizational change incorporated the theory and intervention strategies associated with OD as well as those of human resource management, project management, and strategic change. Table 2 summarizes the distinctions drawn between classic OD and change management as outlined by Worren and his associates (1999).

(8) Change management is based on the assumption that human performance is at the core of business performance (Worren, Ruddle, & Moore, 1999). Change management consultants are members

of cross-functional teams focused on implementing business-oriented changes that ultimately affect behavioral and attitudinal changes within the organization. While many traditional OD interventions may be employed, the emphasis is on integrating structural and cultural solutions as well as assisting the organization in navigating through the chaos of the change process. "Change management promises to be a discipline that will integrate the thought worlds that separate OD from strategy and technology, thus enabling the coordinated efforts necessary to bring about strategic change" (p. 280).

Table 2. Distinctive Features Associated with OD and Change Management

	Organizational Development	Change Management
Underlying theory and analytical framework	Based primarily on psychology (human processes)	Includes principles and tools from sociology, technology, and strategic change theories; individual/group functioning; and systems, structures, and work processes (congruence model)
Role of change agent	Facilitator or process consultant	Content expert (organization design and human performance); process consultant; member of cross-functional team; and part of project organization.
Intervention	Not directly linked to strategy; focus on one component at a time Normative-reeducative (change attitudes to change behavior)	Driven by strategy strategies; simultaneous focus on several components (strategy, human resources, organization design, technology) Action-oriented (change behavior before attitudes)

Traditional thinking about organizational change has also been influenced by the Confucian and Taoist philosophies of the East. Lewin's (1997) model of planned change reflects the Western perspective of change as a linear, goal-oriented, progressive process that can be planned and managed by people. The Confucian perspective, however, assumes that change is a cyclical, journey-oriented, normative process - an inherent part of daily existence (Marshak, 1993). According to Marshak (1994), the implications for understanding organizational change are significant. "...a model of change that specifically addressed a

world of continual change seemed intriguing after dealing with the paradox of how to unfreeze and refreeze permanent white water" (p. 64). He argues that traditional OD is future-oriented and focuses on overcoming resistance. By contrast, a cyclical model views change in terms of a continuous past-present-future cycle in which the goal is to maintain harmony among the constantly changing aspects of a complex system. In Table 3, Marchak (1994) compares Eastern and Western views of change on a variety of dimensions.

Table 3. Two views of change

OD/Western	Cyclical/Confucian
<ul style="list-style-type: none"> <li>▪ Focus on the future</li> <li>▪ Assume satisfied people hold on</li> <li>▪ Overcome resistance</li> <li>▪ Think in terms of either/or</li> <li>▪ Plan and manage change</li> <li>▪ Think analytically</li> <li>▪ Use reason and logic</li> <li>▪ Measure progress</li> </ul>	<ul style="list-style-type: none"> <li>▪ Attend to the past-present-future</li> <li>▪ Assume wise people let go and realign</li> <li>▪ Maintain balance and harmony</li> <li>▪ Think in terms of both/and</li> <li>▪ Cultivate system self-renewal</li> <li>▪ Think holistically</li> <li>▪ Use artistry and composition</li> <li>▪ Be values-centered</li> </ul>



Theoretical frameworks on organizational change have evolved from relatively simplistic models to highly complex philosophies. This, in turn, has produced a rich dialogue among scholars, practitioners and corporate executives. As a consequence, the processes, strategies and technologies developed to facilitate organizational change are likely to continue their evolution. Moreover, the diversity of cultures, disciplines and organizations is likely to ensure that a single paradigm such as that of Lewin (1997) will never again dominate the theory or practice of organizational change.

In the section that follows, three models of organizational change will be presented - Peter Senge's systemic model of organizational change, the business process reengineering perspective, and Richard Axelrod's engagement model. Each represents a contemporary approach that has received considerable attention from scholars as well as practitioners in the field.

#### Peter Senge's Learning Organization

Since the release of *The Fifth Discipline* in 1990, Peter Senge's name has become synonymous with the concept of the learning organization. In this highly influential work, he argued that radical organizational change does not occur without radical personal change. Thus, organizations seeking to evolve and sustain change must create environments in which individuals develop the capacity to learn continuously. Senge (1990) then outlined five learning disciplines that he considered essential for developing a learning organization.

1. **Personal Mastery** – A learning organization encourages individuals to work toward personal goals and to confront the gaps between where they are and where they want to be. It offers an environment of support and is not threatened by individuals who challenge the status quo.
2. **Mental Models** – A learning organization uncovers hidden beliefs and assumptions that may not reflect the current reality. It fosters a culture in which individuals are willing to examine the limitations of what they believe and able to engage in honest dialogue with others.
3. **Shared Vision** – The leaders of a learning organization build a shared vision of the future through which individuals are able to share a common sense of commitment and a common bond, regardless of position or level of responsibility. "Without a pull toward some goal which people truly want to achieve, the forces in support of the status quo can be overwhelming" (Senge, 1990, p. 209).

4. **Team Learning** – A learning organization provides opportunities for teams to develop their dialogue (objective listening) and discussion (presentation of ideas) skills so that they can move beyond defensive interactions and tap into the creative synergies that lie just beneath the surface.
5. **Systems Thinking** – A learning organization uses the language of systems thinking to understand the interdependency and change, and to diagnose and develop lasting solutions to problems.

These learning disciplines appear deceptively simple, yet they speak to the heart of organizational change and development. Senge (1990) offers a clear challenge to the corporate world by arguing that without leadership commitment to the practices of these disciplines in their personal lives, an organization will not achieve its full potential.

#### The Living Organization

In his most recent book, *The Dance of Change*, Senge along with his associates borrow from the world of biology to explain the life cycle of organizational change (Senge, Kleiner, Roberts, Ross, Roth & Bryan, 1999). They suggest that the pattern of acceleration and gradual deceleration that characterizes the growth of biological organisms mirrors the growth and decline that is commonly observed among organizational change initiatives. "The biological world teaches that sustaining change requires understanding the reinforcing growth processes and what is needed to catalyze them, and addressing the limits that keep change from occurring" (Senge et al, 1999, p. 8). While considerable focus has been placed on activating growth processes in order to create learning organizations, the authors argue that the presence and influence of limiting processes has received little attention. In *The Dance of Change* the authors describe the complex interplay of these systemic forces and how they are at work in living organizations striving to sustain profound change.

#### The Leadership Community

The living organization is populated by different types of leaders, each of whom is working to nurture reinforcing growth processes throughout the organization as well as to identify and address the constraints that are impeding growth. There is no single leader driving the living organization forward; rather, there is a leadership community made up of executive, local line, and network leaders whose actions interact with reinforcing and limiting processes according to a common vision and a common set of values. Thus, leadership and sustaining organizational change are viewed as complementary dynamics within the living organization.

### Reinforcing Growth Processes

"Nothing can grow in a self-sustaining way unless there are reinforcing processes underlying its growth" (Senge, 1999, p. 42). The authors outline three fundamental reinforcing processes or cycles that sustain profound organizational change by triggering a distinct set of growth-sustaining forces. These processes are interdependent as changes in one can affect the impact of the other processes operating with the organization. The first deals with *enhancing personal results* (R1). When people realize personal benefits as a result of a change initiative, their level of enthusiasm and their willingness to commit themselves to the change process are increased; in turn, personal investment grows leading to increases in learning and greater personal benefits. The second reinforcing process concerns *networks of committed people* (R2). Informal networks of people diffuse information about the change initiative and generate increased interest and

enthusiasm for change which ultimately triggers greater investment in change throughout the whole organization. The third major reinforcing process deals with *business results* (R3). As new practices lead to improved results, credibility increases and more people are willing to commit themselves to future change initiatives.

### Limiting Growth Processes

Senge et al (1999) outline ten challenges to any profound organizational change process (see Table 4). These challenges are classified into three categories - initiating change, sustaining change, and redesigning and rethinking structures and practices. From a systemic perspective, the source of resistance to change is not found in people, but in a living system that is functioning in ways that help maintain its homeostasis. These challenges represent balancing forces (B) that are trying to conserve the status quo.

Table 4. The challenges of profound change

<u>Change Activities</u>	<u>Limiting Processes</u>
Initiating Change	The challenge of control over one's time (B1). The challenge of inadequate coaching, guidance and support (B2). The challenge of relevance (B3). The challenge of management clarity and consistency (B4).
Sustaining Change	The challenge of fear and anxiety (B5). The challenge of negative assessment of progress (B6). The challenge of isolation and arrogance (B7).
Redesigning and Rethinking	The challenge of the prevailing governance structure (B8). The challenge of diffusion and the inability to transfer knowledge across the organization (B9). The challenge of organizational strategy and purpose (B10).

In order to effectively respond to these challenges, the organization's leadership community must understand the dynamics underlying them. Leaders must recognize that these limiting forces do not operate in a linear fashion and that they may impact every organizational context somewhat differently. Further complexity is created by the interdependencies among these challenges. As resources are directed to overcome the challenges of initiating, problems associated with the challenges of sustaining or redesigning and rethinking will begin to emerge. The shifting dominance among these challenges means that leaders must learn to anticipate where the next challenges will be so that they do not become complacent in their efforts to support continuous learning and change within the organization.

### Summary

Senge (1990) views organizational change as an emergent process that can only be understood from a systemic perspective. As such, his model echoes the Eastern perspective of change (Marshak, 1994). Growth is nonlinear and a natural part of the life cycle of every organization. Sustained growth can only be achieved by recognizing the inherent reinforcing and limiting forces that are present within every organization. Through continual practice and learning, the leadership community is able to identify leveraging strategies that weaken balancing forces and alter the impact of underlying constraints to change.

Senge et al (1999) do not offer a cookbook strategy for implementing change. Instead, they offer insight into the growth processes that exist within every organization. The application of specific interventions

to address resistance is not as important as the application of systemic principles to understand the dynamics underlying the challenges of change. The traditional role of change agent has been replaced with a leadership community that is committed to participating in the change process. Organizational change begins with a new way of thinking and acting, and produces a new way of organizing that supports continuous learning and growth.

**Richard Axelrod's Terms of Engagement**

Axelrod's (2000) view of organizational change was precipitated by perceived limitations with past and current practices in the field. In his most recent publication, Terms of Engagement, he summarizes the key characteristics of four established models reflecting

traditional and contemporary approaches to change (see Table 5). While each approach represented an improvement over its predecessor, Axelrod (2000) proposes that the most contemporary iteration, that of change management, still contains structural and cultural problems. Axelrod (2000) argues that the change management model relies upon the establishment of a parallel organization comprising sponsoring, steering, and design teams that operate alongside the regular organization. These parallel structures represent platforms for bringing about needed change by bringing together experts from across the organization who are able work in cross-functional, multilevel teams.

**Table 5. Historical approaches to change**

	Leader-Driven	Process-Driven	Team-Driven	Change Management
<b>F</b>	Leader produces change	Experts produce change	Teams produce change	Experts and teams produce change
<b>ocus:</b>	Leader produces change	Experts produce change	Teams produce change	Experts and teams produce change
<b>Examples</b>	Command & control leadership style	Industrial engineering; strategic planning; IT	Quality circles and employee involvement	Reengineering; supply chain improvement
<b>Strategy:</b>	Leaders use personal power to bring about change	Experts lead change process; leaders lend power to experts	Employees identify needed changes; leaders approve	Experts initiate change with employee input; leaders approve
<b>Values:</b>	Leaders know best	Consultants know best	Teams know best	Consultants with input from teams know best
<b>Why it worked:</b>	Leaders have all the power and knowledge; uneducated workforce	Consultants have specialized knowledge; uneducated workforce	Those closest to the work have best idea of how to solve problems; empowered employees; educated workforce	Provided a business focus to team-driven change; brought new levels of employee ownership to process-driven change; educated workforce

According to Axelrod (2000), the assumption underlying the use of parallel structures is the belief that the change process is best managed by a select few individuals who organizations.

Axelrod (2000) suggests that the change management approach is insufficient for today's rapidly changing business environment. He cites six primary factors that account for the ineffectiveness of this model:

1. Allowing the few to decide for the many guarantees that implementation of the change process will be more difficult since employees will feel that their input is unimportant.

2. Leaders are isolated from the various team members and are therefore not able to be active participants in the change process.
3. The separation of the planning process from the implementation process limits the ability to develop critical support for change initiatives.
4. The creation of parallel organizations that are not based upon the principles of high employee involvement and participative decision-making.
5. A strong focus on process improvements which has resulted in a lack of attention to the importance of organizational culture.
6. The lack of congruence between what is being advocated by change management advocates as





the enhancement of teamwork and cooperation and what is being practiced as a means of managing employee resistance.

"The old change management paradigm, with its requisite committees, teams, and heavy consultant influence, contains the seeds of its own destruction" (Axelrod, 2000, p. 29).

#### **The Engagement Paradigm**

In response to the aforementioned shortcomings, Axelrod's (2000) introduced his engagement model. It is based on the application of four core principles. The first deals with *widening the circle of involvement*. This involves expanding the number and scope of employees who are involved in the change process so as to create a critical mass for change as well as enhance the innovation, adaptation and learning that can occur. The second principle involves *connecting people to each other*. These connections create synergy and break down the functional barriers that are so easily constructed within organizations. Thirdly, Axelrod (2000) points to the importance of *creating communities for action* in which people are sharing their talents and insights to solve complex problems. The fourth principle concerns *embracing democracy*. "Change grounded in democratic principles has the best chance for success" (p. 35). They provide the ethical and moral foundation on which organizations must operate in order to ensure their continuing growth into the future.

#### The Conference Model

Following a period of experimentation in a variety of business environments, Axelrod (2000) developed a high-involvement process for helping organizations design and implement change. The Conference Model consists of a series of conferences that are held every four to six weeks during which employees discuss core issues at increasing levels of depth. In addition, mini-conferences are held for employees unable to attend the main conference sessions. The underlying assumption is that when a critical mass of the organization comes together to create a vision of the future, there is a much greater likelihood that the resultant change initiative will be successfully implemented.

Axelrod (2000) acknowledges that both executives and OD practitioners have raised a number of objections to his engagement model:

1. Leaders may lose control of the process if too many people are involved.
2. Productivity will decrease as the number of employees involved in the process increases.
3. Employees cannot put the organization ahead of their own self-interests.
4. The cost of widening the circle of involvement is considerable, both financially and emotionally.

Nonetheless, while there are risks involved in adopting a high-involvement approach to organizational

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change, the costs of employee disengagement are seen as having a much greater negative impact on the longer term competitiveness of the organization.

#### The Limitations of Engagement

Axelrod (2000) identifies three major issues that collectively represent the shadow side of the engagement paradigm. The first deals with past or present leadership behaviors that are contrary to the core principles of engagement. Examples include violations of trust, violations of fairness, conversations that disengage, discounting behaviors, ignoring past organizational damage, and a loss of willingness to implement change. An uninformed or arrogant leadership is considered a recipe for disaster as employees will not accept that the change process is authentic.

The second limitation of the engagement model is found in the implementation of disengaging change strategies. This can include unclear decision-making rules that confuse employees, unclear boundaries that do not articulate the scope of the change process, selective information sharing that disempowers employees, or the application of manipulative strategies under the guise of engagement. These so-called design flaws can trigger employee withdrawal and cynicism.

Lastly, Axelrod (2000) suggests that the engagement paradigm has four negative attributes. It is more chaotic than other approaches to organizational change since many more people are directly involved in the process. It also requires leaders to relinquish their executive decision-making powers and allow employees to influence the future course of the organization. Thirdly, the initial costs associated with coordinating the Conference Model are much greater than more traditional change management approaches. Consequently, companies can feel pressured to get an immediate return for their investment which in turn, can lead to compromising the core principles of engagement. Finally, high-involvement change processes are, by definition, more visible and therefore place greater pressure on those involved in designing and leading the change process. This increased scrutiny may cause leaders to look for less public vehicles for change.

#### **Summary**

Axelrod (2000) describes the engagement model as an effective alternative for dealing with many of the major challenges facing organizations in the current business environment. The engagement paradigm offers a set of general guidelines which, when applied consistently over time, will enable organizations to build their capacity to learn and adapt. Axelrod's (2000) underlying assumptions are relatively simple: Find a way to involve as many people as possible, encourage team-building, create communities for action, and build a democratic organization. He says

very little about the application of specific interventions apart from the use of the Conference Model. This suggests that a variety of interventions could be used to create a high-involvement change process.

Axelrod's (2000) engagement paradigm is a values-driven framework that emphasizes implementation more so than process. While it cannot be considered a cookbook, the simplicity of the engagement model can easily be viewed as somewhat formulaic in nature. Nonetheless, it carries considerable face validity, especially for OD practitioners who continuously confront the organizational consequences of leaders who do not practice these principles.

Senge's (Senge et al, 1999) model presents a much more complex analysis of change than does Axelrod (2000). His framework is less prescriptive and more descriptive of the natural dynamics and challenges associated with organizational change. In contrast, Axelrod (2000) focuses on the company-employee relationship almost exclusively with little attention to the type of change or the focus of change. An interesting contrast between these two approaches concerns the use of the Conference Model versus the pilot group, the latter which is advocated by Senge as an effective starting point for change (Senge et al, 1999). This comparison highlights Axelrod's (2000) focus on implementing organization-wide changes as opposed to Senge's interest in creating learning communities over time.

Despite differences in emphasis, both models acknowledge the critical role of leadership in affecting organizational change. Change begins in the minds and actions of leaders who are able to inspire, motivate and empower others to participate in building the organization of the future.

#### The Reengineered Organization

Business process reengineering (BPR) is a corporate change strategy that seeks to achieve radical improvements in customer service and business efficiency in response to increasing competition and growing operational pressures (Sethi & King, 1998). The term "business reengineering" was first introduced in an article written by Michael Hammer in 1990 and has since become a part of the language of corporate America. While the meaning of the term has expanded somewhat over the past twelve years, the intent of BPR is essentially the same:

"...to rethink, restructure and streamline the business structures, processes, methods of working, management systems and external relationships through which we can create and deliver value. Such an approach can yield dramatic improvements in cycle times, efficiency, cost, quality, service, flexibility and capability. These in turn should render

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enhanced customer loyalty and bring increased profitability" (Talwar, 1993/1998, p. 133).

BPR has been described as a reverse-design process that begins with a specific customer-based objective and then works backwards to create the specific value-chain elements that are required to achieve that outcome (Sethi & King, 1998). The focus is on achieving radical improvements in business performance. Given this focus, it is no surprise that information technologies (IT) have come to play a major role in BPR since they have allowed companies to dramatically redesign how work is done. As a result however, BPR has also come to be associated with significant organizational changes at a cultural level as business processes and systems are often consolidated or eliminated due to the implementation of a reengineering strategy.

Talwar (1993/1998) outlines five key internal benefits for companies choosing to adopt a BPR approach to corporate transformation:

1. There is a stronger alignment of core work processes to the business strategy. Thus, new product development, customer service, human resource management, supply chain management and financial management processes are more consistent with strategic corporate objectives.
2. The creation of customer value becomes the key driver for all business activities. Any change is rationalized in terms of increasing customer value.
3. The business architecture or company structure is optimized as a result of enabling cross-functional performance across divisions. Obstacles created by functional boundaries are eliminated thereby facilitating the integration of work processes.
4. Benchmarking activities accelerate learning and provide a focus for change. The organization has a clear business objective based on what is being achieved in industry.
5. As capabilities and performance are enhanced, the organization becomes more ambitious and more confident in its ability to achieve future business objectives.

#### Basic Principles of BPR

Hammer's (1990) seven principles of reengineering represent the core ingredients that can be found in most successful initiatives. These principles underscore the philosophy underlying BPR – the assumption that radical improvements require breaking away from conventional beliefs about how business is done.

#### Principle 1 - Organize around outcomes, not tasks

Taylor's principles of Scientific Management can still be found in today's organizations, however proponents of BPR argue that these structures and processes have not kept pace with the globalization of

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the marketplace (Talwar, 1993/1998). According to Hammer (1990), individual jobs should be designed around an objective or an outcome, rather than a single task. This eliminates unnecessary delays or rework as employees are able to ensure that their work process accomplishes a specific objective.

Principle 2 - Have those who use the output of the process perform the process

With the advent of technology, individuals can do more for themselves. Consequently, there is less need for specialized departments and the overhead they create. Thus, individuals do not need to rely on the Purchasing Department to get office supplies when they have the capacity to order their own.

Principle 3 - Subsume information processing work into the real work that produces the information

There is no longer a need to maintain departments whose sole function it is to collect and store information to be used by other departments. The users of the information can also be responsible for gathering and storing the information as well. For example, a Production department can be responsible for collecting and analyzing quality information rather than relying upon the Quality department to interpret the data for them.

Principle 4 - Treat geographically dispersed resources as though they were centralized

Technology allows a geographically dispersed corporation to establish centralized processes that have the benefit of scale and that avoid the cost and delays associated with multiple redundant systems. For example, common databases can allow a company to negotiate supplier contracts through the corporate office rather than having separate branch locations working independently to get the best deal.

Principle 5 - Link parallel activities instead of integrating their results

Once again, Hammer (1990) suggests that technology can enable separate business units to

coordinate their activities while in process, rather than waiting until each has accomplished its results. By integrating business activities while in process, the coordination is continuous rather than after the fact when changes cannot be made easily and a considerable amount of time and expense has already been invested.

Principle 6 - Put the decision point where the work is performed and build control into the process

This principle suggests that hierarchical decision-making structures are inefficient. The people who do the work should make the decisions. Technology can create expert systems to enable individuals to control their own work. By doing so, delays and bureaucracy can be minimized.

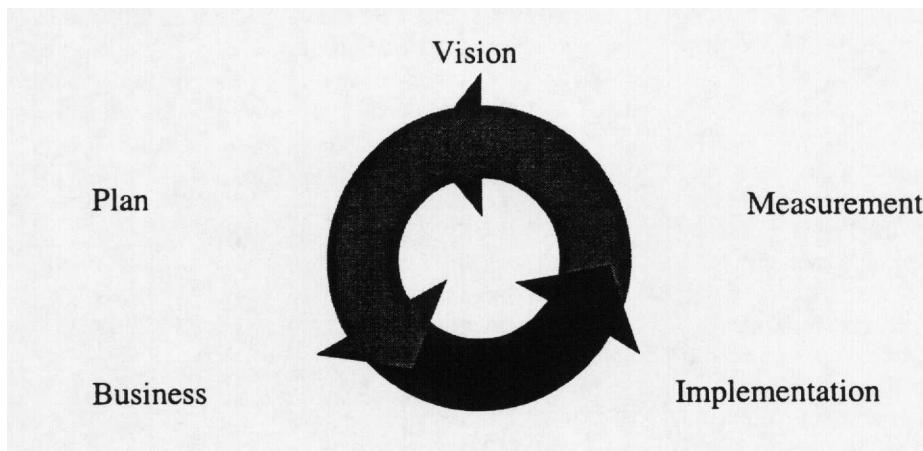
Principle 7 - Capture information once and at the source

Current technology has simplified the information collection process. It is now possible for companies to implement databases that can be accessed by multiple users independently.

The implementation of BPR principles represents a significant paradigm shift for many organizations. Its goals are ambitious - to produce radical change. The means appear deceptively simple, but represent a new way of doing business. Find ways to streamline and simplify operational processes. Use technology to find innovative solutions and empower employees by giving them greater access to information. By implementing the basic principles of BPR, advocates of this approach argue that companies will increase their customer value as well as their competitiveness in a global market.

Methods of BPR

While BPR has a common set of basic principles that characterize most reengineering initiatives, the methodologies used by companies can reflect a range of approaches to implementation. Talwar (1993/1998) outlines a six-step framework for implementing a strategic BPR initiative (see Figure 5).



**Figure 5.** Six key steps in the reengineering process.

From "Business Reengineering – A Strategy-Driven Approach," by R. Talwar (p. 122). Upper Saddle River, NJ: Prentice Hall.

First, companies must establish a well-defined strategic focus in terms of products and services to be offered in the marketplace as well as the competencies and processes around which they intend to build their businesses (Talwar, 1998). This constitutes the vision of the reengineered organization that the BPR initiative is intended to realize. Building this vision requires having a complete understanding of the market as well as the unique strengths and capabilities of the company.

The second step involves developing an overall plan for the initiative, what areas of the company will be targeted for change and how these changes will impact business performance. Talwar (1998) identifies eight areas which can be targeted for change: organization redesign, IT infrastructure, employee development, process orientation, product quality and service improvements, productivity and efficiency improvements, market development and stretch goals. He notes that many BPR initiatives fail due to focusing too much attention on one area and losing sight of the overall business model that is being implemented.

Thirdly, the nature of business processes and their supporting architecture must be redesigned and evaluated in terms of their ability to move the business closer to its strategic objectives. The next step, implementation, involves putting the proposed structural changes in place and assessing the initial performance of the new architecture. The changes must be reviewed and refined continuously.

The final step of a BPR initiative involves a rigorous measurement process in which the results of the changes are evaluated and opportunities for future BPR initiatives are identified.

Much of the literature on BPR refers to the use of traditional change management strategies (Sethi & King, 1998). This reflects an emphasis on finding ways to overcome the organizational barriers to change that will inevitably arise. Talwar (1998) acknowledges the importance of gaining employee commitment and pushing responsibility and authority downward in the organization. He also admits, however, that the purpose of BPR is to achieve radical improvements in business performance which inevitably means radical changes in human resources and their management:

"We must ask whether we are willing to change and possibly remove people, relationships, systems, products, structures and even whole departments which we may ourselves have been responsible for implementing. Finally, and crucially, only we can judge if we as top management are willing to change the culture,

attitude and behavior which got us to the elevated position we are in now" (Talwar, 1998, p. 133).

#### Summary

BPR is a complex, multifaceted approach to corporate transformation that applies a variety of change strategies such as automation, reorganization, downsizing and continuous improvement all through the lens of a process framework. It takes a holistic approach to improvement looking at all business processes and the systems, structures and policies that support them in order to optimize performance (Klein, 1998).

Despite the growing popularity of BPR, the imperative of radical improvements makes reengineering a challenging strategy to implement. Klein (1998) points out that many reengineering projects have failed to succeed. He cites a number of key factors that have contributed to failed BPR initiatives: (a) unrealistic expectations of what can be accomplished by a reengineering project, (b) inadequate human and financial resources for the life of the project, (c) lack of sponsorship among senior executives, (d) inappropriate focus on non-strategic business processes, and (e) lack of an effective methodology that best suits the unique needs of the organization. In a similar vein, Bashein, Markus & Riley (1998) suggest that the biggest obstacles facing reengineering projects are a lack of sustained management commitment and leadership, an unrealistic scope and expectations, and organizational resistance to change.

Advocates of BPR recommend that successful implementation may require starting with a smaller initiative first and using it to create a climate more conducive to radical change (Bashein, Markus & Riley, 1998). Moreover, they suggest that Information Systems and Human Resource personnel be brought onboard during the earliest stages of a reengineering project so that conflicts among cross-functional teams can be addressed quickly. Klein (1998) offers the following nine commandments to those who wish to avoid the obstacles that can interrupt a successful BPR initiative:

1. Be clear.
2. Be realistic.
3. Be prepared.
4. Hurry up.
5. Have a champion.
6. Focus.
7. Technology yes, but people first.
8. Don't get snowed.
9. Follow a methodology.

Reengineering has been described as a high risk, high reward endeavor (Bashein, Markus & Riley, 1998). Nonetheless, for many in senior leadership positions, BPR has become the program of choice for achieving strategic goals. Thus, it is likely to continue to grow in popularity as increasing competition drives business to continually reestablish their competitive edge in the marketplace. The challenge for practitioners is to assist business in creating organizational environments in which individuals are motivated to participate even at the risk of affecting their own livelihoods.

#### Conclusion

The pictures of organizational change portrayed by Senge et al (1999), Axelrod (2000) and Sethi and King (1998) offer three unique perspectives of corporate transformation. The BPR model represents the perspective of the business strategist whose first concern is maintaining a competitive edge in the marketplace by increasing customer value. The frameworks of Senge and associates (1999) and Axelrod (2000) are much more closely aligned with the OD perspective that focuses on addressing internal sources of organizational effectiveness (Worren, Ruddle & Moore, 1999). While Axelrod (2000) advocates for a high-involvement approach to facilitate change, Senge et al (1999) attempt to normalize the internal dynamics associated with organizational transformation and challenge leaders to change their thinking about how organizations function.

Clearly, BPR adopts a change strategy that reflects a highly analytical and planned approach to corporate transformation. The engagement and learning models, however, recognize that organizational change is not an entirely rational process that can be systematically planned and implemented. According to these perspectives, the organization is a living community that cannot achieve its maximum potential without recognizing the human side of change. As such, Senge et al (1999) and Axelrod (2000) are more closely aligned with an emergent view of change.

All three perspectives acknowledge the critical role of leadership in achieving sustained organization change. Moreover, all three perspectives acknowledge that increasing responsibility and control over decision-making must move downward in order to create high-performing, competitive organizations. In each case, poor leadership and inappropriate management processes are recognized as a major cause of unsuccessful change initiatives (Sethi & King, 1998; Senge et al, 1999; Axelrod, 2000). [It is interesting to note, however, that while Axelrod (2000) advocates for high levels of employee involvement in strategic planning issues, the reengineering perspective gives the majority of this responsibility to senior executives. It is only during the implementation process that the BPR

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emphasizes the importance of employee empowerment (Sethi & King, 1998).]

How do organizations change – gradually or all at once? Is there one right way to think about change – is it an event or is it a process? Where does change begin -- in the marketplace or in minds and hearts of individuals? The answers to these questions are complicated by the increasing complexity of the world in which we live. The simple answer is that organizational change has many faces and can take many forms. It is impossible to identify a single model of change or a preferred set of interventions. To begin to understand change, one must first understand the unique character of the organization itself.

Many kinds of change can occur within a single organization simultaneously. Individuals, processes, structures and systems may experience both sudden and gradual changes that are triggered from internal as well as external sources. The challenge for leadership is to create a single vision that can unify the change activities of a global workforce. Senge et al (1999) offers a new language of change. Axelrod (2000) offers a set of guiding principles. Sethi and King (2000) offer a methodology. These scholar-practitioners represent a small sampling of the many who have developed useful frameworks and tools to understand and support organizational change processes (Wilson, 1992).

Organizations in the twenty-first century must seek to create environments that support creative chaos. This will no doubt involve applying a variety of change practices under the banner of a clearly communicated strategic vision and a leadership that is personally committed to leading the change process.

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### **Second Section Introduction**

Quality management is not a new idea in the world of business, however in the late 1980s, TQM gained **Futurics**

considerable momentum in North America (Martin, 1995). Today, TQM could be considered one of the most well known approaches to organizational change. Interestingly, TQM has as many critics as it does advocates (Knights & McCabe, 1999). This is likely due to the vigor with which advocates promote this approach as the pathway to success in the marketplace, an ideology which stands in stark contrast to the many failed TQM initiatives that can be found throughout the literature (Terziovski, Amrik & Moss, 1999). This continuing controversy makes it all the more important to understand TQM and the issues that appear to trigger such diverse views among scholars and practitioners.

The depth section of this paper is organized around five major objectives. First, a brief overview of the history of TQM and the major developments that have contributed to the current framework will be provided. Secondly, the underlying principles that reflect the essence of this management approach will be presented. Following this, examples of applications in industry will be described along with research concerning the effectiveness of this model of organizational change. The final section will deal with ongoing implementation challenges facing organizations choosing to adopt this improvement strategy.

### **The History of Quality**

James (1996) describes the quality management movement in terms of four distinct eras. The earliest quality era emerged around the time of the Industrial Revolution, during which the focus was on the inspection of product quality by specialists. In the preceding era, craftsmen were not especially concerned about quality and production since there was no competition for customers. However, when mass production became the norm and competition grew, technology enabled factories to standardize production and increase their efficiencies as well as their profits. Consequently, companies trained quality specialists who inspected *products* for defects as they came off the line.

In 1924, the principles of statistical quality control were introduced by Walter Shewhart (James, 1996). Manufacturers realized that one hundred percent inspection of products did not guarantee non-defective production. There was variation in every process and in order to achieve consistent quality, it was necessary to control the process. Thus, while the inspection era focused on products, the control era focused on *processes* by defining and monitoring specific process parameters that were associated with the production of quality.

The third quality era expanded the domain of quality development and saw management become much more heavily involved. Companies recognized that quality was the responsibility of the entire workforce and it could not be achieved without the

commitment and cooperation of the whole organization. Eventually, this led to the development of quality assurance *systems* that were implemented with the goal of involving multiple departments within a single organization and not simply manufacturing.

The evolution of quality showed little further progress from the 1930s to the 1960s. More than half the world's gross production came from the United States (Martin, 1995). "It was also during these times that America got fat on waste, because no one worried about the costs of waste - companies were making enough profit to cover those" (James, 1996, p. 44). America was enjoying a command economy in which anything that was made was bought.

It was amidst this climate that the "high priests" of TQM, Deming and Juran, traveled from the States to Japan and found a ready audience for their total quality management ideas (Martin, 1995, p. 218). TQM emphasized continuous improvement of processes, procedures and systems by empowering *employees*. It involved a cultural revolution within the organization (James, 1996). Gradually, their work impacted the Japanese economy. Foreign goods and services that rivaled those of the United States were being produced and America began paying attention. By the late 1980s, the United States no longer enjoyed a command economy. America was ready to learn about TQM and with this shift, the next quality era was underway.

Over the past twenty years, the meaning of quality has been explored and expanded beyond the notion of conformance to standard specifications. Garvin (1987, 1988) has suggested that there are five unique quality perspectives. The first is the *transcendent* view that assumes that quality is based upon subjective experience and cannot be objectively defined and measured. The *product-based* perspective describes the opposing view; quality can be precisely measured according to customer needs. From a *user-based* perspective, quality is defined by the individual user whose preferences and needs are highly personalized and subjective. The *manufacturing-based* view holds to the notion of conformance to specified requirements through the minimization of process deviations. And finally, there is the *value-based* perspective that reflects a psychological understanding of the meaning of value among customers. Each of these perspectives, highlights the importance of a different aspect of quality. In Table 1, Garvin (1988) relates these five quality perspectives to eight dimensions that reflect customer perceptions of quality. He suggests that the relationship between these customer dimensions and his five quality perspectives can provide the basis for the development and application of a TQM approach by highlighting critical customer requirements and helping organizations focus their quality management activities.

Table 1. The quality management mix

Customer Dimensions	Quality Perspectives				
	Transcendent	Product	User	Manufacturing	Value
Performance		X	X	X	X
Features		X	X	X	X
Reliability		X	X	X	
Conformance			X	X	
Durability		X	X	X	X
Serviceability	X	X			X
Aesthetics	X				X
Perceived quality	X				X

#### The Principles and Philosophy of TQM

TQM involves five system elements – process, technology, structure, people and task (James, 1996). *Process* involves managerial, administrative and production activities. *Technology* includes all items or resources required to complete a task. *Structure* comprises individual roles and responsibilities within an organization as well as formal and informal communication channels. *Task* consists of all quality issues and job functions. And lastly, *people* refers to the development, training, rewards and recognition given to employees. An organization that aims to improve continuously must keep these five systems in balance.

From the perspective of organizational change, TQM advocates gradual, constant change in order to produce small, steady improvements. Change becomes a way of life and has a much less dramatic impact on the organization. The focus of TQM can be very narrow as it seeks to improve upon current processes and tasks. By creating a culture that encourages and supports the active involvement of everyone, TQM seeks to gain the commitment and cooperation of the entire organization to make improvements and produce quality every time. Thus, change starts at the bottom and works its way up through the organization.

Due to the emphasis on making gradual improvements, the risk of major failures is minimized

according to proponents of this approach. Unlike business process reengineering which may involve major investments in technology upfront (Sethi & King, 1998), TQM seeks out improvement opportunities that do not require a great deal of capital. Consequently, one of the benefits of this approach is a reduction in the risk of costly failures (James, 1995). Major innovations can produce radical organizational improvements that produce abrupt changes and short-lived improvements, but TQM is intended to produce small, continuous improvements that are sustained over the long-term (see Figure 1).

At the heart of TQM are six fundamental beliefs (James, 1996). First, senior management must actively and visibly support quality principles through the organization. They must model quality at all times. Secondly, TQM stresses the importance of meeting the current and future needs of customers. It is a customer-driven approach that assumes that processes and structures must be designed specifically around customer needs. Third, TQM requires a culture that supports empowered teams and the elimination of autocratic management bureaucracies.

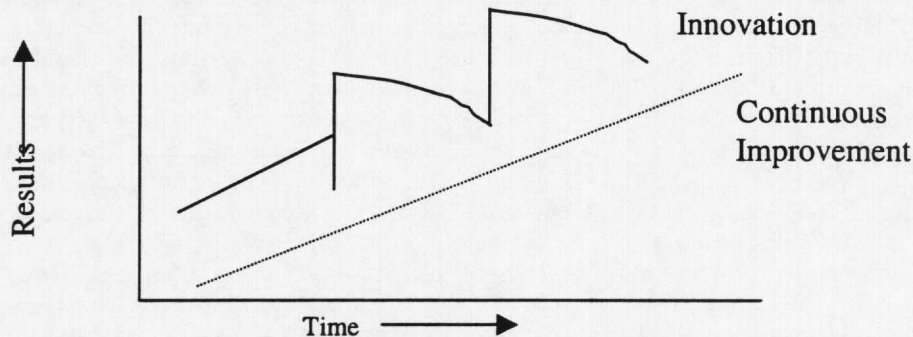


Figure 1. TQM continuous improvement versus radical innovation

Every organizational system must be aligned with quality principles. Fourth, every employee must understand quality and see it as an integral part of their work. Employees must be trained and then given the opportunity to use their expertise to improve the way things are done. Fifth, TQM encourages a management-by-fact philosophy in which objective data are the foundation for building a quality organization. To this end, total quality management relies heavily upon problem-solving tools to gather and analyze data. And lastly, suppliers must be actively involved in the quality improvement process by working closely with companies to identify and respond to improvement opportunities.

TQM represents a commonsense approach to organizational change. It argues that by creating an environment in which change becomes a part of everyday life, organizations will be able to satisfy customer demands and enhance their competitive position in the marketplace.

#### Methodology

TQM is applied differently in every organization. Companies can choose among a variety of commercial packages that reflect the idiosyncrasies of their developers (Juran, 1974; Deming, 1986; Crosby, 1979; Ishikawa, 1985). Alternatively, many companies have developed their own quality management approaches that have since become well known in the literature [see

Senge, Kleiner, Roberts, Ross, Roth & Smith (1999) for a more detailed description].

Zhang (2000) conducted a comprehensive review of the quality literature and identified 11 elements considered to represent the essential components of TQM. These included: supplier quality management, process control and improvement, product design, quality system improvement, leadership, vision and plan statement, evaluation, participation, recognition and reward, education and training, and customer focus. He then analyzed the quality management methods (QMMs) that have been developed in practice to operationalize each of these elements. Zhang (2000) found 83 QMMs in total. After compiling a basic taxonomy of TQM methodology, Zhang (2000) interviewed 10 manufacturing companies in the Netherlands with well-established reputations for their quality practices and asked them to rate these QMMs in terms of frequency of use. Table 2 lists those QMMs that were rated as being used 80 to 100% of the time.

While these findings cannot be considered representative of the entire quality community, they do suggest that TQM is a multifaceted methodology that can be implemented in different ways and in different parts of an organization. Consequently, it is difficult to summarize the methodology underlying TQM in terms of a single set of practices.



Table 2. Major elements of TQM and frequently used quality management methods (QMMs)

TQM Elements	QMMs	
Supplier TQM	<ul style="list-style-type: none"> <li>• Supplier audits</li> </ul>	<ul style="list-style-type: none"> <li>▪ Potential supplier evaluations</li> </ul>
Process control and improvement	<ul style="list-style-type: none"> <li>▪ PDCA cycle</li> <li>▪ Self-inspection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Inspection</li> <li>▪ Equipment maintenance or improvement</li> </ul>
Product design	<ul style="list-style-type: none"> <li>▪ Concurrent engineering</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reliability engineering</li> </ul>
Quality system improvement	<ul style="list-style-type: none"> <li>▪ Quality manuals</li> <li>▪ Quality system procedures</li> </ul>	<ul style="list-style-type: none"> <li>▪ Work instructions</li> <li>▪ ISO 9000 certificate</li> </ul>
Leadership	<ul style="list-style-type: none"> <li>▪ Top management commitment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Empowerment</li> <li>▪ Policy deployment</li> </ul>
<b>Vision and plan statement</b>	<ul style="list-style-type: none"> <li>▪ Vision/mission statement</li> <li>▪ Business plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ Quality policy</li> <li>▪ Quality goals</li> <li>▪ Quality planning</li> </ul>
Evaluation	<ul style="list-style-type: none"> <li>▪ Quality audits</li> <li>▪ Department evaluations</li> <li>▪ Employee satisfaction evaluations</li> <li>▪ Team evaluations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Employee performance evaluations</li> <li>▪ Business evaluations</li> <li>▪ Strategic evaluations</li> <li>▪ Benchmarking</li> </ul>
Participation	<ul style="list-style-type: none"> <li>▪ Information communication</li> <li>▪ Establishing a quality culture</li> <li>▪ Suggestion activities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Within functional delegated teams</li> <li>▪ Cross-functional delegated teams</li> </ul>
Recognition and reward	<ul style="list-style-type: none"> <li>▪ Working conditions improvement</li> <li>▪ Salary promotions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Bonus schemes</li> <li>▪ Presentations</li> </ul>
Education and training	<ul style="list-style-type: none"> <li>▪ Individual training plans</li> <li>▪ Quality awareness education programs</li> <li>▪ Newsletters</li> </ul>	<ul style="list-style-type: none"> <li>▪ Training for job requirements</li> <li>▪ Quality management methods education</li> </ul>
Customers Focus	<ul style="list-style-type: none"> <li>▪ Customer complaint information</li> <li>▪ Customer satisfaction surveys</li> </ul>	<ul style="list-style-type: none"> <li>▪ After-sales service</li> <li>▪ Formal feedback systems</li> <li>▪ Warranty of quality</li> </ul>

What is, perhaps more possible, is a general characterization of TQM methodology. As mentioned in the previous section, this model of organizational change is data-driven. In other words, it relies upon rational problem solving and decision making activities. It assumes that given accurate and complete data (as well as a supportive leadership), well-trained employees will make quality decisions and produce quality products and services.

Deming's (1986) PDCA cycle exemplifies this problem solving process (see Figure 2). First, the problem is defined (Plan). Then a period of analysis is required in order to determine all possible causes. Once the root cause is identified, a solution can be developed and implemented (Do). This is followed by an evaluation stage to determine whether or not the solution was successful (Check). If so, the change becomes a part of a revised work process and employees are trained accordingly (Act). The PDCA cycle will be found in many different iterations in companies that have adopted the quality management approach.

Thus, while TQM comprises a multitude of tools and techniques that can be applied in many different ways within organizations, it is perhaps best known for its commitment to a commonsense problem solving approach. By developing skills as basic as PDCA, it is assumed that employees can help transform their organizations from mediocre to leading edge corporations (Martin, 1995).

#### Applications

TQM is being practiced in corporations around the world. Table 3 presents a summary of recently published quality research that was included in the previous annotated bibliography. While this brief list of publications can hardly be considered exhaustive, it illustrates the international scope of TQM in today's marketplace. It also reinforces the observation that TQM has moved beyond the confines of the manufacturing sector and has made an impact on a broad range of industries. In the pages that follow, some examples of how TQM has been applied in industry are described.

Table 3. Quality research by country and industry

Authors	Country of Origin	Industry
Agus, Krishnan, Latifah, & Kadir (2000)	Malaysia	Manufacturing
Bilich (2000)	Brazil	Banking
Coyle-Shapiro (1999)	United Kingdom	Manufacturing
Drexler & Klinsorge (2000)	United States	Higher Education
Herguner (2000)	Turkey	Higher Education
Knights & McCabe (1999)	United Kingdom	Retail Banking
Lin (1999)	Taiwan	Manufacturing
Ravichandran (2000)	United States	Information Systems
Savolainen (2000)	Finland	Construction & Manufacturing
Scharitzer & Korunka (2000)	Austria	Public Services
Silva (2000)	Brazil	Electrical Power
Terziovski, Sohal, & Moss (1999)	Australia	Manufacturing
Zhang (2000)	Netherlands	Manufacturing

#### TQM in Finland

Savolainen (2000) reported on the impact of TQM in two companies – a family-owned construction firm and a metal manufacturer. A severe national recession forced both companies to adapt to a more competitive marketplace and more demanding customers. In the case of the construction company, the entry into the world of TQM began with an extensive exploration process that ultimately led to the development of a quality initiative that was tailored to their specific business needs. In the second case, the emphasis was on the implementation of an organization-wide quality education strategy that was reinforced by a supportive management presence. Over the course of a ten-year period, both companies were able to establish strong quality cultures within their organizations despite differences in organizational structures and TQM implementation plans. Moreover, Savolainen (2000) reported that both companies were able to survive one of the country's most difficult economic periods and to strengthen their competitive positions in the marketplace.

#### TQM in Brazil

Silva (2000) described the impact of TQM in two electrical companies in Brazil. These companies approached the implementation process by exploring best practices in Japan, the United States and Europe. Their efforts were part of an industry-wide quality and productivity initiative in Brazil. According to Silva (2000) both companies adopted many of the standard TQM quality practices with special emphasis on education and training for employees and senior management commitment. While specific data were not provided, it was reported that both companies achieved a broad range of operational, financial,

customer and organizational performance improvements.

#### TQM in Austria's Public Sector

In a more detailed case study, Scharitzer and Korunka (2000) reported on the application of TQM to improve the quality of customer service and the administrative efficiencies of a municipal office serving tenants in public housing. Over the course of a comprehensive change management process that utilized TQM methods, the office underwent a significant restructuring. Work processes were redesigned and human resources were re-deployed. The researchers followed the process over a one-year period beginning one month before changes were implemented to one year following the changes. Results of their longitudinal case study indicated that customers reported significant improvements in service in comparison to pre-change measures.

#### Summary

The quality literature is filled with published case studies that provide descriptive reports on the benefits of TQM. Total quality management appears to have drawn international attention for its ability to assist organizations in addressing significant business challenges. However, it is interesting to note that the documentation of TQM benefits in the research literature remains largely anecdotal.

Terziovski, Sohal & Moss (1999) investigated the adoption of quality practices in manufacturing companies in Australia from 1991 to 1996. They found that from 1991 to 1993, the proportion of companies using TQM had increased; however from 1993 to 1996, the popularity of quality practices had declined substantially. They interpreted these data as a reflection of the lack of published research on the contribution of TQM practices to organizational

performance as well as a general misunderstanding among executives concerning the expected benefits of quality management.

Of course, it is important to acknowledge the difficulties of measuring the impact associated with any change process given the interconnectedness of organizational systems. In the case of TQM, this is further complicated by the fact that change is a continuous process; identifying beginning and ending points is difficult to justify. It is possible, nonetheless, to monitor trends over time. If Savolainen (2000) is correct and the development of a quality culture evolves slowly over the course of many years, then extended longitudinal studies are needed in order to gain a more accurate picture of the impacts of TQM. Until then, the number of critics of TQM programs may continue to increase.

#### Implementation Challenges

While there appears to be a dearth of hard data concerning the benefits of TQM, the opposite is true in the case of implementation. Researchers and practitioners point out that there are a myriad of challenges associated with the effective implementation of total quality management initiatives.

#### Non-systemic Implementation Strategies

Coyle-Shapiro (1999) conducted a longitudinal analysis of the change process associated with TQM in a manufacturing environment over a three-year period. Her findings highlighted the important role of front-line leadership positions in supporting and modeling quality principles and practices. The extensive training and education activities for supervisors had a limited impact on those individuals whose leadership style opposed employee empowerment principles; this in turn, limited the level of employee participation. The results also indicated that employee participation in future continuous improvement activities was influenced more by the perceived benefits of TQM than by previous participation. Thus, it was not sufficient to simply expose individuals to the quality management philosophy; ongoing reinforcement of quality practices was needed. Coyle-Shapiro (1999) concluded that an effective TQM implementation requires a systemic approach involving multifaceted change interventions that address multiple systems and processes within the organization simultaneously.

Ravichandran and Rai (2000) offered a similar conclusion concerning the importance of adopting a systemic TQM implementation strategy that involves the whole organization.

An important finding emerging from our results is that discrete quality-oriented practices are unlikely to impact quality performance substantially. Instead, their interactions create an organizational system that plays a pivotal role in the determination of

observed levels of quality performance...Our results emphasize that a coherent, integrated strategy encompassing the adoption of all identified factors is required, as opposed to the implementation of one tool or management practice. (p. 397).

#### Lack of Leadership Commitment

Published research has also identified leadership as a significant determinant of effective TQM implementation. Agus, Krishnan, Latifah, and Kadir (2000) examined the impact of TQM on financial performance in ten manufacturing companies in Malaysia and concluded that the commitment and participation of senior management was crucial to the quality management process.

There is a strong consensus in the literature that senior leadership must demonstrate an unambiguous commitment to the principles and practices of quality management in order to achieve positive results (Ravichandran & Rai, 2000; Savolainen, 2000). Leadership is responsible for establishing the systems and processes that will nurture and support employee development and empowerment – a fundamental principle of the TQM philosophy.

While there is strong support for the importance of leadership in implementing an effective quality management initiative, the reality is that many initiatives fail due to the inability to transform existing leadership structures (Martin, 1995). According to Knights and McCabe (1999), this reality is due to the fact that TQM does not address fundamental issues of power and identity that exist within the current corporate environment. In their in-depth analysis of the implementation of TQM in a major retail bank setting, they observed that the existing framework of power was not challenged. Contrary to the philosophy of TQM, existing power relations were reinforced.

TQM is political in its promise to isolate and solve problems, especially as this must entail ensuring the conformance or control of employees to deliver the goal of quality. In this sense, TQM is essentially a technology of normalization. TQM's strength develops: 'by taking what is essentially a political problem, removing it from the realm of political discourse, and recasting it in the neutral language of science...the problems have become technical ones for specialists to debate. In both management practice and guru theory, TQM is normalized such that any failures of outcomes is defined not as a problem of design or principle, but simply as one of implementation.' The case study is a vivid example of this normalizing process whereby failures, far from threatening the political choice to adopt TQM, actually

reinforce demands for making greater efforts to implement it. (p. 212-213)

Knights and McCabe (1999) provide a critical analysis of TQM within an organizational context characterized by a complex set of power relations. They challenge the notion of employee empowerment suggesting that as long as traditional organizational structures exist, power issues will trigger various forms of resistance against change initiatives such as TQM. Given that the challenge of gaining leadership commitment continues to represent a major barrier to the implementation of quality management practices, their critique of TQM philosophy may represent an opportunity for further research.

#### Cultural Differences

A third impediment to effective TQM implementation is a failure to recognize the need for culture change (Martin, 1995). Quality management is not a quick-fix. As Japanese companies have demonstrated, the success of TQM is found over the long-term as quality is built into the fabric of an organization. This requires fundamental changes in corporate culture.

Despite considerable agreement concerning the importance of addressing cultural differences when planning quality initiatives, a limited body of research has investigated the impact of culture on effective TQM implementation. Lin (1999) examined the relationship between organizational climate and quality management practices in small and medium-sized manufacturing companies in Taiwan. He found differences in how high versus low quality-oriented companies responded to organizational variables such as climate and structure. Herguner (2000) found that national culture is related to an organization's ability to sustain a cultural environment that supports quality practices. Yusof and Aspinwall (2000) identified fundamental differences between larger-sized organizations and small businesses and suggested that TQM implementation strategies should be adapted to fit the unique characteristics of organizations. These studies suggest that every organization is unique and that it may be short sighted to overlook elements such as national culture, size or structure when planning to implement a quality initiative.

Detert, Schroeder and Mauriel (2000) argue that effective TQM implementation requires that companies recognize the gaps between their existing cultures and the distinctive culture underlying the quality management philosophy. "A company's prevailing cultural characteristics can inhibit or defeat a reengineering effort before it begins" (p. 851). If a corporate culture is not in sync with the dominant values of the quality management philosophy, it is unlikely that a TQM could be sustained over the long-term.

*Futurics*

Based on a review of the literature, Detert et al (2000) have characterized a quality culture in terms of the following beliefs:

- Any system based on cause and effect requires measurement and data to make improvements (e.g. management by fact).
- Long-term commitment and short-term sacrifices will enhance quality in the long run.
- People are intrinsically motivated to do a good job and are often impeded by dysfunctional systems.
- Change is an important and preferred organizational state as things can never be considered "good enough".
- The purpose of the organization is to achieve the results that its stakeholders (employees, customers, stockholders) consider important.
- Maximum effectiveness can only be achieved through cooperation and collaboration.
- Shared vision and goals among employees and management are a critical requirement for organizational success.
- Organizations are customer-driven and must seek to establish partnerships with external groups (e.g., suppliers, community, etc.).

These authors suggest that research into the cultural configurations of companies who have successfully implemented TQM practices could be of benefit to organizations that are planning to adopt a quality management approach. Their framework could also be used to further delineate how specific cultural traits or dynamics might inhibit or facilitate the implementation process.

#### Summary

A number of published reports have shown that a minority of American corporations consider TQM to be a significant source of competitive advantage (Martin, 1995). According to Boyett, Conn and Kearney (1998), companies that have failed to experience the benefits of the quality management approach have typically committed one or more of the following mistakes (p. 398-403):

1. Focusing too heavily on changing culture without getting to the specifics of changing behavior.
2. Failure on the part of senior executives to fully and accurately define measurable business performance requirements.

3. Failure to perform a gap analysis and develop a customized strategic quality plan prior to implementing TQM.
4. Failure to establish a functioning executive quality council that has hands-on involvement in the quality effort and takes personal responsibility for making TQM happen.
5. Failure to establish key quality measures and goals for every level of the organization and that are linked to organization-wide requirements for market leadership.
6. Failure to change compensation systems to hold senior executives and middle managers responsible for quality leadership and for achieving quality results.
7. Failing to restructure to place managers, supervisors, and employees physically and emotionally close to the customers they serve.
8. Relying upon training and/or quality improvement techniques as a way to implement TQM rather than viewing TQM as a holistic, management paradigm change.
9. Failing to do "just-in-time" training and to provide follow-up coaching to ensure that skills taught in the training are immediately applied on the job.
10. Seeking short-term breakthroughs rather than long-term continuous improvement.

Gaining and sustaining a continuous improvement initiative offers challenges not unlike those facing individuals who recognize the need for making lifestyle changes. When there is a sense of urgency, the motivation to change is high and challenges are confronted and overcome. However, when the sense of urgency is replaced by the familiar monotony of daily life, it becomes difficult to sustain the motivation to change and challenges quickly turn into insurmountable obstacles. Organizations are complex social communities that must find ways to meet the demands of both internal and external customers (Denison, 2000). Without the vocal and visible commitment of senior leadership and a clear understanding of TQM as management paradigm and not a toolbox, it is unlikely that the continuous improvement process can become any more than an isolated event in the life of an organization (Bilich, 2000).

#### Closing Remarks

In many ways, the story of TQM could be summarized as a good idea whose full potential has never been fully realized outside Japan. On the one hand, it appears that the quality management philosophy has gained an international following. Corporations all over the world have attempted to establish quality cultures. On the other hand, it appears that TQM has gained an audience of very vocal critics. Reports of failed quality initiatives appear to be much

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more numerous than reported successes (Martin, 1995). Ironically, the turnaround of the Japanese economy can never be too far from the mind of the corporate executive who is looking for new ways to maintain a competitive edge in the global marketplace.

This paper has explored some of challenges that organizations must overcome in order to achieve the promised benefits of TQM. Organizations are reminded to think systemically and to lead wholeheartedly. Above all, they are reminded that TQM is a long-term commitment and not an easy fix.

While few individuals, if any, would argue against the importance of continuous improvement in organizations hoping to meet the challenges of today's marketplace, the methodology of TQM will continue to draw criticism. Power structures remain one of the most significant barriers to profound change in organizations (Senge et al, 1999) and advocates of the quality approach devote little attention to this issue. In addition, there are those who argue that TQM limits the innovation, inspiration and creativity of organizations (Harari, 1993):

TQM attempts to make quality happen via an analytically detached, sterile, mechanical path. What's often missing, frankly, is emotion and soul. Go out and look at all the sincere individuals diligently following the step-by-step processes they've learned in the TQM...training classes, and ask yourself: "Where's the love of our product and our customer? Where's the joy of the pursuit of excellence? Where's the passion in the doing and the creating? Where's the fun in being here?...Where's the thrill in accomplishment?" If you can't find evidence of these, you probably won't find real quality either (as cited in Martin, 1995, p. 249).

Regardless of these criticisms, it is likely that TQM will continue to be practiced in the marketplace. Some corporations will see benefits while others will be disappointed by their experiences. This is the story of organizational change. It is never easy and not always successful, but without continuing effort, the survival of a business and a community is at risk. There are many roads to organizational change. Total quality management is but one of many options that an organization may choose to incorporate into its strategic change process. \_\_\_\_\_ F