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### TOOLKIT FOR ORGANIZATIONAL CHANGE

### **Notes**

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# CHAPTER 3

# Change Frameworks for Organizational Diagnosis

What to Change

There is nothing so practical as a good theory.

-K. Lewin

# **Chapter Overview**

- Change leaders need to understand both how to go about change (the
  process of making the change) and what changes need to be made
  (the content of those changes). Understanding what needs to change is
  the focus of this chapter. Knowing what to change depends on your skill
  in organizational diagnosis.
- Change leaders' abilities to determine **what** needs changing require them to have a clear organizational framework that they can use for analysis. They need to understand how complex and interactive organizational components are, how analysis can occur at different levels, and how organizations and their environments will shift over time.
- This chapter outlines three models that provide organizational frameworks: the McKinsey 7-S model, the Burke-Litwin causal model, and Nadler and

Tushman's organizational congruence model. While each of these models is useful, this book uses the Nadler and Tushman model as its framework because it balances the complexity needed for organizational analysis and the simplicity needed for action planning and communication.

- The complexity of organizations is highlighted by Sterman's systems dynamics model. It helps us to think of the nonlinear and interactive nature of organizations.
- Quinn's competing values model provides a framework that bridges individual and organizational levels of analysis.
- Organizational changes over time are highlighted by Greiner's five phases of organizational growth model.
- Complexity theory is introduced to highlight the interactive, timedependent nature of organizations and organizational change.

In Chapter 2, we considered **how** to change. That is, we outlined a process approach to effective change. In this chapter, we deal with the content of change, or what to change. Change leaders need to understand and be skilled in both the what and the **how**. Differentiating the process from the content is sometimes confusing, but the rather unusual example below will highlight the difference.

Bloodletting is a procedure that was performed to help alleviate the ills of mankind. . . . In the early nineteenth century adults with good health from the country districts of England were bled as regularly as they went to market; this was considered to be preventive medicine. <sup>1</sup>

The practice of bloodletting was based on a set of assumptions about how the body worked—bloodletting would diminish the quantity of blood in the system and thus lessen the redness, heat, and swelling that was occurring. As a result, people seemed to get better after this treatment—but only in the short term. The reality was that they were weakened by the loss of blood. As we know today, the so-called science of bloodletting was based on an inaccurate understanding of the body.

It is likely that bloodletting professionals worked to improve their competencies and developed reputations based on their skills in bloodletting. They worked hard at the **how** aspects of their craft. Advances in medicine prove that they did not really understand **what** they were doing.

Similarly, a highly gifted change leader may be able to shift the organization. But the usefulness of that shift is determined by what they choose as well as how they do it. For example, a change leader might embark on developing a customer relations focus for the organization when it is really the computer system that needs fixing—being nice to customers isn't helpful if you are working with the wrong data. This is highlighted by the following:

Magna Corporation, a \$22 billion revenue company, designs, develops, and manufactures automotive components and vehicles primarily for sale to original equipment manufacturers worldwide.

Magna International Inc. had for over 10 years spun off divisions when they reached sufficient size for an initial public offering. This was based on the assumption that focusing on special parts and components achieved efficiencies and higher profits. Clearly, by 2004, this diagnosis was incorrect. As Magna shifted to making complex modules and entire vehicles, the need for coordination soared. This was increasingly difficult given the independence of each spun-off division.<sup>2</sup>

Magna had transformed its organization from 1994 to 2004. They may have been good at how they did things, but by 2004, there was concern that what to change had shifted. Magna's approach was increasingly out of alignment with what was needed in the marketplace. As has been stressed, effective change leaders need both: a good understanding of what to change and excellent skills at how to go about achieving those changes. Further, they need to understand that the what and the how will change over time as the environmental conditions shift.

Bruch and Gerber differentiate the what and the how into a leadership question: "What would be right? and a management question: "How do we do it right?" They analyze a strategic change program at Lufthansa's from 2001 to 2004. This program successfully generated over one billion euros in sustainable cash flow. While the how questions focussed on gaining acceptance of the change—focusing the organization, finding people to make it happen, and generating momentum—the what questions were more analytical, asking what change was right, what should the focus be, and what can be executed given the culture and situation. They conclude that a focus on implementation is not sufficient. A clear grasp of the critical needs, the change purpose, or vision is essential.<sup>4</sup>

Underlying our understanding of what needs to change in an organization is the set of assumptions and beliefs about the organization and how it works. In our example above, barber-surgeons believed that the body consisted of humors that needed to be in balance. Bloodletting could restore that balance. Today's physicians have a much more complex, science-based, systemic view of the body. The parallel is clear. Determining what should change in an organization relies heavily on the models we have of how organizations work and our skill in using them to identify appropriate, needed changes.

In this chapter, we outline three models that provide a framework for organizations.\* As well, we provide other models that highlight the need to understand organizational dynamics, the level of analysis, and how organizations shift over time. The models help us to understand the underlying patterns of causation within an organization. Market intelligence gathering, news reports, benchmarking studies, and the like can be excellent sources for ideas, but they are not a substitute for the careful thinking and detailed organizational analysis that is needed.

We provide three models as examples of frameworks for analysis. Many other models exist, of course. However, the focus for this book is on helping change leaders to be effective rather than helping them to understand the differences and intricacies of many models. Thus, we limit the numbers covered.

Consider the following account of employee reactions to the introduction of new uniforms for cabin staff at Air Canada. It was part of a rebranding effort for the airline that occurred within the backdrop of bankruptcy proceedings, layoffs, organizational restructuring, and significant compensation and benefit reductions that resulted from the renegotiation of existing collective agreements.

### Negative Union Reaction to Air Canada's New Uniforms<sup>†</sup>

New uniforms for Air Canada's flight attendants were introduced in the fall of 2004. Celine Dion's star power was used to showcase the new look—one designed to promote a fresh look as Air Canada emerged from bankruptcy protection. The uniforms were to be introduced in 2005. The union representing the flight attendants, the Canadian Union of Public Employees, filed a grievance. The union reported that their members had not had access to prototypes and they needed more time to consider the matter, including the design, cost, quality, and durability. Previous discussions on uniform changes took up to three years, much more than the one-year introduction Air Canada wanted. The union reported that it was led to believe there would be meaningful consultations around the development of the uniform, but did not believe this had occurred. All of these discussions were in the context of an employee group that had been asked to take pay and benefit cuts and other sacrifices for the airline. Employees viewed the new uniform introductions as lavish, high-handed, and inappropriate in light of all the cutbacks. As well, employees would have to pay for these garments!5

Air Canada considered the matter a redesign of the uniform and missed the dynamics that gave rise to this predictable reaction. Change agents need to understand the webs of relationships and multiple systems that are involved. They need to recognize the role that external environmental factors and history play. In Air Canada's case, these included customers, competitors, the media, government, and a mature, highly competitive market. The history of sour employee–employer relationships at the airline anchored the perceptions that the parties had of one another. The change agent needs a framework that will help to capture the complex pattern of relationships.

In Chapter 2, a framework for the change management process was presented. In this chapter, we are concentrating on providing frameworks to do both an initial organizational analysis and a deeper gap analysis as shown in Figure 3.1. The gap analysis tools are discussed in more detail in Chapters 5, 6, 7, and 8.

Figure 3.1 allows change leaders to combine the **what** of change with the **how** of change by linking the content of the chapters of the book with the model.

Below are three models that allow change agents or leaders to classify information and to improve their understanding of their organization's dynamics.

<sup>&</sup>lt;sup>†</sup>Air Canada is Canada's largest domestic and international full-service airline. During 2005, Air Canada and its subsidiary, Jazz, operated, on average, approximately 1,200 scheduled flights each day with a combined fleet of 322 aircraft.

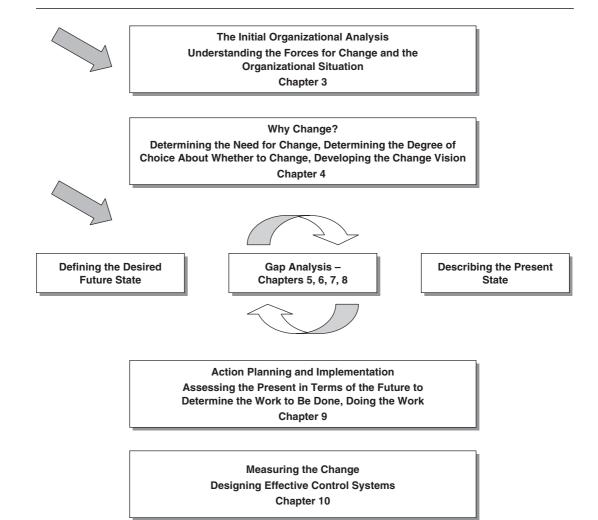


Figure 3.1 Organizational Analysis in the Change Management Process

# **How Do We Analyze Organizations?**

# **Models of Organizational Analysis**

The McKinsey 7-S model, the Burke-Litwin model, and the Nadler and Tushman model are presented. Each model gives a framework for organizational analysis that helps us to structure our thinking and improve the quality of our analysis. While all models are useful, we use the Nadler and Tushman model as a framework for this book. The Nadler and Tushman model has a reasonably complete set of variables and presents them in a way that encourages straightforward analysis. It specifically links environmental input factors to the organizational

components and outputs. As well, it provides a useful classification of internal organizational components while showing the interaction among them.

Regardless of model, organizations are assumed to interact with their environments in a complex and dynamic way. This **open-systems perspective** is based on the following assumptions:<sup>6</sup>

- Open systems exchange information, material, and energy with their environment. As such, a system interacts with and is not isolated from its environment.
- A system is the product of its interrelated and interdependent parts and represents a complex set of interrelationships, rather than a chain of linear cause-effect relationships.
- A system seeks equilibrium, and one that is in equilibrium will change only if some energy is applied.
- Individuals within a system may have views of the system's function and purpose that differ greatly from the views held by others.
- Things that occur within and/or to open systems (e.g., issues, events, forces) should not be viewed in isolation but rather should be seen as interconnected, interdependent components of a complex system.

The adoption of an open-systems perspective allows managers to identify areas of misalignment and risk points. Open-systems analysis helps us to develop a much richer appreciation for the current condition of the organization and the plausible alternatives and actions that could be considered for improvement. For example, we know that when systems have been isolated from the environment for extended periods of time, they risk becoming seriously incongruent with the external environment. We also know that when the environment changes rapidly, the results can prove disruptive and, in some cases, disastrous. Consider what happened with the deregulation of electrical utilities in the United States, the impact of the fall of the Berlin Wall on existing East German organizations, or the impact of the removal of protective tariffs on North American garment manufacturers. Each of these led to significant disruption and change. Disruptions can shake organizations to their foundations, but they also have the potential to sow the seeds for renewal (hence the term "creative destruction," coined by Joseph Schumpeter (10).

In summary, organizations should not be analyzed as if they exist in a bubble, isolated from the environment.

### The McKinsey 7-S Model

One way of thinking about organizational components and their alignment with the environment can be found in the McKinsey 7-S model. It was developed by Peters and Waterman when they were consultants with McKinsey, a consulting firm with a strong, positive global reputation. <sup>11</sup> Table 3.1 describes the components of the model.

The seven elements in the model vary in the ease with which they can be understood and evaluated. Structures, systems, and strategy are normally easier to track because they tend to leave a visible trail (e.g., organization charts, documents detailing policies and systems, strategic plans, and implementation strategies). However, there is always the question of whether such data reflect the actual practices of the firm. One of the

**Table 3.1** Components of the 7-S Model

Strategy	A plan or course of action undertaken in response to or in anticipation of changes in the external environment. It leads to the allocation of the organization's finite resources to reach specific goals.
Structure	How people and the work are formally organized. It relates to the nature of the formal hierarchy, reporting relationships, and other design factors that go into the formal structure (e.g., span of control, degree of centralization).
Systems	The formal and informal processes and procedures used to flow information and facilitate decision making and action.
Style	How the managers behave (their style, what they pay attention to, how they treat others) in the pursuit of organizational goals. At a more macro level, it means the nature and strength of the culture (norms, shared beliefs, and values) that develops over time and influences behavior.
Staff	How human resources are developed and categorized over time.
Shared Values	Longer-term vision and shared values that shape what organization members do and the destiny of the firm.
Skills	The dominant attributes and distinctive competencies that exist in key personnel and the organization as a whole.

Source: From "Structure is Not Organization," by R. Waterman, Jr. *Business Horizons, 23*(3), copyright © 1980. Reprinted with permission from Elsevier.

reasons that actual practices differ from what is espoused often lies in the influence that the other S's in the model have on what occurs—the skills, staff, style (managerial style and culture), and the shared values and superordinate goals of the organization.

The underlying thesis of the model is that organizational effectiveness is a function of the degree of fit achieved among these factors and the environment. When organizations experience change, the degree of fit is affected, and the challenge of change management is to make changes so that high levels of fit among the seven elements can be achieved.

Changes to one of the components can affect all the other components. Therefore, those implementing change need to understand these components as an interconnected set of levers. For example, if changes are being made to the information system in order to make the organization more customer responsive, those making such changes need to carefully consider the implication on the other components and be prepared to manage the change in a more holistic fashion. Making changes to one of the components while ignoring the implications on the others is a recipe for failure. Enhancing internal and external congruence or alignment is the key to developing organizational effectiveness (see Figure 3.2).

The 7-S approach to organizational analysis tells us first to think about the external environment and the alignment of the key organizational dimensions. The

Figure 3.2 The McKinsey 7-S Model

environment does not appear as a variable in the model. However the author's use of the model suggests that the organization should be considered as embedded in the environment. Second, it assists in identifying areas of strong alignment and support and areas of misalignment or nonalignment that will need to be addressed in order to increase the prospects for success. It does not emphasize the informal side of organizations—the politics and power and connections between people based on trust and friendships. Additionally, while it focuses on the interactions among components, it does not explicitly address organizational outcomes.

Table 3.2 provides a template for thinking about change and the components of the 7-S model. First, one must address the question, "Why is change needed?" This may be triggered by competitor actions, public complaints, or the fact that organization members are no longer happy with how the organization is performing. When change is undertaken, the table helps the change leader to identify where congruence and incongruence exist and consider what options are available. Then the impact is considered on other variables. When a change leader uses this model, the goal is to develop a change approach that will lead to high levels of congruence among all the organizational factors and the environment, because this will result in heightened organizational performance.

Applying the Magna Corporation example (from earlier in the chapter) to Table 3.2, the analysis would show that the alignment between its strategy and structure has slipped. The decentralized structure did not fit the strategy requirements of making entire vehicles. Only by creating new coordinating mechanisms could Magna regain alignment. As a second example, values of the Air Canada staff were not aligned with the strategy that management was pursuing. Management believed that new uniforms would represent the revitalized organization as it came

Identifying Areas of Alignment and Misalignment That Will Need to Be Managed and Actions That Need to Be Taken Table 3.2

	Environment	Style	Shared Values	Skills	Staff	Systems	Structure	Strategy
Strategy	Degree of Alignment:							
Structure								
Systems								
Staff								
Skills								
Shared Values								
Style								
Environment								

out of bankruptcy. Staff believed that the uniforms were an unnecessary expenditure. A third example would be the gap between what employees perceived to be the authoritarian management style of many corporate executives and the organization's espoused values of the importance of people and their development.

As the situation changes, the analysis must change as well. Environmental and organizational analysis and alignment represent an ongoing challenge that is facilitated by openness to new ideas, experimentation, organizational learning, and the capacity to implement and refine.

The 7-S model provides change agents with a checklist of critical variables that need to be analyzed. It focuses on their connectedness and the need for alignment among variables. However, the role of the environment is implicit. The model does not suggest a flow from environmental variables to organizational ones that then lead to performance outcomes. As well, while the model emphasizes interconnections and congruence, it does not suggest cause-effect relationships that lead to increased understanding by change agents.

### The Burke-Litwin Causal Model

A second model that can be used to analyze organizational situations is the Burke-Litwin causal model.<sup>13</sup> The Burke-Litwin model contains variables similar to other open-system models. However, it seeks to address more directly the question of change management. As Burke notes, the combination of double-headed arrows and multiple variables creates a messy, complex picture; however, it is one that is also reflective of the reality that those interested in change must deal with (see Figure 3.3).

Variables located in the top half of the model (environment, leadership, mission and strategy, and organizational culture) are identified as the *transformational factors*. Changes to these organizational factors are seen as likely caused by interactions with the external environment. Initiatives in this area are difficult to manage because they challenge core beliefs and assumptions about the organization and what it should be doing. They entail significantly new behavior by organization members and major alterations to other variables in the model. However, when fundamental reorientation and re-creation are a necessity, they may represent the only viable approach to organizational rejuvenation and long-term success.<sup>14</sup>

The remaining variables are identified as the *transactional factors* because they are more directly involved in the day-to-day activities of the organization. Changes of an incremental or evolutionary nature can occur without necessarily triggering changes in the transformational factors. We see this in ongoing quality improvement initiatives, management development programs, work realignment, and other incremental interventions aimed at refining and improving internal practices in order to enhance fit, and, therefore, performance.<sup>15</sup>

As Burke notes, transactional factors can also, at times, be used to help trigger changes of a more transformational nature. For example, organizational assessments that lead to alterations in reward systems, team management processes, or a new product/service initiative may trigger questions about culture and strategy. This creates awareness of the need for transformational changes that then could migrate back to other transactional factors. Collins reports that transformations in companies that went from "good to great" often began their journey by trying to sort out how

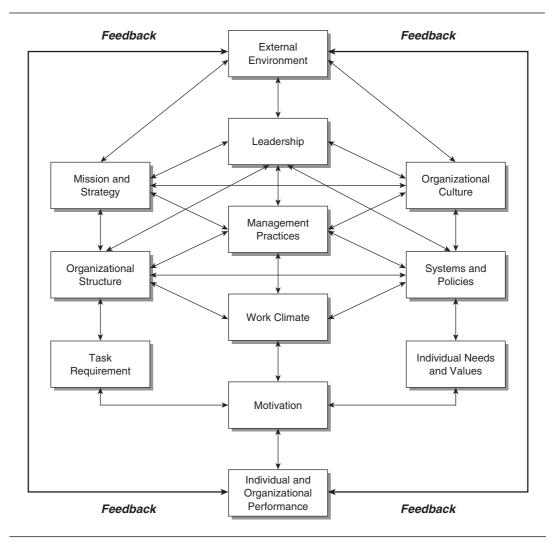


Figure 3.3 The Burke-Litwin Causal Model

Source: From *Organizational Change:* Theory and Practice by W. Warner Burke, copyright © 2002. Reprinted with permission of Sage Publications, Inc..

to better align their internal systems and processes with their customers. They ended up with transformational changes through having the right people engage in disciplined evaluations, followed by a disciplined, steady, committed course of action. <sup>17</sup> As noted elsewhere in this book, an understanding of timing, trigger points, catalysts, and leverage can be used to stimulate self-assessment, organizational learning, and change that have proven very difficult to initiate, energize, and implement.

The Burke-Litwin model enriches our conceptual map of the organization. It provides a complex set of variables that will help explain organizational dynamics. By separating variables into transformational and transactional, the model gives us a way of examining the impact of changes of different variables. However, this

complexity makes it more difficult to keep track of all variables and develop clear action plans. Additionally, while it does have both the environment and individual/organizational performance as variables in the model, these are viewed as just 2 of the 12 variables. As a result, there is no apparent flow from environment to organization to performance.

Both the 7-S and the Burke-Litwin models are useful analytical tools. The choice of model is often one of personal preference—both can help a change agent. However, because of the limitations that we see in the 7-S model and the Burke-Litwin model, this book relies on the Nadler and Tushman model, outlined below. In our view, Nadler and Tushman offer a relatively complex organizational analysis while maintaining an action focus.

### The Nadler and Tushman Organizational Congruence Model

Nadler and Tushman<sup>18</sup> provide a conceptual scheme that describes an organization and its external environment. The model focuses on how the organization's parts fit or don't fit<sup>19</sup>. We have adapted their model as depicted in Figure 3.4 and use the model as a framework for this book. Inputs are transformed to outputs, but the feedback links make the model dynamic and the components highly interdependent.

The major components of the model are the following:

# The External Environment, History, and Resources of the Organization

These include the competitive situation faced by the organization, the trends in society, and other environmental factors that have an impact on the organization's

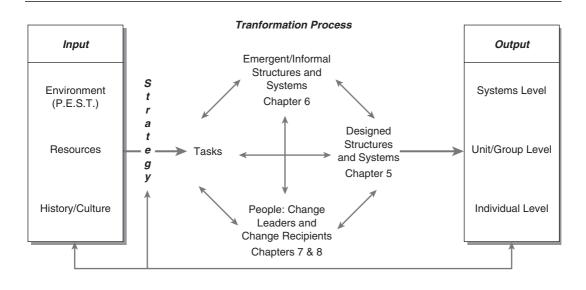


Figure 3.4 The Nadler and Tushman Organizational Congruence Model

ability to be effective and efficient. The past history of the organization provides us with some insight into the organization's culture and its emergent structure. Finally, the human, technological, and capital resources available also impact an organization's strategy and, ultimately, its outputs. In thinking about what to change, all of these inputs may be sources of opportunity and constraint.

# The Strategy

An analysis of the organization's competencies, strengths, and weaknesses, in light of the environmental threats and opportunities, leads to the strategy that the organization decides to pursue. Sometimes this is consciously decided on. At other times, it may be a reflection of past actions and market approaches that the organization has drifted into. When there is a gap between what they say their strategy is and what they do (i.e., the actual strategy in use), one needs to pay close attention to the strategy in use.

For change leaders, the change strategy is a critical focus of their analysis. What are the purposes and objectives of the planned change in the context of the organizational strategy?

### The Tasks

In order to carry out the strategy, a set of tasks is defined. Some of these tasks are *key success factors* that the organization must execute in order to successfully implement its strategy. An organization's tasks may be described in a very discrete way, listing, for example, the duties of a particular position or, at the polar extreme, the basic functions such as marketing, production, and so on that the organization performs in its transformation processes.

For change situations, change leaders need to think through the shift in key tasks caused by the change. This will enable a specific gap analysis.

# The Designed Structure and Systems

This includes any formal structure or system that management creates to produce desired outcomes. Once the tasks are identified and defined, they are grouped to form reporting relationships, the formal organizational chart of roles, responsibilities, departments, divisions, and so on. The purpose of this structure is to enable efficient and effective task performance. The systems of an organization are the formal mechanisms that help the organization accomplish its tasks and direct the efforts of its employees. These include an organization's human resource management systems (recruitment and selection, reward and compensation, performance management, training and development), information systems, measurement and control systems (e.g., budget, balanced scorecard), production systems, and so forth.

For some changes, the formal organizational hierarchy will be a critical variable—particularly if formal power needs to be used. For other changes, the

# The Emergent or Informal Structure and Systems

The informal relationships among people and groups in the organization and the informal way things get done form the emergent or informal structure. While managers define the tasks necessary to accomplish the strategy and then structure those tasks in formal ways, many things occur that are unplanned or unanticipated. For example, friendly relationships between individuals often ease communications, groups form and provide support or opposition for the accomplishment of tasks, and individuals adapt procedures to make things easier or more productive.\* The informal system will include an organization's culture, the norms or understandings about "how we do things around here," values (e.g., about the importance of customer service), beliefs (e.g., about why the organization is successful), and managerial style (e.g., a "tough boss" style). Culture is a product of both the organization's history and its current organizational leadership. It acts as a control system in the sense that it defines acceptable and unacceptable behaviors, attitudes, and values, and will vary in strength and impact, depending on how deeply held and clearly understood the culture is. Other elements of the emergent organization that are important to analyze when considering how to create change include power relationships, political influence, and informal decision-making processes.

Change leaders need to recognize the key individuals that can facilitate or block change. Some of them will be from these emergent structures and systems. Identifying those individuals and bringing them onside will be a critical activity. Understanding the emergent structures and systems that have the potential to influence and at times derail change is critical to increasing the likelihood of a successful change initiative. Chapter 6 deals with emergent and informal systems and structures.

## People

The people in an organization perform its tasks, using both the organization's designed and emergent systems and structures. It is important that the knowledge, skills, and abilities of each person match what the organization needs. Understanding the individuals in the organization and how they will respond to the proposed change will be significant in managing the change situation. The role of change recipients is dealt with in detail in Chapter 7.

Within every organization, certain *key individuals* are critical to its success. Often we think of the formal leaders as those who are most important in terms of accomplishing the mission, but others may be crucial. These people might have special technical skills or might be informal leaders of a key group of employees. People such as these, acting as change leaders, are described in Chapter 8.

For an interesting perspective on the informal system, see either Hutt, M., et al. (2000, Winter). Defining the social network of a strategic alliance. *Sloan Management Review*, (41)2, 51–62; or Krackhardt, D., & Hanson, J. R. (1993). Informal networks: The company behind the chart. *Harvard Business Review*, (74)4, 104–111.

# The Outputs

The outputs of an organization are the services and products it provides to generate profitability or, especially in the case of public sector and nonprofit organizations, to meet other goals. Additional outputs are also important: the satisfaction of organization members, the growth and development of the competencies of the organization and its members, and customer satisfaction (to name just three). These outputs need to be defined and measured as attentively as profitability, return on investment (ROI), or numbers of clients served. The success of the organization in producing desired outputs becomes part of a feedback loop that updates the history and resources components of the model, potentially reinforces or modifies thinking about the organization's strategy, and reinforces or modifies the nature of what goes on in the transformation portion of the Nadler and Tushman model.

In their work, Nadler and Tushman argue three critical things. First, the system is dynamic. This means that your diagnosis will change over time and with different concerns and objectives. Second, the "fit" or congruence between components is significant in diagnosing why the organization performs as it does. And third, the better the "fit" between components, the more effective is the organization. The organizational change challenge is to align the system components to respond to changing external and internal conditions.

The system is dynamic. If your organization's environment shifts, so must your diagnosis. For example, when inflation was running at 1,100% per year in Brazil,<sup>20</sup> the influence of financial executives soared, because financial management played the pivotal role in sustaining the firm. When inflation slowed and stabilized in the range of 10%–20%, power shifted away from finance and toward sales, marketing, and production. If the internal organization alters significantly, your diagnosis must also change. While this may seem like a statement of the obvious, it often goes unobserved in practice. Managers develop patterns of thinking about organizational performance that serve them well, but over time, these patterned approaches may impair their ability to see when conditions change. As a result, the assumptions we make about how things work may come to be just plain wrong!

As systems change over time, different parts of the system become more or less important. For example, if we introduce a new system, training for that system is an issue. Once the training is complete, the significance of that issue is less and our focus shifts. As well, your view of the system depends on who you are and what you wish to diagnose. Thus, a senior executive will examine the entire organization with the factors drawing the greatest attention being the ones critical to achieving his or her aims. A department manager will focus at a more specific level and examine what his or her department must do and how it is structured, and so on.

The "fit" between organizational components is critical. We need to understand the various components of the organization and how they fit together and influence one another. Executives in an organization who restructure and ignore the informal groupings do so at risk. Or if managers create structures to fit several key people and then those people leave, there will be a significant loss of fit between the structural component and the key people within Nadler and Tushman's model. In our earlier example of Magna International, the fit between Magna's strategy and the external

environment had been strained as the environment shifted. Magna's strategy of decentralizing operations and spinning them off into independent companies became incongruent with the need for coordination between units. As a result, Magna had to alter its strategy and repurchase those same companies.

Organizations with good fit are more effective. Nadler and Tushman and others argue that effective organizations have excellent "fit" or "congruence" between components. Further, they argue that the strategy needs to flow from an accurate assessment of the environment and respond to the changes occurring in that environment. Similarly, the strategy fits the organization's capabilities and competencies. If all of these are not aligned reasonably, the strategy will fail or be less effective. Inside the organization, the four components (tasks, designed structure and systems, emergent structure and systems, and people) must fit each other. For example, if we hire motivated, skilled individuals and assign them routine tasks without challenge or decision-making opportunities, there will be a lack of fit and productivity will suffer. Or if the strategy demands the adoption of new technology and employees are not provided with the necessary training, fit is lacking. There can be a lack of fit between the emergent structure of the organization and other components. Within categories, elements might not fit. For example, an organization might decide to "empower" its employees. If it fails to adjust the reward system, this lack of fit could easily lead to a failure of the empowerment strategy.

Overall, lack of fit leads to a less effective organization. Good fit means that components are aligned and the strategy is more likely to be attained.

For many managers, the notion of "fit" is easiest to understand as they follow the flow from strategy to key tasks to organizing those tasks into formal structures and processes to accomplish the desired objectives. This is a rational approach to management and appeals to the logic in all of us. At the same time, the reality of organizations as represented by the needs of individuals and by the existing informal structures often means that what appears to management as "logical" and "necessary" is not logical to employees. Managerial "logic" is viewed by employees as against their interests or unnecessary. Peters recognizes the importance of the so-called nonrational aspects of organizations. He argues that managers should tap into the power of teams to accomplish results, that individuals can be challenged to organize themselves to accomplish tasks. Thus, while "fit" is easiest to picture in logical terms, we also need to consider it in terms of the informal system and the key individuals in the change process.

In a typical scenario, changes in our environment lead us to rethink the organization's strategy. This, in turn, results in changes in key tasks and how we structure the organization to do those tasks. In developing our new strategy and in redesigning our organization's systems and structures, managers need to become aware of and understand the influence of key individuals and groups.

This congruence framework helps us in three important ways. First, it provides us with a template to assist us in our organizational analysis. Second, it gives us a way of thinking about the nature of the change process—environmental factors tend to drive interest in the organization's strategy, which in turn propels the transformational processes. These then determine the results. Third, the congruence framework emphasizes that for organizations to be effective, a good fit between all elements in the

process is required—from environment to strategy through to the transformation process. Fit is also necessary within the transformation process—a constant challenge for incremental change initiatives such as continuous improvement programs. An emphasis on the internal fit between organizational components often focuses on efficiency. An emphasis on the external fit between the organization and its environment is an effectiveness focus.

# An Example Using the Nadler and Tushman Organizational Congruence Model

In Chapter 2, we gave an example of a change that McDonald's restaurants were making to its children's Happy Meals in the United States. This change was in response to environmental pressures perceived by McDonald's. These pressures include an enhanced requirement for nutrition on the part of parents, the threat of litigation and legislation involving "fat" foods, adverse publicity, and the availability of more nutritious alternatives offered by competitors. The pressures and McDonald's slowness in responding led to poor performance over the past several years.

McDonald's stock had declined over 60% in the three years leading up to its Apple Dipper proposal in mid-2003. It reported its first quarterly loss in its 47-year history in 2002. Consumer surveys reported that service and quality were less than its competitors. It had failed at several initiatives, including an attempt at pizza (the container wouldn't fit through drive-through windows), discounting (below cost prices, which upset franchisees), and a standardized restaurant kitchen upgrade that slowed service. McDonald's tried to respond but did not identify solutions that fit with its new environmental demands.

To revitalize itself, the company brought back retired Vice Chairman James R. Cantalupo as CEO. He had steered McDonald's successful international expansion earlier, but faced a very different challenge when he returned in December 2002. That year, 126 franchisees left the chain. Sixty-eight of those were poor performers and were forced out. Simultaneously, McDonald's continued to add stores in less than optimal locations. Sales growth was closer to 2% than to the expected 15%. Investors were unhappy.

Franchisees were finding that margins had declined rapidly. McDonald's discounting practices, new menu items that didn't sell (its low-fat burgers, for example), and expensive renovations did not rejuvenate the company. Customers continued shifting to competitors that offered fresher, bettertasting, and more nutritious food in restaurants that were cleaner and gave faster service than McDonald's. Operating an additional store, the traditional reward to franchisees, was no longer attractive.<sup>22</sup>

Using the congruence model of analysis, we can see that McDonald's had become poorly aligned. The company tried to rely on the ingredients of its past success and either ignored or was slow in responding to changes in both customer desires and its competition. It kept expanding, opening more outlets offering more of the same product. Internally, its aggressive expansion led to a de-emphasis on inspection and grading

of restaurants' service and cleanliness. When these tasks were no longer rigorously monitored and rewarded, franchise performance declined on these dimensions. Although individual franchisees had created two of McDonald's best-selling products, the Big Mac and the Egg McMuffin, product innovation by franchisees was discouraged. Corporate product initiatives failed. The outputs, at the store level and corporately, measured by sales, profits, and share price all declined. Individual franchisees left for a chance at success in other restaurant chains or retired after seeing their futures turn bleak. New franchisees were not as profitable as they had been. At the same time, a wave of low-fat, low-carbohydrate diets became popular, and McDonald's suffered adverse publicity from being sued (unsuccessfully, so far) for making people fat.<sup>23</sup>

A different set of tasks became key to matching the changed environment. Management focused on the traditional success keys of quality, service, cleanliness, and value but emphasized the new tasks of innovation and expanding margins. The task of expanding the number of franchises was moved to a nonstrategic position.

Key people were changed. Cantalupo, a long service executive, was appointed CEO, and two individuals were promoted from McDonald's younger corporate staff, one as COO (and who became CEO when Cantalupo died suddenly in April 2004) and the other to develop new products and McDonald's new growth strategy.

Systems were modified and strengthened. The store inspection system became more high-tech with handheld units used to ensure store rounds were made and key performance measures assessed in an expeditious manner. Franchisees were asked for their ideas. Local franchises were encouraged to experiment with pricing and new food types (e.g., teriyaki burgers). New cooking systems were tried.

Cantalupo and his replacement, as longtime employees, knew the informal systems at McDonald's and were able to use these systems to identify key talent and to persuade franchisees to use the new systems and adopt new practices. They were also able to extricate themselves from the immediate past practices that had led to franchise difficulties.

These efforts to introduce new key people, redesign organizational systems, modify the company's strategy, and alter the product mix have shown superb initial success and may reverse McDonald's slide (at the time of the writing of this book, it is too early to tell). However, it is clear that the steps taken have improved the congruence between key variables in at least the short term, and the results are showing this.

The Nadler and Tushman model enables us to think systematically about the organization. It acts as a checklist to ensure that we consider the critical components that must be matched with the strategy and environmental demands. Note that as was pointed out earlier, the system is dynamic. The environment, the people, the competition, and other factors change over time, and part of that change is due to how the components interact with each other. Second, the "fit" between organizational components is critical. McDonald's products, organization, systems, and culture were becoming misaligned with the new environment. Finally, organizations with good fit are more effective. The moves that Cantalupo made improved the fit and led to a turnaround in sales and margins.

Like any living entity, an organization survives by acting and reacting effectively to the external environment it faces. Unless it adjusts with appropriate changes to its strategy and/or its transformational process, it reduces its capacity to thrive. When one part of the organization is changed, the other parts also need to adapt to establish the congruence or "fit" that leads to effectiveness. In managing organizational change, ignoring that the organization is a social system and forgetting to take care of fit is a recipe for failure. Cantalupo and his replacement (Charlie Bell) have begun the realignment at McDonald's. Whether they have made the right changes and enough changes for the long term will be demonstrated by McDonald's performance in the future. Critical to this will be McDonald's ability to innovate and change in the face of shifts in its environment.

# Evaluating the Nadler and Tushman Organizational Congruence Model

Are the assumptions made by the Nadler and Tushman organizational congruence model reasonable ones? For example, should strategy always dictate or lead to the organization's structure and systems? While that is one of the traditional views of strategy, it is not unusual to see changes in the transformational process drive alterations to strategy (note our earlier comments on the Burke-Litwin model). Yetton and his colleagues showed that changes in information technology produced changes in strategy as the organization learned about and took advantage of new technology.<sup>24</sup> Thus, while we think that the implied direction of the Nadler and Tushman model is appropriate, any analysis must recognize how dynamic and interactive these factors are. For many change agents, particularly those in middle management, the strategy of their organization will be a given and their role will be to adapt internal structures and systems. Alternatively, they may attempt to influence the strategy directly (e.g., participation in a strategic task force) and/or indirectly (initiate activities that lead to the development of new internal capacities that make new strategies viable).

Has the importance of fit been overstated? We think not. For example, in an investigation into the mixed results achieved by Total Quality Management (TQM) initiatives, Grant, Shani, and Krishnan (1994)<sup>25</sup> found that "TQM practices cannot be combined with strategic initiatives, such as corporate restructuring, that are based on conventional management theories. The failure of one or both programs is inevitable" (p. 25). Thus, they found that the strategy, the structure, and new TQM processes need to fit with each other. More recently, as a result of September 11, 2001, a new superintelligence agency was created, presumably to control the dozen or so intelligence agencies in the United States. However, reports that have emerged suggest that the new intelligence czar has none of the levers needed to do his job—the formal structure has been created but not the systems and processes that give him leverage to be successful. In both these examples, a lack of fit creates issues that impair success.

The need for change may not always be identified by looking only at an organization's environment. Problems surface in a variety of ways. There might be some signs in the organization's outcomes, indicating that some aspect of performance needs to be addressed. Further, there is the question of the magnitude of the change. The organization may decide to change its strategy, its culture, or some other core element. Generally, the more fundamental the change, the more other

elements of the organization will have to be adjusted or modified to support the desired change. For example, a change to an organization's culture often creates a domino effect, requiring multiple changes to its structure, systems, and people.

Finally, does better fit always mean more effectiveness? This depends on the measure of effectiveness. In the short run, fit might mean increased profits as the organization reduces costs and becomes efficient. However, an innovation measure might show that fit has led to declining innovation. It can be argued that in the long run, tight congruence in a stable environment leads to ingrained patterns inside the organization. Individuals develop habits and systems and structures are made routine. Such patterns can be very change resistant and can be hugely ineffective when the environment does change radically. Perhaps McDonald's suffered from this prior to Cantalupo's changes. A similar argument would hold that the pace of change is so rapid that an overemphasis on congruence can lead to too static an analysis. Approximations are appropriate given the rate of change—"don't make it perfect, get it acceptable" and move on. Nevertheless, for most of our purposes, the assumption that an increasing fit is a good objective is appropriate.

As with other congruence or alignment-oriented models, the Nadler and Tushman model must deal with the criticism that "too much emphasis on congruence potentially (could have) an adverse or dampening effort on organizational change." The key lies in balancing the need for flexibility and adaptiveness with the need for alignment. This balance point shifts as environmental conditions and organizational needs change. To emphasize the dynamic nature of organizations, this chapter examines Sterman's systems dynamics model.

# How Can We View Organizational Systems as Dynamic Models?

# Sterman's Systems Dynamics Model<sup>28</sup>

Successful change agents will have a dynamic and complex view of organizations. They will avoid a static and linear view. While the Nadler and Tushman model can be viewed as dynamic, the model does not focus on the nature of dynamic systems. Sterman (2001, p. 10) suggests that "our mental models are limited, internally inconsistent, and unreliable." Managers handle increased complexity by increasing the number of variables considered. Much more important in Sterman's view is the dynamic nature of those variables and the interactions over time between those variables—particularly when those interactions are counterintuitive.

He describes how many will take a linear view of the world—a rational causative model where managers identify a gap between what is and what is desired, make a decision, and take action, expecting "rational" results. If sales are low, we increase advertising and sales will flow! However, because of complex, interactive, nonlinear, and history-dependent variables, this linear view is inaccurate and limiting. What we get are counterintuitive results that are often policy or change resistant. Increasing advertising may lead to competitive responses—others may increase their advertising as well. The result may be increased costs and static revenues. Figure 3.5 provides a framework for Sterman's model.

Often because of the goals we have and our perception of the environment, we make decisions following a rational model. However, we fail to anticipate the side effects of our decisions and often don't comprehend the goals of others and other environmental factors. This leads to different actions by others as they seek to optimize their outcomes.

Consider the following example. We change the incentive structure for employees anticipating that this will lead to higher productivity. However, employees may see increased productivity as likely to lead to layoffs—and thus resist increasing outputs. Or this move to change rewards may lead employees to focus on quantity and neglect crucial quality concerns. This, in turn, may create negative customer reactions that cause management to create new control systems around quality. Such control systems take additional paperwork and effort, which will increase costs and potentially defeat the original objective of increasing productivity.

According to Sterman, many of the issues result from time lags and delays, inventories and buffer stocks in the system, and attribution errors. Thus, in our above example, employees may increase their efforts to generate new sales as the result of the changed rewards. However, there could well be a significant lag before new sales result. Some sales cycles take months and even years before producing

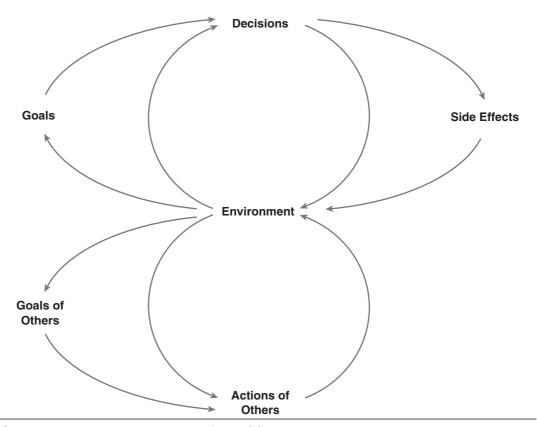


Figure 3.5 Sterman's Systems Dynamics Model

Adapted from Sterman, J. (2001, Summer). Systems dynamic modelling. *California Management Review, (43)*4, 13, copyright © 2001 by the Regents of the University of California. Reprinted by permission.

firm results. Thus, management's initial observation might be that the rewards system change did not work. Small changes in demand may get exaggerated because of inventory buffers that automatically adjust. And finally, humanity's need to attribute cause can create issues. We may assume causal links that don't exist.

Sterman's model heightens our awareness of the complexity involved with change and the challenges involved in developing alignments that will produce desirable results in the longer term and not result in very unpleasant surprises. As such, it builds on the work of Argyris and Schön,<sup>29</sup> identifying the importance of organizational analysis through double-loop and triple-loop learning.\* It is also consistent with the work of Senge<sup>30</sup> on how organizations should be designed and managed in order to enhance organizational learning, innovation, and change.

It is too easy to get stuck in old patterns and comfortable ways of thinking because they worked in the past. Life is more predictable when living in a single-loop world. However, when we do so, we fail to open our minds and hearts to environmental threats and opportunities, to new ways of assessing situations, and to potentially more potent approaches to innovation and organizational improvement.

In Figure 3.5, the decisions lead to side effects as well as intended effects. These interact with the environment and the goals of others to create a much more complex set of responses than were anticipated.

In the McDonald's example described earlier, management's early initiatives to increase the number of stores and decrease costs led to a decreased focus on store cleanliness. In the short term, this led to positive outcomes. With more stores, overall revenues increased. With less time and effort spent focusing on cleanliness, costs would be lower and profits higher. However, over time, cleanliness would slide in the absence of sufficient attention; customers would be aware of the lack of cleanliness and would stop going to McDonald's. These side effects would create more pressures for short-term profits as sales declined. The cycle would repeat until management became aware that the cycle was self-defeating.

When a firm lowers price in order to increase market share and profitability, they may do so without thinking through the implications of their decision. Their actions may lead to competitor responses that lower prices further and sweeten sales terms and conditions (e.g., no interest or payments for 12 months, improved warranties) in an effort to respond to their competitor and win market share back. Thus, the planned advantages coming from the price cuts may end up adding few new sales, shrink margins, condition customers to see the product in primarily price terms, and lock the organization into a price-based competition cycle that is difficult to escape.<sup>31</sup>

Sterman reminds us to avoid the trap of thinking in a static, simplistic way. We need to understand the dynamics of the operation. Increasingly, successful managers are resorting to systems thinking and more complex, nonlinear modeling to improve their diagnostic skills. *The Economist* argues, "Better understanding is the key" to

Single-loop learning is essentially adaptive learning within the organization's operation. Internal data are assessed and modifications are made, but the original objectives are not questioned. Double-loop learning goes beyond making incremental modifications and challenges the assumptions, standards, policies, values, and mode of operation that gave rise to the standards and objectives. Triple-loop learning extends this analysis and exploration of possibilities further and questions the underlying rationale for the organization and why it exists.

improved productivity.<sup>32</sup> They provide examples where a deep understanding led to major productivity gains: Procter & Gamble developed a counterintuitive conclusion to distribute their products in "less than full" trucks; Delta Airlines analyzes engine data to anticipate problems and correct potential failures before they occur.

In doing our diagnosis, we need to recognize the assumptions and values we bring that underlie our implicit understandings of organizational dynamics and the nature of the environment and the marketplace. Picture marketing people in a meeting with operations or R&D people—you can imagine the value clashes. Marketing people are often externally oriented, while operations people are concerned with internal dynamics. A model by Quinn helps to frame and understand some of these issues and points to the value of a diversity of perspectives when approaching organizational and environmental analysis.

# How Can We Focus on the Different Levels of Organizational Systems?

# **Quinn's Competing Values Models Framework**

How we think about our organization will determine what we think needs changing. The focus or level of analysis will determine many of our perspectives. An economist's view using econometric models will be very different than a psychologist's, which would be at the individual and group levels. Each of the components of the Nadler and Tushman model allows us to include many different models at different levels of analysis. For example, formal structures and systems could include the organizational structure, the formal information system, or the reward system. The informal system would include models of group behavior or of organizational culture. Quinn provides a model that bridges the organizational level with the individual level.<sup>33</sup> His framework is appropriate for both organizational-level and individual-level analysis.

Quinn's competing values model outlines four different ways of thinking about organizations. Each of these ways is based on a set of values and assumptions about the organization and how it works. He argues that two dimensions underlie our view of organizations: an internal-external dimension and a control-flexibility dimension. Underlying our perceptions of organizations are assumptions about the importance of both internal versus external and control versus adaptability aspects of organizations. These two dimensions form four quadrants, each of which provides a different "frame" or view of the organization.

As a manager, do you think more about the organization in internal terms and how it operates, or do you think of the organization's environment and the fit between that environment and the organization? Do you focus your attention on how the organization adapts and changes, or is your emphasis more on ensuring that the direction is under control and that people do what is needed? Quinn argues that these dimensions form the four value orientations (Open-Systems View, Rational Economic View, Internal Processes View, and Human Resources View) that underlie how we think. Further, he states that while all orientations are needed in an organization, each of us will tend to operate from one quadrant more than the others. As well, because the values underlying each quadrant are in conflict, individuals will

have difficulty having a "natural" perspective from more than one quadrant. Individuals will tend to adopt one set of internally consistent values and find their views in conflict with or competing with those individuals with perspectives from other quadrants. The Competing Values Model is portrayed in Figure 3.6.

One of the strengths of Quinn's model is that it links organizational-level analysis with individual-level analysis. That is, we can examine an organization's processes and determine whether they are focused on external adaptation, internal adaptation, and so on. At the same time, Quinn suggests managerial skills that are needed for each quadrant. To increase the focus in a quadrant, one needs to have managers develop the competencies needed and design systems to reinforce those skill behaviors. Of specific interest to change leaders are those skills that help with change processes. (See Chapter 8 on change leaders for more on this.)

Every organization needs to attend to all four quadrants. It needs to know what is going on internally and also be aware of its external environment. It needs to control its operations and yet be flexible and adaptable. At the same time, too much emphasis on one dimension may be dysfunctional. That is, we need to be flexible, but too much flexibility can bring chaos. Conversely, too much control can bring rigidity and paralysis. In the end, organizations need to balance these in ways that are congruent with their external environmental realities.

Quinn labels the internal/flexibility quadrant as the Human Resources View of organizations. Similarly, the external/flexibility quadrant is the Open-Systems View, the external/control quadrant is the Rational Economic View, and the internal/control quadrant is the Internal Processes View. Each of these quadrants

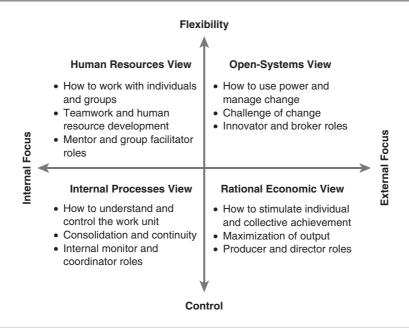


Figure 3.6 Quinn's Competing Values Model and Change

Adapted from Quinn, R. E., et al. (2003). Becoming a master manager (p. 13). New York: John Wiley & Sons.

may be associated with a particular way of thinking about the organization, with roles that managers need to play and with skill sets managers may learn that enable them to play these roles.<sup>34</sup>

Each quadrant provides a value orientation needed in organizations. At the same time, it suggests managerial roles and skills that will support those value orientations. For example, Quinn argues that innovator and broker roles are needed in the Open-Systems Quadrant. The innovator roles demand an understanding of change, an ability to think creatively to produce change, and the development of risk taking. The broker role involves the development and maintenance of a power and influence base, the ability to negotiate solutions to issues, and the skills of persuasion and coalition building.

Care must be taken not to be trapped into adopting one view and ignoring alternate perspectives. Too much focus on internal stability led IBM to miss the PC revolution for many years. Too much focus on the external world led many dotcoms to spin out of control in the technology boom of the early 2000s.

As managers, we tend to adopt a set of assumptions that causes us to isolate our focus on primarily one quadrant. Thus, Quinn argues, operations managers and management accountants tend to see the world from an internal control perspective. This view provides insight and understanding into how the organization was operating. At the same time, it limits understanding because the assumptions underlying this perspective minimize looking outside the organization and the need to adapt. Similarly, Quinn would argue that sales or marketing people tend to view the world externally and with an adaptation perspective. In essence, each perspective brings with it strengths and the risk of myopia concerning alternative perspectives.

We may use Quinn's model in several ways: to characterize an organization's dominant culture, to describe its dominant tasks, to portray the focus of its reward systems, and to describe a needed shift in task emphasis or in the types of people that it must recruit. To refer again to the McDonald's example, in 2003, franchisees were being encouraged to become more innovative, while at the same time, they had to focus increasingly on the internal control of service quality. Because these two value orientations are not joined easily, change leaders will know that the concurrent development of these two initiatives will require careful management. When Bennett was appointed as the new CEO of Intuit, he discovered that Intuit had an "employee-centric culture." In his view (and using Quinn's model), their orientation or value set was too internal and too adaptable. He moved to increase the focus (i.e., increased control) on critical variables (based on his view of external realities). Thus, in Quinn's terms, he emphasized the rational, goal-achievement value set, and through this process, he shifted their focus.

Quinn's model provides both a framework that bridges individual and organizational levels of analysis and a framework to understand competing paradigms in organizations. While these perspectives are useful, they suggest a relatively static situation, not a dynamic one that we have argued for earlier in this chapter. In particular, Quinn's framework does not encourage us to consider possible changes that occur in organizations over time. As organizations grow from one-person, entrepreneurial ventures to larger functional entities to multidivisional, multinational entities, the nature of the organizations shifts because of size and complexity.

Greiner's model, described below, provides one framework for thinking of changes to organizations that occur over time.

# How Do We Think of Organizational Change Over Time?

# **Greiner's Five Phases of Organizational Growth Model**

The magnitude of organizational changes can vary markedly—from small, evolutionary changes to large, revolutionary ones.\* The evolutionary shifts are, by definition, less traumatic for organization members and less disruptive to the organization. Since they typically involve small, incremental shifts in existing systems and behaviors, they are easier to plan and execute. However, they may not be what the organization needs in order to maintain health and vitality. As a change leader, you need to be very aware of the perceived magnitude of change. The dynamics and processes are very different. For incremental, evolutionary change, the challenge might be convincing people of the need and tweaking systems and processes to reinforce the desired outcomes. However, for disruptive, revolutionary change, the issue may well be keeping the organization operating while making significant alterations to how the organization views the world, its strategy, and how it goes about transforming inputs into outputs that its customers desire.

Many students of organizational change believe that organizations pass through periods of relative stability, punctuated periodically by the need for more radical transformations of current practices.<sup>36</sup> During the periods of relative stability, organizations tend to be in equilibrium and evolutionary approaches to change are adopted in order to incrementally improve practices. Eisenhart and others believe that organizations can force incremental change by "time pacing"—setting up targets and deadlines that require regular periodic change.<sup>37</sup> Greiner describes alternating periods of evolutionary and revolutionary change as natural as an organization grows over time. Figure 3.7 outlines Greiner's model.

Over time, these incremental changes in how we think about and how we operate the business become less effective, as they become increasingly less congruent with the internal and external realities that the organization must manage. This period of relative stability also decreases in length as the ambient rate of change in the environment increases. In Nadler and Tushman's terms, the organizational strategy and/or the transformational components (task, formal organization, informal organization, and people) becomes increasingly out of sync with the environment. Once the pressure builds sufficiently, it produces the need for more radical transformations of the organization. This relatively rapid and discontinuous change over most or all domains of organizational activity is referred to by Greiner as the revolutionary change period.<sup>38</sup>

As shown in Figure 3.7, Greiner outlines a model of typical stages of growth in an organization. He suggests that these patterns are progressive and logical as the organization grows. Greiner is prescriptive in that he claims that the organization

The determination of the size of the change is of course dependent on organization level and perspective. An incremental change according to a CEO may well be viewed as transformational by the department head that is directly affected by the change.

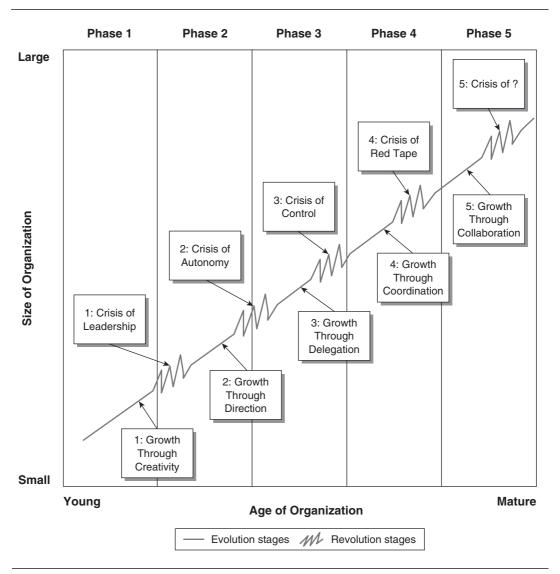


Figure 3.7 Greiner's Five Phases of Organizational Growth

Source: Reprinted with permission from "Evolution and Revolution as Organizations Grow," by Larry Greiner in Harvard Business Review, July-August, 1972. Copyright © 1972 by the Harvard Business School Publishing Corporation, all rights reserved.

must pass through these crises in order to grow and develop. The transitions are caused by a variety of issues: the death of the founder, the need for functional organization to develop needed specialties, the emergence of disruptive market forces and/or technology, the need to decentralize into divisions to keep closer to the customer, and, finally, the need to become more organic to enable the organization to use the potential of all employees.

This framework is appealing because of its logic and simplicity. However, in our view, the prescriptiveness of the model is too strong. Not all organizations follow

the pattern suggested. In today's world, a small entrepreneurial venture may become a global competitor of reasonable size by using the Internet and collaborating with partners around the world. In other words, organizations need not develop as Greiner claims. Nevertheless, the framework is valuable in highlighting many of the crises faced by organizations and in relating those crises to the growth stage of the organization. The model reinforces the notion of the competing values that managers must keep in an appropriate state of dynamic tension. For example, as you move from the crisis of autonomy to growth through delegation, one can hypothesize a shift in values from control to flexibility.

In our McDonald's example, McDonald's has passed through most of the stages of growth and is now struggling with many of the tensions described by Greiner. While Greiner's model suggests that certain tensions predominate during different growth phases, such tensions don't vanish. As such, McDonald's continues to struggle with the generation of creative ideas under new leadership. The new management team is balancing the provision of direction and coordination to provide control but is also recognizing the essential autonomy of franchisees who will avoid red tape whenever possible. What things can be delegated, what things cannot, and which items need to be decided by collaboration will be continuing issues for McDonald's. For example, corporate cleanliness procedures and standards are essential for brand image. However, the enforcement of such standards is difficult given the ownership structure and the costs of enforcement.

While Greiner's model is prescriptive, it captures many of the issues faced by organizations both in growth and in dealing with the human side of organizational change. Too often, managers are trapped by their own perspectives. They fail to recognize that regardless of "who is right," others will see things differently and have different criteria to judge potential outcomes. An important key in identifying "what to change" is embracing multiple perspectives, recognizing that each comes with its own biases and orientation on what needs to be done. By developing a more balanced and comprehensive assessment, while being conscious of how your own biases and preferences tend to color your perspective, the change leader is likely to come to a more holistic understanding of what change is needed to produce the alignment needed for organizational success.

# How Do We Capture the Complexity of Organizational Analysis?

# **Complexity Theory**

Many models of organizational change rely on a "gap" analysis as the description of what needs to change.<sup>39</sup> Although this has the advantage of simplicity, change agents need to move beyond this to recognize the importance of interdependence and interrelationships.<sup>40</sup> We began this chapter by describing organizations as open systems, and we have developed this by presenting frameworks for analysis that can account for the dynamic, multilevel, time-dependant nature of organizations. As well, you've been encouraged to recognize that different situations require different levels of analysis, and

the appropriate analytic tools will change dependent on that level. The importance of moving away from seeing change in primarily simple, rational, cause-and-effect terms should not be underestimated. Change leaders must learn how to cope with complexity and chaos as realities. This represents an important shift in our view of change.

Change agents need to extend their thinking from organizations as systems to organizations as complex, paradoxical entities that may not be amenable to control. One theory that develops our view of organizations is complexity theory. Stacey<sup>41</sup> identifies the following as the underlying propositions of complexity theory (adapted below):

- Organizations are webs of nonlinear feedback loops that are connected with other individuals and organizations by webs of nonlinear feedback loops.
- These feedback systems can operate in stable and unstable states of equilibrium, even to the point at which chaos ensues.
- Organizations are inherently paradoxes. On one hand, they are pulled toward stability by forces for integration and control, security, certainty, and environmental adaptation. On the other hand, they are pulled toward instability by forces for division, innovation, and even isolation from the environment.
- If organizations give in to the forces for stability, they become ossified and change impaired. If they succumb to the forces for instability, they will disintegrate. Success is when organizations exist between frozen stability and chaos.
- Short-run dynamics (or noise) are characterized by irregular cycles and discontinuous trends, but the long-term trends are identifiable.
- A successful organization faces an unknowable specific future because things
  can and do happen that were not predicted and that affect what is achieved
  and how it is achieved.
- Agents within the organization cannot control (through their actions, analytic processes, or systems and controls) the long-term future. They can act only in relation to the short term.
- Long-term development is a spontaneous self-organizing process that may
  give rise to new strategic directions. Spontaneous self-organization is the
  product of political interaction combined with learning in groups, and managers have to pursue reasoning through the use of analogy.
- It is through this process that managers create and come to know the environments and long-term futures of their organizations.<sup>42</sup>

Some complexity theorists would argue that the managed change perspective that underpins this book is fundamentally flawed. They would do so because it focuses on management of complexity and renewal through environmental analysis and programmatic initiatives that advance internal and external alignment, and through them the accomplishment of the goals of the change. Those who adopt a complexity perspective would view the change leader's job as one of creating conditions and ground rules that will allow for innovation and efficiency to emerge through the encouragement of the interactions and relationships of others.

Advocates believe that this approach can unleash energy and enthusiasm and allow naturally occurring solution patterns to emerge that would otherwise remain

unseen (i.e., they self-organize into alignment). Vision and strategy are still valued by this approach because they can supply participants with a sense of the hoped-for direction. However, they are not viewed as useful when they attempt to specify the ultimate goal.

A close review of the complexity ideas, though, shows that this perspective is not really that far from the one advocated by this book. This book adopts an open-systems perspective and argues that the environment is characterized by uncertainty and complexity and that organizations are more likely to be successful over time if they develop adaptive (or, if you will, coevolutionary, in the language of complexity theory) capacities. This means that openness to new ideas and flexibility need to be valued and that organizations need to learn how to embrace the ideas, energy, and enthusiasm that can be generated from change initiatives that come from within the organization. This book recognizes the value that teams (including self-managed teams) can contribute to successful change, from needs assessment to the development of initial ideas and shared vision through to strategy development and implementation. Further, it acknowledges that too much standardization and reduction of variance will drive out innovation. Finally, it notes that greater uncertainty and ambiguity give rise to greater uncertainty over how things will ultimately unfold, thereby highlighting the importance of vision and strategy as directional beacons for change initiatives.

An important idea that comes from complexity theory is that small changes at key points early on can have huge downstream effects. But can one predict with any certainty where those changes and leverage points will be, or what downstream results will emerge as the result of actions we take today? Often the answer is no. Motorola likely had no clear idea where wireless technology would take the world when they began work on the cellular phone technology in the 1960s. Likewise, Monsanto probably had little sense of the magnitude of the marketplace resistance that would build for the genetically modified seeds when its research and development program was initiated in the 1980s.

We may not be able to predict precisely what will transpire over the longer term, but we can make complex and uncertain futures more understandable and predictable if we do our homework in an open-systems manner, look at data in nonlinear as well as more linear terms, engage different voices and perspectives in the discussion, and rigorously consider different scenarios and different approaches to envisioning what the future might look like.

When organizations do this, they are likely to get a better sense of what is possible from a vision, directional, and technological perspective. Further, through the engagement and involvement of others, change leaders are in a stronger position to initiate with a shared sense of purpose. They are also more likely to have identified critical actions and events that must occur and where some of the potentially important leverage and resistance points exist. As a result, they are more aware of how things may unfold and are in a stronger position to take corrective or alternative action as the result of their ongoing monitoring and management of the process. As well, change agents will recognize the importance of contingency planning as unpredictable, unplanned events occur.

It may not be possible to predict absolute outcomes. However, it is possible to generally predict where an organization is likely to end up if it adopts a particular

strategy and course of action. The identification of the direction and the initial steps allow us to begin the journey. Effective monitoring and management processes allow us to make adjustments as we move forward. The ability to do this with complex change comes about as the result of hard work, commitment, a suitable mind-set (e.g., openness and flexibility), skills and competencies, appropriate participation and involvement, access to sufficient resources, and control and signaling processes. In the end, the authors of this book subscribe to the belief that "luck is the intersection of opportunity and preparation."<sup>44</sup>

# **Summary**

In this chapter, we explored models that will help managers develop a wellgrounded sense of what needs to change in their organization. A solid analysis of an organization must be based on recognition of the organization's strategy, how it fits with the changing environment, and how the various components of the organization also fit with the strategy and environment. We described three models that help managers categorize the complex organizational data that they must deal with. This book uses the Nadler and Tushman model as a framework. It focuses on achieving congruence between the organization's environment, strategy, and internal organizational components in order to achieve desired outcomes. In includes both the formal aspects of organizations and informal aspects. Finally, it fits neatly into a process approach to organizational change helping us to merge the what of change with the how of change. In the Beckhard and Harris model, this type of analysis will fit both at an initial organizational analysis stage and a gap analysis stage. Figure 3.1 identifies where this process of analysis rests within the Beckhard and Harris change management process that was described in Chapter 2. As such, it provides the foundation for much of what will follow in the remainder of this book.

While the book relies on both the Nadler and Tushman' framework and the Beckhard and Harris model, we argue that change leaders must be particularly sensitive to the dynamic nature of organizations, to the need for multiple levels of analysis, and to the shifts that organizations make over time. Sterman's, Quinn's, and Greiner's models are presented to reinforce these perspectives. As well, we discuss complexity theory. This theory challenges a simple goal-oriented approach that many change managers might take and encourages a much more emergent view of organizations.

Change leaders must recognize the assumptions and biases underlying their analysis and whether the assumptions they make limit their perspectives on needed change. Their diagnosis should recognize the stage of development of the organization and whether it is facing evolutionary, incremental change or, at the other end of the change continuum, more revolutionary, strategic change. By developing an in-depth and sophisticated understanding of the organization, change leaders will be better able to appreciate what has to be done to enhance the organization's effectiveness.

<sup>&#</sup>x27;These are the McKinsey 7-S model, the Burke-Litwin causal model, and the Nadler and Tushman congruence model.

# **Glossary of Terms**

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### The How and What of Change

The How of change relates to the process one uses to bring about change.

The What of change relates to the assessment of what it is that needs to change—in other words, the content of the change.

### **Open-Systems View of Organizations**

The Open-Systems View of Organizations considers the organization as a set of complex, interdependent parts that interact with the environment to obtain equilibrium.

### **Models of Organizations**

McKinsey 7-S Model—The McKinsey 7-S model states that the key components of organizational analysis are strategy, structure, systems, style, staff, shared values, and skills. Understanding these variables will provide insight into the dynamics of an organization.

Burke-Litwin Causal Model—The Burke-Litwin causal model views organizations as composed of 12 key variables divided into two sets: transformational variables (external environment, leadership, mission and strategy, organizational culture, and individual and organizational performance) and transactional variables (management practices, structure, systems and policies, work unit climate, motivation, task requirements, individual needs and values, and individual and organizational performance).

Nadler and Tushman Organizational Congruence Model—The Nadler and Tushman model views organizations as composed of internal components (tasks, designed structures and systems, emergent structures, and systems and people). The model states that higher effectiveness occurs when the organization is congruent with its strategy and environment. This model forms the framework for this text.

Sterman's Systems Dynamics Model—Sterman's model describes organizations as interactive, dynamic, and nonlinear as opposed to the linear, static view that many individuals hold of organizations.

Quinn's Competing Values Model Framework—Quinn's model describes organizations as based on competing values: flexibility versus control and external versus internal. These two dimensions lead to four competing views of organizations: the human resource view, the open-systems view, the rational economic view, and the internal processes view.

Greiner's Five Phases of Organizational Growth Model—Greiner's model hypothesizes that organizations move through five phases of growth followed by five stages of crisis.

Complexity Theory—Complexity theory argues that organizations are webs of nonlinear feedback loops that connect individuals and organizations that can lead to self-organization and alignment between parts.

# **END-OF-CHAPTER EXERCISES**

Toolkit Exercise 3.1 provides an exercise to practice thinking about the 7-S model.

# **TOOLKIT EXERCISE 3.1**

# Applying the 7-S Model and the Alignment Tool

1. Think of an organization that you are familiar with and analyze it using the 7-S model.

2. Now consider the changes that you believe would improve things. When you subject these changes to an analysis of alignment, do they solve the problems, or do they, in some cases, make the misalignment worse?

3. Use the process to refine your thinking about the nature of what needs to change.

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### **TOOLKIT EXERCISE 3.2**

# Analyzing Your Organization Using Nadler and Tushman's Model

- 1. Use the congruence model to describe your organization or an organization you are familiar with. Categorize the key components of the environment, strategy, tasks, formal system, informal system, and key individuals. What outputs are desired? Are they achieved?
- 2. Is the strategy in line with the organization's environmental inputs? Are the transformation processes (the key tasks, the formal organization, the informal organization, and the key individuals) all aligned well with your organization's strategy? How do they interact to produce the outputs?
- 3. When you evaluate your organization's outputs at the organizational, group, and individual levels, do you see anything that might identify issues that your organization should address?
- 4. Are there some aspects of how your organization works that you have difficulty understanding? If so, identify the resources you can access to help with this analysis.

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