Assessing the Role of Leadership in Transformation
In a Learning Organization

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Assessing the Role of Leadership in Transformation In a Learning Organization

BY

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A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirements of the degree of

Master of Public Administration

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ABSTRACT

Much has been written about the dramatic nature and pace of change that is ongoing in our world. Change can be both evolutionary and revolutionary. In an era where the speed and nature of change is having a profound effect on organizations, most are looking for ways to respond to these forces of change: to make changes to their organizations to make them more flexible, more adaptable. Among these organizations, a smaller number are looking to do much more than simply improve or alter existing processes in their organizations: they are looking to fundamentally reform or “transform” their organizations.

Within this environment, the capacity to adapt to, or try to ‘manage’ change has become increasingly important. But in an environment of increasing complexity and uncertainty is it really possible to manage change? This thesis explores the issue of change and how leadership can influence the ability to navigate change effectively, within learning organizations. The Thesis suggests that, while it may not be realistic to try to manage change, the leaders of organizations may be able to create the conditions necessary to prepare for and adapt to change, and indeed, to seize the opportunities that change may present. More specifically, this thesis suggests that this role is the central one for leadership in helping organizations survive and thrive.

With these ideas in mind, a framework for initially examining the role of leadership with respect to organizational change is developed. The creation of this framework involves looking at living systems theory, understanding the nature of change, identifying key leadership attributes and tasks, and juxtaposing these against what systems theory suggests as a potential role for leadership.
Table of Contents

ABSTRACT ........................................................................................................ i

I) INTRODUCTION .......................................................................................... 1

1. THE ISSUE ............................................................................................................. 1
2. THESIS STATEMENT ............................................................................................... 5
3. APPROACH ........................................................................................................... 7
4. METHODOLOGY .................................................................................................... 8
5. SUMMARY ........................................................................................................... 13

II) A DEFINITION OF ORGANIZATION ......................................................... 15

1. SYSTEMS APPROACH TO UNDERSTANDING ORGANIZATIONS .................. 18
2. ORGANIZATION: DEFINED ................................................................................... 22
   2.1 Systems Thinking and the Learning Organization ............................................. 26
   2.2 Defining the Learning Organization .................................................................. 30
3. ORGANIZATIONAL EFFECTIVENESS .................................................................. 34
4. SUMMARY ........................................................................................................... 43

III) A DEFINITION OF CHANGE IN ORGANIZATIONS ................................. 46

1. CHANGE AND TRANSFORMATION ........................................................................ 46
   1.1 Systems Theory as a Foundation for Understanding Organizational Transformation ........................................................................................................... 49
   1.2 Innovation and Transformation – The Concept of Creative Destruction .......... 54
2. TRANSFORMATION EXPERIENCES ....................................................................... 60
3. SUMMARY ........................................................................................................... 63

IV) FORCES OF CHANGE .................................................................................... 65

1. FORCES OF CHANGE AND DISCONTINUITIES .............................................. 66
2. IMPLICATIONS FOR ORGANIZATION ............................................................... 69
   2.1 New Forms of Organization ............................................................................. 70
3. SUMMARY ........................................................................................................... 74

V) ELEMENTS OF LEADERSHIP ......................................................................... 78

1. LEADERSHIP DIMENSIONS ............................................................................... 79
   1.1 Hierarchical versus Distributed Leadership ..................................................... 80
   1.2 Transformational versus Transactional Leadership ............................................. 82
2. ATTRIBUTES OF LEADERSHIP ......................................................................... 87
3. TASKS OF LEADERSHIP ..................................................................................... 94
4. SUMMARY ........................................................................................................... 110
VI) LEADERSHIP AND TRANSFORMATION IN A LEARNING ORGANIZATION .............................................................................................................. 114

1. TRANSFORMATIONAL ELEMENTS OF ORGANIZATION .................................................. 115
   1.1 Transformation: The Relationship Between Mission, Strategy, Culture and Structure .................................................................................. 116
   1.2 Relationship to Leadership .................................................................................. 118

2. SYSTEMS THEORY AND ROLES FOR LEADERSHIP .................................................. 122
   2.1 Emergent Organization .................................................................................. 124
   2.2 Creating Context .......................................................................................... 125
   2.3 Leveraging Change ....................................................................................... 129
   2.4 Support Mechanisms .................................................................................... 133

3. SUMMARY ............................................................................................................. 135

VII) CONCLUSION ................................................................................................... 140

1. A FRAMEWORK FOR FURTHER EXPLORATION ....................................................... 140
2. LEADERSHIP AND SYSTEMS THEORY ................................................................. 143

APPENDIX I .............................................................................................................. 152

INTERVIEW GUIDE .................................................................................................. 152

APPENDIX II ............................................................................................................ 155

LEADERSHIP ROLES FROM COMPLEX SYSTEM THEORY ........................................ 155

BIBLIOGRAPHY ....................................................................................................... 157
1) INTRODUCTION

1. The Issue

Much has been written about the dramatic nature and pace of change that is ongoing in our world. Most organizations have and will continue to experience various degrees of change. The implications of many of the changes occurring are nothing short of revolutionary. Revolutionary change can ultimately ‘transform’ an organization. Transformation takes organizational change further. “Transformation is moving an organization to a higher plane, leading it to become something qualitatively different.”

Transformative change can also occur through evolutionary change. Viewed individually, small changes may appear to have only a limited effect. Yet over time, a number of small changes added together can create revolutionary change. Transformation can also occur through specific, carefully orchestrated changes to a system. Such changes, although they appear small, can create a profound ‘ripple effect’ through a system. The analogy of the butterfly that flaps its wings in Peking causing weather patterns to change in the Gulf of Mexico is illustrative of this idea.

Technological change and globalization are among the most frequently cited “environmental forces” that are affecting organizations. Everyday we are exposed to stories in the electronic and print media about emerging issues related to these and other forces, not to mention the fact that each of us is probably impacted more directly by changes in our work and home environments, which have been precipitated through

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technological evolution. In short, our environments are becoming increasingly complex, and we are, in many instances, being inundated with change.

The interaction between organizations and the aforementioned “forces” in their environments has also introduced increasing complexity into our organizations. This complexity is compounded by the fact that most organizations are not dealing with one change, but instead find themselves confronted with a number of changes. Even when the forces of change can be described in terms of a single, compelling change, the issues are usually multi-faceted in that they affect a number of aspects of organization, such as strategy, structure, systems, and processes, simultaneously.

Increasing complexity has precipitated a greater sense of uncertainty in many organizations. As complexity and uncertainty increase, many organizations are left desperately trying to “manage” change in their worlds. Unfortunately, they are often unsuccessful because such an approach may not consider the broader implications of their efforts to manage change in the larger system of which they are a part. Unintended consequences can result from incorrect or ill-considered “change management” efforts.

“Systems thinking” – an approach, which has its origins in the physical sciences – can provide a discipline for understanding how an organization relates to its environment, and how it may respond to change and complexity.

It should be noted, that while much of our knowledge of how social systems operate has been drawn from the characteristics of “open systems” in the physical sciences, there are differences between the physical and social contexts that must be

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acknowledged. For example, a social organization may be able to transform over a period of time — perhaps three to five years — while the biological organism may take hundreds, perhaps thousands of years to evolve. Absent these differences, we would be able to glean all of our knowledge of the operation of social systems from the physical world. All of this said, there are a number of characteristics of physical systems that are important for our understanding of social systems.

A prominent school of management thought has evolved around systems thinking. Peter Senge, for example, has popularized the idea of systems thinking as a frame of reference for understanding and coping with change and complexity. In his book, the Fifth Discipline: The Art and Practice of the Learning Organization, Senge describes systems thinking as the discipline for seeing structures that underlie complex situations, and as the necessary tool for leaders to differentiate high and low leverage change. However, Senge also acknowledges that systems thinking alone is not sufficient to help an organization address complexity. Its capacity to deal with complexity, indeed its survival, depends on its capability and capacity for continual learning; it must strive to become a “learning organization.”

The learning organization is one where “people continually expand their capacity to create the results that they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.” Learning occurs through understanding and responding

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7 Senge, 3.
8 Senge, 3.
to feedback. In this regard, the challenge for managers and leaders alike, is to be able understand their own organization and the environment within which it operates. As a result of their learning, they will also understand their capacity to affect change in the organization (system). One of the leader's main tasks, therefore, is to create a culture and climate that are predisposed to continuous learning. In other words, the leader and members of that organization must understand and use feedback as part of a "lessons learned" cycle to work with, instead of against, change in their organizations.

It should be understood at the outset of this discussion that major change or transformation can occur within organizations that may not be learning organizations as defined above. This sort of change can occur as a result of an incorrect response to some event or force affecting the larger system. The organization may respond by underplaying or over responding to the source of the instability. The inability to understand or gauge an appropriate response may relate to the pattern of feedback loops associated with the system. A system, which responds solely to positive feedback loops, without consideration of negative feedback, may be driven into a destructive state of growth or development. Negative feedback provides a self-correcting mechanism. For example, an organizational team may be driven through an inappropriate reward and recognition system towards a growth at any cost strategy, because of the capacity to achieve results initially. However, a negative feedback process could indicate that this process may ultimately erode the success of the team and organization by causing the individuals to take actions, which will erode the success of their counterparts. In this example, had the organization been able to gauge the balance and interaction of feedback
types required for its success, the problem may not have occurred. This is one of the hallmarks of a learning organization.

Leadership, it shall be suggested, may be highly influential in managing change – particularly that associated with complex systems - in the context of a learning organization. Leadership, through its capacity to encourage organizational learning, can be very important in terms of the organization's ability to understand the type and balance of feedback required for success. That said, there are other organizational elements such as mission, strategy, structure and culture that play roles in determining organizational performance and ability to make the most of continual change. However, of all the elements, leadership should be the most influential because it can shape and guide the others. In a learning organization, leaders can, through a lessons learned cycle, refine values, promote the emergence of strategy, and generally set appropriate organizational parameters to effectively deal with change.

2. Thesis Statement

The purpose of this thesis is to further explore the role of leadership in transformation in a learning organization. More specifically, it attempts to identify how leadership may influence, or assist in managing change in a systems context, and its potential importance, in this regard, relative to other elements of organization. This thesis is premised on three principle assumptions:

1. That change is not an event or point in time. It is instead part of a process, the

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timing of which can vary from one organization to another depending on the organization’s relationship to its environment.

2. That to manage change – to the extent that this may be possible – an organization must value continuous organizational learning. In other words, the process of assessing and incorporating “lessons learned” into the operation of the organization must be part of that organization’s practice and culture.

3. That of the many elements influencing organizational performance, such as mission, strategy, and culture, leadership will most directly influence the ability of a learning organization to manage change.

In addition to these three key assumptions, a fourth should be added that elaborates on part of the second assumption. This assumption alludes to the idea that managing change may not always be possible – despite our best efforts. A fourth assumption, therefore, should recognize that best efforts aside, unintended consequences may result from trying to ‘manage’ complex systems through discontinuous change. Unintended consequences, in other words, can mitigate the best intentions of leadership. Their existence serves as a strong reminder that living systems may not be easily directed to a desired outcome; they are instead more likely to be successfully “nudged” towards it.10 Although unintended consequences effectively limit the capacity of a leader to direct the future of an organization, that doesn’t mean that leadership is powerless. On the contrary, leadership may play a critical role in helping organizations deal effectively with unintended consequences and uncertainty. In more specific terms, this may mean harnessing the uncertainty or “adversity” it creates by encouraging the organization to

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10 Pascale, Millemann, and Gioja, 6.
learn from its prior errors. In this regard, adversity can create an opportunity for learning and growth.

While considerable anecdotal information is available to assist in identifying the parameters of leadership that are important in trying to manage organizational change, further detailed study - beyond the scope of this thesis - will be required. Recognizing the need for more detailed, longer-term analysis, this thesis focuses on building a framework for determining the existence and nature of relationship between leadership and the management of change.

3. Approach

Building an appropriate framework for the analysis of ideas and evidence is an important step in trying to determine the correlation between leadership and the management of change in a learning organization. This thesis, as suggested, recognizes that further work will be required to be able to build a ‘concept’ with evidence gathered the framework established.

Further research, therefore, will focus on testing the validity of the framework created. This will involve further studying leadership and its influence on the management of change - particularly major or discontinuous change - in ‘real’ organizations. Nonetheless, the creation of an appropriate ‘framework’ is the first critical step towards building a ‘concept’ of leadership and its role with respect to organizational change.

\textsuperscript{11} Pascale, Millemann, and Gioja, 250-251.
In order to develop this framework, a literature review, which focuses on organizational development theory, organizational change theory and general management theory was undertaken to build a theoretical foundation for defining organizations, organizational change, and the key elements of leadership. Anecdotal evidence from management and organizational literature provide references to try to demonstrate a correlation between sound leadership in a learning organization, and the effective management of change. In addition, two interviews were conducted with organizational leaders: one private sector and one public sector. The results were used to provide initial validation for the framework. The questionnaire used for these interviews is attached as Appendix I.

4. Methodology

In an effort to create an effective framework, this thesis has addressed the following topics:

1. A Definition of Organization – A definition of organization is developed to explain what an organization is and its relationship to environment. The concept of organizational effectiveness is explained. This thesis is premised on a systems-based approach to understanding organizations and the process of change. Thus, the choice of a systems-based approach to defining and understanding organization is elaborated. Particular attention is paid to describing the process of feedback and how it can be used to create a learning organization. The concept of a learning organization is also defined and discussed.
2. **A Definition of Change** – The idea that change is a continuous process and organizations, accordingly, are always in a state of flux is explored. It is recognized that the pace and type of change differ from one organization to another. Nevertheless, as Morgan suggests, “Our actions shape and are shaped by change, we are just part of an evolving pattern.”

Change can be both transformational, in that it can fundamentally change a system, and/or transactional, in that it emphasizes process changes with an existing system. Under a systems-based approach, the organization and its members are part of a continual cycle of innovation whereby even small changes introduced into a system can produce larger or revolutionary changes. These changes can be described as transformational if they can push the system into a new context or paradigm.

The idea that the process of change can be understood as a process of innovation is also explored. Changes to the system can lead to new innovations being introduced, which can become 'strengths' for the organization. Over time, these same strengths can later become weaknesses through the process of innovation and change. The role of organizational learning is recognized as critical in this context and is explored. It is suggested that continuous organizational learning is required to ensure that the cycle of improvement and obsolescence in an organization continues as a means of ensuring survival.

As lessons learned are considered, strategy, culture and forms of organization can all be shaped. For example, through the process of organizational evolution

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12 Morgan, 300.
and change, an organization can take on many forms. Examples of these are also discussed.

3. **Forces of Change** – A brief, but important discussion of the forces of change, which are part of and can drive the process of innovation, is also included. While the implications and specific types of changes may differ from organization to organization, the principle themes are consistent. These may include, but are not limited to the following:

- **The competitive environment is changing rapidly** – For business, new markets, new competitors and new expectations from customers are placing increasing demands on organizations. Governments must also deal with increasing demands from stakeholders and are being driven to look for alternative ways of serving them.

- **Emerging technologies pose new challenges and opportunities** – For all organizations, the dawn of the digital era presents new opportunities and challenges. Innovations in information gathering, interpreting and disseminating have profound implications for organization design, operation and performance.

- **Technical skills and teamwork abilities of people must be continually upgraded** – Technological improvements necessitate continuous updating of skills as increasing levels of knowledge are embedded in the processes associated with performing most jobs. Today’s knowledge can all too quickly become yesterday’s knowledge, which means that forward-looking organizations must facilitate information and knowledge transfer.
• **Financial pressures are forcing cost cutting and downsizing** – Ideally, most organizations aspire to use their resources as prudently as possible. Although most organizations today have undergone some cost-cutting or rationalisation exercises in the recent years, the mantra of “do more with less” is still very much a part of the operating philosophies of these entities.\(^{13}\)

The purpose of discussing the nature of change is to reinforce the idea that linear thinking and ideas are not as relevant in a turbulent and ‘non-linear’ world. This is where the convergence of chaos and complexity theory is important, as the emergence of many of these themes is prompting, if not pushing, the movement of organizations towards a new context.

4. **Attributes and Tasks of Leadership** – This section identifies examples of the key attributes and tasks of leadership for the purpose of establishing those aspects of leadership most necessary for coping with change. The literature review draws on management theorists and their assessments of what constitutes an effective leader. This is later juxtaposed against the key attributes and tasks of leadership that are drawn from systems theory. References are also made to the experience of notable leaders such as George Marshall.

5. **Transformational Elements of Organization** – Building a framework to describe the relationship between leadership and the ability to manage organizational change requires identifying the other elements of organization, which may affect the change process. These elements are discussed and a rationale for their selection provided. The Burke Litwin model, which is a comprehensive model of organizational change, is used as a basis for identifying

\(^{13}\) Sullivan and Harper, introduction.
the key elements of organization, which can influence the ability to manage change. My research to date has suggested that in addition to leadership, the following elements, because of their transformational nature, maybe correlated with successful change:

- mission;
- strategy;
- structure; and
- culture.

6. **Comparison of General Leadership Tenets with those Described as being Important from a Systems Perspective** - This analysis is key for development of the framework. The section builds on the other sections where elements of leadership and organization are described. Examples are drawn from the literature review to establish correlation between leadership in the learning organization context and the ability to manage discontinuous change. The concept of "patching" provides one such example.\(^\text{14}\) This describes a process whereby organizations routinely change their configurations in response to changing opportunities, with leaders Establishing the broad configuration.

The roles, drivers and attributes of leadership in learning organizations I focus on include:

- creating and maintaining a culture accepting of the need for continual learning and change (this is a longer-term task);

• fostering trust, communication and information sharing within the organization (this can involve creating systems to support this type of environment);
• accurately reading and understanding the organization’s relationship to the environment;
• envisioning and creating the conditions for strategy to emerge;
• envisioning and creating the conditions for different forms of organization structure to emerge;
• guiding operationalization of the strategy; and
• establishing norms, values and standards for the organization.

Perhaps, most importantly, the leader must develop a shared sense of purpose and mission for the organization.

5. Summary

It is the intention of this thesis to establish a framework, against which the key attributes, and most importantly, the tasks of leadership and their relationship to change in a learning organization can be understood. While it is acknowledged that other dimensions of organization may influence performance and capacity for change, the idea that leadership is perhaps the most influential of these is a cornerstone of this framework.

Is a framework for further exploring the role of leadership in influencing change in a learning organization needed? The answer, I would suggest, is yes. Increasing complexity in both the environment and organizations is creating a need for greater understanding of the real extent to which organizations can ‘manage’ change. While a number of management and organization development theorists have explored the extent
to which organizations – inclusive of all of dimensions – can really manage change, few have looked expressly at the role of individual elements of organization. Although this thesis has chosen to view organizations through the lens of systems theory – that is, through an approach premised on understanding of an integrated whole - this does not preclude the need to understand the role of individual dimensions of organization and their effect on performance. By examining leadership in a more comprehensive manner, it should be possible to better understand how it can work in conjunction with other elements of organization to manage change.
II) A DEFINITION OF ORGANIZATION

To begin the process of developing the framework, a working definition of organization must be established. On that basis, effectiveness in organizations must also be defined and understood. This will help us identify the elements of an organization, which may influence its capacity for successful transformation.

Most members of society have some basic relationship to organizations, whether through family, work, schools, churches, volunteer activities, and so on. From these associations with organizations, organizational theorists have developed a variety a ways of viewing and characterizing organizations, which have ultimately shaped the development of definitions of organization.

Classical organizational theory, which was the first school of thought on organizations to emerge, has significantly influenced the view of organization – even as it exists today. The Classical school is typified in the works of early theorists such as Henri Fayol, Max Weber, and Frederick Winslow Taylor. Fayol is noted for his general theories of management, which represent one of the earliest attempts to codify the experience of successful organizations. Taylor led the movement of scientific management, which purported that there was always "one best way" to carry out tasks. This mechanism would optimize productivity through development of the fastest, most efficient, and least fatiguing method of production. Weber, similarly, broke new ground in organizational theory with his observations on the relationship between the mechanization of industry and the emergence of bureaucratic forms of organizations.

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Unlike the other men, Weber was not an advocate for bureaucratic organizations and the emerging world to which they belonged. His theory of bureaucracy noted the potential danger for this approach to routinize and mechanize every aspect of human life in the same way that the machine routinizes production. In so doing, bureaucratization threatens to erode the human spirit and its capacity for human action.

Despite, the differences in their views of the implications of the emerging industrial society for organizations, aspects of the works of Fayol, Taylor and Weber still resonate in organizational management approaches used today. The basic thrust of their collective thinking is captured in the idea that management is “a process of planning, organization, command, coordination and control.”16 In this context, each saw management as a part of a larger system, which transforms human capital and other materials into either goods or services.

Neo-classical organizational theorists followed on the heels of classical theorists, basically modifying their work. Their ideas resonate in the works of Herbert Simon and Philip Selznick. Simon is noted for his criticisms of the concept of “general management principles” suggesting that they are often times “inconsistent, conflicting, and inapplicable to many of the administrative situations facing managers.”17 Selznick argued that, while it is possible to describe and design organizations in a purely rational manner, this approach cannot account for the non-rational aspects of organizational behaviour.18 Organizations consist of individuals, whose goals and aspirations may not be fully consistent with those of the organization. As a consequence it may be difficult, if

16 Morgan, 18.
17 Shafritz and Ott, 97.
18 Shafritz and Ott, 97.
not impossible, to realize organizational goals and mission without subsuming new elements into its policy-making process so that their interests do not threaten those of the organization.

The ideas of theorists from the classical and neo-classical schools of thought, as well as those from others such as the human relations, behaviourist, systems theory and population ecology schools, have collectively shaped the evolution of organizational theory. All have directly influenced views of organizational performance, and somewhat less directly, views of the role of leadership. For the purposes of this thesis, a systems approach to explaining organizational performance and change has been adopted, as it appears to offer great potential as a framework for identifying and addressing many management issues. As in other dimensions of our world, systems theory, because of its integrative approach, seems to offer the most appropriate lens through which to view the management challenges that can present themselves in an increasingly complex and non-linear world. This section, therefore, provides a discussion of the main tenets of systems theory and learning organizations in order to achieve two objectives:

- To attempt to define organization, as a basis for understanding the critical elements of organization and how they relate to one another; and

- By understanding the elements which define organization, to begin to establish linkages between them and the drivers, attributes and tasks of leadership, which are discussed in the latter sections of this thesis.
1. Systems Approach to Understanding Organizations

Systems theory has gained increasing acceptance as a valuable framework for understanding the processes and behaviour of social systems. In its simplest terms, a system can be defined as "a set of objects together with the relationships between the objects and their attributes." The concept of viewing social organizations as systems has its roots in the natural sciences, and the study of the behaviour of physical and biological systems. Proponents of the "systems theory" approach to understanding organizations believe that open systems have a number of common attributes upon which hypotheses can be made about the behaviour of social organizations. These include the following:

- **Importation of Energy** - Open systems take or 'import' energy from the environment. As social systems, organizations are not self-contained – they interact with their environment by drawing energy from other institutions, other people, or from material resources.

- **Through-put** - Open systems take the energy they import and transform it into something. Organizations will take energy in the form of people or material resources, for example, and transform it into a concept, a good, or a service. This process will entail some work in the system, and as part of that, some reorganization of input.

- **Output** - The outcome of the process of through-put in an open system is that

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something will be exported into the environment. In an organization, this would be the resulting idea, product, or service.

- **Systems as Cycles of Events** – The pattern of activities in an open system has a cyclical character. The product exported into the environment furnishes the source of energy for that repetition of the cycle of activities. The organization, for example, produces a good, which is sold in the external environment. The proceeds from this sale may be used to purchase more raw materials for production into more goods.

- **Sub-systems and their Relationships** - Open systems, as suggested initially, are characterized by a relatedness of their parts or sub-systems. In this way, each unit of the system, and its parts, in turn, can be described as bounded by the larger structure. The notion that everything in a system is related to everything else is critical in that it suggests that a change in one part of a system can produce changes throughout. One school of thought would suggest that change in a system may be more directly felt within that particular part of the system than outside of the sub-system, suggesting a "hierarchy of systems". As is explored later, another view suggests that the effect of a small change in the context of a complex, non-linear system may be experienced far from the initial source. Regardless, the sub-system and system - particularly in linear systems - can generally be viewed as evolving together. The importance of the general concept of sub-systems is explored in greater detail later in this discussion.

Consistent with the notion of systems as 'cycles of events', the structure of

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22 Seiler
social systems, which sometimes do not have physical bounds, can be found in activities, which return upon themselves to complete and renew a cycle. Structure can form from a single cycle of events, or from a combination of events or an event 'system'. This is consistent with the idea that organizations can form from the shared experience of individuals. For example, people may be brought together informally, united by a common belief about a social issue. What begins as an informal alliance may ultimately become an organization.

- **Negative Entropy** – Open systems must counter the tendency towards entropy whereby all forms of organization move towards disorganization or death. To do this, they must import more energy than they expend. By storing energy, they are said to acquire 'negative entropy'. Social systems can be capable of almost indefinite arresting of entropy. This is consistent with the idea that systems will try to stay at equilibrium; although, this need not be static.

- **Information Input, Negative Feedback and the Coding Process** – In open systems, inputs into the system can provide it with information on the environment, and its functioning with relation to the environment. The most basic form of feedback is negative feedback. This feedback allows the system to correct deviations from a course, and work towards a form of 'dynamic' equilibrium. Without negative feedback, the system will cease.

  It is this feedback that forms the basis for a learning organization, which is discussed shortly. Feedback can take the form of both single and double feedback loops. These feedback loops keep the organization in a state of dynamic equilibrium as the organization is constantly working towards maintenance of the
equilibrium and its existence. The function of feedback loops is also included in the sections, which follow.

- **The Steady State and Dynamic Homeostasis** - The process whereby an open system tries to stop negative entropy operates to maintain a constant rate of energy exchange. There is a continuous inflow of energy from the environment and a continuous export of products. However, the character of the system and the relation of the parts remains the same.

  In trying to adapt to the environment, the system may attempt to cope with external forces by ingesting them. Organizations may move towards incorporating the external resources necessary to survive within their bounds, with the result being that the organization will expand.

- **Differentiation** - Open systems are said to move towards differentiation and elaboration. Social systems, for example, move towards the multiplication of roles with greater specialization of functions.

- **Equifinality** - Through this process, an open system can reach the same final state from differing conditions and a variety of paths. When open systems move towards increasing regulatory controls, they may limit or reduce the equifinality in the system. The overarching principle, therefore, is that there is more than one method for achieving a given objective: a premise clearly in contrast to the one best approach idea, which underpins classical organization theorists such as Taylor.

Open systems have to be open to, if not part of, their environment, otherwise the process of feedback will not occur. However, ensuring the right “degree of openness” to
the environment can be incredibly difficult as it can influence a system’s stability and opportunities for growth.\textsuperscript{23} The system that is “too responsive” becomes unfocussed, possibly finding itself trapped in a negative state. Alternatively, the system that is not responsive enough looses touch with that which can threaten it, resulting in a similar outcome.

Each of the attributes of systems theory just described provides an important foundation for the remainder of Chapter II and perhaps more importantly, for the remaining chapters of this thesis. Absent a basic understanding of the distinguishing attributes of systems theory and their implications for social organizations, the reader will find it difficult to understand the critical concepts of systemic change and organizational learning which are integral to the creation of this framework.

2. Organization: Defined

Through building a basic awareness of the principal schools of organizational thought and systems theory, the student of organizational theory can begin to identify certain features, which may define organizations. As a starting point, most theorists would accept that organizations are systems made up of people, or groups of people. The operation of biological and ecological systems and their relationship to their environment, have provided the basis for understanding organizations as social systems. Debate may arise as to whether these systems are ‘open’ to, directly affected by, or are ‘closed’ to their environments, or, whether they are simply reflective parts of a larger system.\textsuperscript{24}

\textsuperscript{23} Seiler, 25.
\textsuperscript{24} Morgan, 252-261.
Whether they are open to or closed to the environment, organizations are also characterized by input-output transactions with the environment. People in social organizations transform inputs such as human capital into the system into outputs such as products, services, and ideas. This relationship between a system and its environment is not strictly one way with the environment prompting the system to act. It should be understood that a system both responds to and acts upon its environment. An environment, for example, may impose certain constraints upon a system in terms of the choices of available resources. At the same time, a system can also affect its environment when it selects from among available resources. This idea is important in that it reinforces the notion that the system is not separate from its environment. The term “autopoeisis”, which is further explained in the Chapter III of this thesis, describes this notion that the system and its environment should be viewed as being part of a larger system.

The concept of an organization interacting with its environment becomes important as we try to understand the types of forces that affect the performance of modern organizations and the capacity of organizations to cope with change. This process of transforming inputs into outputs can also affect and shape the development of the organization. One way of viewing the process by which organizations evolve is in terms of a process of creative destruction or “innovation”. This describes the process whereby an organization takes information and uses it to affect the outputs it produces, which, in turn, can affect the inputs going back into the organization, ultimately changing

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25 Seiler, 25.
26 Morgan, 295.
the organization itself. This concept is discussed in greater detail in the Chapter III of this thesis.

According to Katz and Kahn, organizations are open systems characterized by a transformation of energy inputs into systems outputs.\(^{27}\) The transformation of inputs into outputs is based on the organization having a relationship with its environment. In social systems, this relationship is based on the patterned activities of a number of individuals. These activities can be complementary or interdependent with respect to a common output or outcome.

Seiler, like Katz and Kahn, employs the "organization as a system" metaphor to understand organizational behaviour.\(^{28}\) Systems, in this context, are comprised of sub-systems, which are in turn comprised of parts that have particular functional relationships with one another. In this way, a hierarchy of systems can be seen to exist, which means that a change in one of the sub-systems can have implications in other sub-systems that are part of a larger system. Environment, in this context, may not be completely external to a system if one considers the hierarchy concept. For example, an organization may first be seen as part of the aerospace industry, then part of the manufacturing sector, and then of the larger economy of a nation. Each 'environmental context' may have certain factors, which can ultimately impact upon the organizational sub-system, and vice-versa.

Seiler adds another twist to this notion that organizations transform inputs into outputs, suggesting that what goes into an organization can ultimately be influenced by its outputs through a process of feedback. This process of feedback, which will be


\(^{28}\) Seiler
discussed in greater detail, allows an organization to maintain equilibrium. It can also enable the organization to evolve and to innovate.

Another variation on the definition of organizations sees them as systems of coordinated activities in pursuit of a purpose or goal. Selznick refers to "a system of consciously coordinated activities or forces of two or more persons." While this definition suggests the recognition of purpose or intent through the term 'coordination', it does not address the context or 'environment' within which the activities are taking place. If we accept that organizations are not "closed systems" - that is, that there are inputs and outputs which are associated with the organization interacting with its environment - then the relationship with the external environment must be included within our definition.

Lawrence and Lorsch offer another definition of organizations, which suggests a relationship between organization and environment. They purport that "an organization is the coordination of different activities of individual contributors to carry out planned transactions with the environment." This definition has a number of strengths. First, it recognizes that people, not organizations have a purpose. The notion of different activities recognizes the concept of a division of work among the various contributors to the organization. Coordination relates to the achievement of the goals of the organization's members.

From the previous discussion, a number of attributes of organization have been

30 Daniel Katz and Robert L. Kahn, "Organizations and the System Concept", in Shafritz and Ott eds., 276.
identified which collectively provide a working definition of organization. First, it can be argued that organizations can indeed be viewed as systems. In addition, they do have some sort of shared purpose as an underpinning of their environment. Moreover, they have some form of relationship with their environment in that they are not completely closed to it. They can draw inputs from their environment and feed their outputs back into it. They can also draw information from their environment that allows them to adjust their relationship with it, resulting, perhaps, in changes in their inputs and outputs. The nature of the relationship between an organization and its environment can also be self-referential as organizations attempt to reshape their identity to maintain a certain perception of themselves, which is driven by their environment. As will be shown, the organization’s relationship with its environment can be particularly important for understanding how an organization changes. Viewed together, these key aspects of organization are important as they provide the basis for a definition of learning organizations.

2.1 Systems Thinking and the Learning Organization

Collectively, the attributes of organizations, particularly those relating to systems, suggest ways of understanding and, as will be discussed in greater detail later, of leading and managing organizations. According to Peter Senge, “systems thinking” is the cornerstone of how “learning” organizations think about their world.32 He describes it as the discipline for seeing structures that underlie complex situations, and as the necessary tool for leaders to differentiate high and low leverage change. Systems thinking, alone, is

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32 Peter Senge, 69.
necessary but insufficient to deal with complexity in organizations. Complexity in organizations refers to the fact that systems of interaction within organizations can be both ordered and chaotic. The existence of internal complexity means that random disturbances can produce unpredictable events that reverberate through a system.

Senge refers to two types of complexity that can be present in organizations:

- **Detail Complexity** – which involves dealing with many variables;
- **Dynamic Complexity** – which involves situations where cause and effect are subtle and where effects of interventions over time are not obvious. (That is, the same action has different effects in the short and long run and has one set of consequences locally and in another part of the system.)

The real advantage lies in understanding dynamic complexity and its effects, and in correctly reading and applying it to a given situation. Leaders, in this context, need to understand dynamic complexity through their own learning. With this learning comes an understanding and appreciation for the fact that system thinking can imply two things:

- Seeing interrelationships rather than "linear" cause and effect relationships; and
- Understanding change as a process rather than as a point in time.

The capacity to see interrelationships and to view change as a process are predicated on an understanding of feedback. "Cybernetics" is the term used to explain the capacity for a system to take in and use information to help it engage in self-regulating behaviour to maintain a steady state. The process of information exchange depends itself on the existence of negative feedback which involves the automatic detection and correction of error so that movements beyond a specified limit will initiate movements in another direction to maintain a desired course of action. In cybernetics, therefore,
systems take in information in order to detect and correct error and maintain a certain state.

Cybernetics, as a system of information exchange and feedback, encompasses the following principles:

- Systems must have the capacity to sense, monitor and scan significant aspects of their environment;
- They must be able to relate this information to the operating norms that guide system behaviour;
- They must be able to detect major deviations from these norms; and
- They must be able to take corrective action when these deviations are detected.

Systems, including complex ones, can detect and correct errors in operating norms so that they influence the standards that guide their operating norms. The key is to use feedback from their environment to not only correct for error, but to question the appropriateness of what they are doing. In this way, systems not only learn from the info they take in, they can engage in self-reflective learning on a continuous basis. Through this process of self-reflection, they are said to engage in double-loop learning or "learning to learn". Single loop learning, on the other hand, is simply reflective – in that it corrects for error but doesn’t question what is being done.

Two kinds of feedback can exist – both positive and negative. Senge refers to these forms of feedback as reinforcing and balancing feedback. The interaction of both types of feedback influences the growth and development patterns of the system.

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33 Morgan, 81.
34 Morgan, 86-87.
35 Senge, 73.
Reinforcing feedback occurs when there is a situation where things are growing. It can also occur when things are in decline. It can significantly magnify the effects of a small change. In this respect, it ignites both "vicious" and "virtuous" cycles of change.\textsuperscript{36}

Reinforcing feedback rarely occurs unchecked or in isolation. This can be where balancing feedback happens to limit the growth or decline – as the system seeks stability. Each system has an underlying goal that drives it. Balancing feedback works to help point the system in the direction needed to realize its goal(s). Organizations have a number of complex balancing processes at work, such as the company that refills its inventories. These processes have to reflect the organization’s own rhythms, goals, and norms.

Many barriers to double-loop learning in traditional organizations can exist. Hierarchical organizations can inhibit information flows and in so doing inhibit organizational learning. Accountability schemes can also pose problems for learning in that, inappropriately applied, they encourage defensive mechanisms which inhibit people from questioning what occurs in the organization or questioning existing operating systems and norms. A pervasive groupthink can take over, causing people to be less inclined to challenge operating norms.

In addition to the need to scan the environment and question norms and values, Cybernetics, suggests the following about systems:

- Their survival depends, in part, on allowing an appropriate strategic direction and pattern of organization to emerge; and

\textsuperscript{36} Senge, 81.
• Their survival also depends on evolving designs that encourage double-loop learning to emerge.\textsuperscript{37}

It should be noted that while the systems model and the principles of cybernetics can suggest much about the behaviour of living systems, they should not be seen as a prescription for organization survival. Complex systems, when thrown far from equilibrium into ‘chaos’, are not easily controlled. It may be difficult, given uncertainty in the system, to predict the form into which it ultimately ‘organizes’, and when this will occur.\textsuperscript{38} The ability to adapt and cope with uncertainty must also be viewed as important for organizational survival. As suggested earlier, attempts to ‘direct’ the transformation process can create unintended consequences. Again, this idea serves as an important reminder that while design and guidance of an organization may be possible, control is likely not. Despite this somewhat sobering proposition, practice of the principles associated with cybernetics and learning should better equip an organization to deal with uncertainty than it might otherwise. The importance of leadership, in this sense, is measured in terms of its capacity to influence learning in an organization, potentially finding opportunity in adversity.

2.2 Defining the Learning Organization

Although systems theory would suggest that organizational effectiveness, and ultimately survival, may depend on the existence of double loop learning or ‘learning to learn’, not all organizations have developed this capacity. In a more theoretical sense, organizations which have internalized this capability at all levels can accurately be

\textsuperscript{37} Morgan, 90.
\textsuperscript{38} Merry, 52.
described as ‘learning organizations.’ Organizations that will excel in the future are those that discover how to tap people’s commitment and capacity to learn at all levels in an organization.\(^3^9\)

Viewed through a systems theory lens, a number of dimensions of ‘learning organizations’ are apparent. Three key dimensions are consistent with cybernetic principles already outlined:\(^4^0\)

- **Systems Thinking** – members of an organization think in terms of wholes as opposed to parts of a system;
- **Frames of Reference** – members of organizations have mental models, or frames of reference from which they view the world. If members of an organization are willing to respond to and learn from feedback, they will also be ready to challenge their frame of reference and its appropriateness; and
- **Team Learning** – members of an organization must think together to suspend their own beliefs and welcome contrary points of view, which may enhance their own viewpoints. Team members have to recognize patterns of defensiveness that may limit team learning.

Each of these dimensions of the learning organizations is formed over time and, as will be suggested later, through the work of leadership. Senge suggests that there are laws that govern the creation of such an organization.\(^4^1\) Key points include:

1. **Today’s problems come from yesterday’s solutions** – Systems can experience evolutionary and revolutionary growth through innovation.\(^4^2\) This idea will be

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\(^{39}\) Senge, 3.
\(^{40}\) Morgan, 83-90, Senge, 6-11.
\(^{41}\) Senge, 57-67.
\(^{42}\) Morgan, 295-296.
elaborated upon in the discussion on innovation as a process of creative
destruction in Section III;

2. The Harder you Push Back the Harder the System Pushes Back – Systems –
both the people within an organization and the larger system of which it is part -
may exert force back on an organization in the opposite direction in order to
counteract changes being made. This constitutes compensating feedback and is
also related to the idea of creative destruction, in that a system will try to exert an
equal or greater force to counter a force moving in an opposing direction. This is
evident in organizations where changes are being imposed from the top,
prompting managers and others to push back. The idea of a larger system pushing
back on a sub-system is evident when a small organization introduces an
innovation that threatens the potential dominance of other organizations in a
system;

3. Behaviour grows Better Before it Grows Worse – Short-run responses to
compensating feedback will lead to reoccurring problems;

4. The Easy way out Usually Leads Back in – Familiar solutions or approaches
lead to persistence of the same situations in the organization;

5. The Cure can be Worse than the Disease - Short-term solutions can lead to
long-term dependency;

6. Faster is Slower – Systems have their own natural pace of growth. Managers
can’t control the system outcomes – they can, however, influence design (e.g.,
creating an environment accepting of change etc.)
7. Small Changes can Produce big results but the areas of highest leverage are often the least obvious – Strategic points exist in a system at which small changes can lever a significant impact. This point will also be returned to under later sections.

8. You can have your cake and eat it too, but not at once – Competing views must be incorporated into solution development. The organization’s culture must encourage an honouring of different views. As well, it must encourage thinking about things in a system and process way as opposed to just at a point in time.

9. There is no blame – Under a systems perspective, the environment and the organization are part of a larger whole; thus, the notion of “us versus them” is no longer valid.

As suggested, learning organizations are distinguished by their capacity for double loop learning. To be competent at this, they must undertake two types of learning: 1) adaptive learning which is associated with single loop feedback, and 2) generative learning which is directly associated with double loop learning.\(^{43}\) Generative learning is forward looking. This is consistent with the concept that change is constant and that the healthy system (organization) is always in a state of transformation, seeking to reach a better state. Through the process of generative learning, the organization challenges what is learned from its adaptive learning, as well as the assumptions that are later formed from such learning. Through learning, the organization evolves and recreates itself. In a study of companies that have survived for extensive periods of time – some for hundreds of years – Arie de Geus affirms the correlation between

\(^{43}\) Sullivan and Harper, 193-194.
organizational survival and learning. He notes that, "once a company has adapted to a new environment, it is no longer the organization it used to be, it has evolved. That is the essence of learning."44 Senge similarly notes that, "through learning we reperceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life."45

Viewed together, the attributes and principles of the learning organization suggest a number of possible drivers for leadership, as well as attributes and tasks. This is a key assumption, which underlies the creation of a framework to understand the role of leaders and leadership and their relationship to transformation.

Having described how the concepts behind systems theory and learning organizations can influence organizational action and performance, this discussion cannot proceed further without an explanation of organizational effectiveness. It is this discussion to which we turn our attention in the next subsection of this Chapter.

3. Organizational Effectiveness

Most organizational theorists would acknowledge that there are a number of ways to approach the measure of organizational effectiveness. Moreover, they would also recognize that no one approach is adequate and that there may be a need for multiple models to understand the concept of effectiveness.46 The main approaches to measuring

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45 Senge, 14.
effectiveness relate to the functioning of key aspects of organization. One possible approach focuses on outputs and the accomplishment of goals. Under this approach, an organization whose outputs come closest to meeting its goals would be deemed as most effective. This approach typically works best when organizational goals are clearly understood and can be measured.

Another approach is to look at the success with which an organization acquires the resources it needs from its environment. The closer the organization comes to acquiring all of its resource needs, the more effective it is deemed. This approach can work well when a clear connection exists between the resources received by the organization and the outputs produced. Following in this line of thinking, it might be assumed that an organization storing significant amounts of resources may not be as effective because it is not translating its inputs into outputs. That said, there must be some reasonable allowance for an organization to maintain, for example, a small inventory.

A third possible approach emphasizes the internal processes and operation of the organization. In this regard, the most effective organization operates as one whose internal operations function smoothly. Trust is a key operating principle for such organizations. There is also little internal strain in the organization, and its members are highly integrated. The organization’s members are part of a coherent whole; they are part of a “healthy system”. This approach typically works well when the organization’s

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48 Cameron, 67.
49 Cameron, 67.
internal processes and procedures are closely associated with its primary task or what it produces.

A fourth approach looks at the degree of satisfaction enjoyed by each of an organization’s strategic constituencies.\textsuperscript{50} A strategic constituency is any group of individuals that has some stake in the organization and its performance, including:

- Resource providers;
- Users;
- Producers of its outputs; and
- Groups whose cooperation is essential for the organization’s survival.

Those whose lives will be significantly affected by the organization’s success are among the key constituents or stakeholders. The more satisfied these groups are, the more effective the organization is deemed to be. This approach works best when external constituencies exert a large influence over the organization or when its behaviour is highly reactive to constituency demands, such as with a governing body.

While each of the aforementioned approaches has its merits, it is clear that none on their own is sufficient to explain organizational effectiveness. This is because no one of the approaches described can adequately explain all situations or all types of organizations.\textsuperscript{51} With the goal approach, for example, some organizations may be effective in areas that aren’t necessarily consistent with their goals. As well, goals can be set too low, can be misplaced, and can even harmful to the organization or others if they are realized. Examples, of the latter include achieving profit at all costs, or a government

\textsuperscript{50} Cameron, 67.
\textsuperscript{51} Cameron, 68.
forcing a piece of legislation through which may seriously threaten the long-term interests of many in order to achieve some short-term benefit or gain.

The system resource approach has its own limitations.\textsuperscript{52} Some organizations can be effective by other standards even if they don’t acquire the optimal amount of needed resources. For example, some small universities and colleges can produce high-calibre students despite their relatively smaller population and resource base. Some professional sports teams, for example, have defied the odds and produced high calibre sports teams without the high salaries and “superstar” line-ups.

The process approach can also be flawed.\textsuperscript{53} An organization can still appear to be effective even when its internal organizational health is low. There are many stories of organizations that for short periods of time excel in terms of financial indicators. This can occur despite their internal organizational processes being less than ‘functional’. Cameron also notes that organizations, which are too ‘tightly’ run may be less innovative because there is little room for improvement and no real slack for exploring improvements.\textsuperscript{54}

Finally, the strategic constituency approach can be limited in that organizations can be effective even if they completely ignore or operate in conflict with constituent demands.\textsuperscript{55} A recent example is the Alberta provincial government, who by number of indicators might be deemed effective, apparently defied the wishes of a significant group of constituents with the implementation of its bill with respect to funding for private health care clinics.

\textsuperscript{52} Cameron, 68.
\textsuperscript{53} Cameron, 68.
\textsuperscript{54} Cameron, 69.
\textsuperscript{55} Cameron, 69.
It is clear that individually each of these approaches is insufficient to explain organizational effectiveness. What may be needed, therefore, is a model that encompasses a more comprehensive way of measuring effectiveness. Consistent with system thinking, this model would be more able to account for the variety of elements that might influence effectiveness. It would incorporate a number of the elements of organization, such as goal realization and internal effectiveness into one model, and would be more consistent with "systems thinking". The Burke-Litwin model of organizational performance and change, which incorporates a number of components of organization into one framework, could provide a more "holistic" approach to understanding and assessing organizational effectiveness than the aforementioned ones.

The Burke Litwin model provides one of the most comprehensive frameworks for understanding organizational performance and change. The model comprises a group of specific variables and the cause and effect relationships between them that influence organizational behaviour and change. It has its foundation in systems theory, where the organization, as an open system, is affected by interaction with its environment. The external environment of the organization represents the input to the system and the organization's performance, the output. The cause and effect relationship between performance and the external environment moves in both directions with the other variables serving as the throughput for the system.

The organizational variables that comprise the Burke Litwin model include the following:

- External environment
- Leadership

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56 Burke and Litwin.
• Mission and strategy
• Organizational culture
• Structure
• Management practices
• Work unit climate
• Systems (policies and procedures)
• Task and individual skills
• Motivation
• Individual needs and values
• Individual and organizational performance

The model divides these factors into two groups: transformational factors and transactional factors. The notion behind this division is that transformational factors -- which include the external environment, leadership, mission and strategy, organizational culture, and individual and organizational performance -- interact to create a need for organizational transformation. Transformation, in this context, is different than change. Indeed, Burke and Litwin would argue that transformation will require entirely new behaviour sets from its members.

Change, on the other hand, is more directly related to the transactional half of the model. Transactional factors, according to Burke and Litwin, describe the relatively short-term reciprocity relationships between people and groups that can alter the organizational variables. The transactional factors include management practices, structure, work unit climate, systems (policies and procedures), task and individual skills, motivation, individual needs and values, and individual and organizational performance.

57 Burke and Litwin, 7-8.
58 Burke and Litwin, 7.
59 Burke and Litwin, 8.
Given the causal nature of the Burke Litwin model, the relative influence of each factor with respect to organizational performance will vary. The following provides a brief description of each factor, in addition to leadership, and its potential influence on the organization.

**External Environment** – The external environment consists of outside conditions or situations that influence the performance of the organization. The extent of external influence can vary given the stability and types of organizations within a given environment. Emery and Trist refer to the combination of randomness of organizations and the interaction between them within an environment as the “causal texture” of the environment. The convergence of computing and communications technologies, for example, has created highly complex and competitive industry environments where the pace of change is rapid. In such industries, environment is likely to significantly influence the organization’s performance.

**Mission and Strategy** – The mission refers to what the organization’s purpose is, as determined by the highest executive group. It also speaks to what the organization’s employees or members understand its purpose to be. Strategy, in turn, is what the organization will do to achieve its purpose over the longer-term. While important, the choice and effective deployment of mission and strategy may depend, to a large degree, on the leader and the clarity of his or her vision.

**Organizational Culture** – Organizational culture describes the values, beliefs, atmosphere or ‘climate’, standards or ‘norms’, the traditions or ‘symbols’ and

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philosophy that define an organization.\textsuperscript{61} Culture can be shaped by the
environment and by leadership.

\textbf{Structure} – An organization’s structure describes the arrangement of functions
and people into specific areas and levels of responsibility, decision-making
authority and relationships to effectively advance the organization’s mission and
strategy. Structure can have a variety of influences on the organization. It can
influence information flow and coordination, as well as the integration of
behaviors within the organization.\textsuperscript{62} As a result, it can be said to shape
management practices. Structure can also be seen as related to control, but not
necessarily synonymous with it.\textsuperscript{63}

\textbf{Management Practices} – Management practices describe the use of human and
material resources to execute an organization’s strategy. Management practices
can affect other transactional variables such as climate. As a transactional factor,
management practices are more of an inducement to incremental change than
transformation.

\textbf{Systems} – Systems are the standardized policies and mechanisms, such as reward
and recognition systems and management information systems, which facilitate
work. Clearly, systems such as reward and recognition systems can have an
impact on the behavior of employees. As well, information systems can be a
strong enabler of organizational performance. However, there are limits to the

\textsuperscript{61} The Price Waterhouse Change Integration Team, \textit{The Paradox Principles}, (Burr Ridge, Illinois: Irwin
\textsuperscript{62} Robert Duncan, “What is the Right Organization Structure?” \textit{Organizational Dynamics} (Winter 1979)
59-60.
\textsuperscript{63} William G. Ouchi, “The Relationship between Organizational Structure and Control”, \textit{Administrative
Science Quarterly}, (March 1977, volume 22)
impact of systems on an organization. They are likely to have limited effect, for example, if leadership is absent.

**Work Unit Climate** – Climate represents the collective current impressions, expectations and feelings of members of local work units, which have an impact on their relationships towards others and other organizations. A climate that engenders teamwork, for example, can positively affect performance.

**Motivation** – Motivation in an organization describes the behaviors engendered by the combination of achievement, power, affection and other human motives. Motivation drives an individual towards achievement of some goal. Motivation, in conjunction with other factors, such as systems can influence individual performance and ultimately organizational performance. As will be discussed further, this is also a critical aspect of transformational leadership.

**Task and Individual Skills** – Task and individual skills effectively refer to the skills and competencies required for people to complete the tasks they are assigned. Absent the correct match between people’s skills and tasks, individual and organizational effectiveness is likely to be compromised.

**Individual Needs and Values** – In an organization, individual needs and values provide the desire and worth, which motivate individual actions and thoughts. Individual needs and values can influence individual and ultimately, organizational performance. For example, an individual may value time for their families outside of the workplace more than rapid advancement in their jobs. Adhering to these values, therefore, can involve a trade-off between individual need and organizational performance.
**Individual and Organizational Performance** – Using systems theory as a basis, individual and organizational performance refers to an organization's outcome or result, as well as the indicator of effort and achievement. It can be affected by the interplay of both the transformational and transactional factors. According to Cameron, the concept of individual and organizational effectiveness must first be clearly defined in order to accurately assess an organization’s performance.64

4. **Summary**

The purpose of this section was to provide a theoretical basis for defining organization and from which organizational performance and the factors influencing it could be better understood. All of the main schools of organizational thought have clearly shaped our view of organizations, and continue to influence them even today. For example, Weber, of the Classical theorists, recognized early the potential problems of command style organizations in terms of performance – an issue which many organizations continue to wrestle with today.

Of the various schools of organizational thought, Systems theory was selected to provide the lens through which organizational performance and change are viewed in this thesis. Although it was recognized that there are differences between the operation of physical and social systems, there are, nonetheless, attributes of systems that can be universally applied in terms of describing systemic interactions and change. The relationship of a system to its environment, the concept of throughput, and the notion of

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64 Cameron, “Critical Questions in Assessing Organizational Effectiveness”
negative entropy can all be used to explain how social organizations function.

It was also recognized that systems can be complex and can be thrown into chaos. This means that changes to a system - particularly one far from equilibrium - may not be linear in terms of their effects. In other words, a small change may have a considerably larger effect on the system than would be expected.

Another important principal from the operation of physical systems, in terms of its capacity to explain the function of social systems, is feedback. The capacity to read, understand, and make use of feedback can be integral to any system’s performance and survival – whether physical or social. In trying to reinforce this correlation, de Geus observes that companies such as the Hudson’s Bay Company and Dupont have survived because of their sensitivity to their environments and ability to adapt themselves to changes in the world around them.\(^5\) This is where the concept of adaptive learning comes into play, as the system launches a counter reaction to any perceived threats. Feedback, it was also pointed out, can prompt an organization to respond incorrectly to what is happening in its environment. This is where the organization’s capacity for generative learning, which is associated with the capacity to question existing norms and standards and to factor these and adaptive considerations into planning for the organization, can come into play. In the context of complex systems theory, learning can help an organization adapt to, but not direct, change. Leadership, in that regard, may encourage learning and, in so doing, help the organization deal with the uncertainty created through change.

It was also suggested that organizations may be best understood as having a

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\(^5\) Arie de Geus, 53-54.
number of elements which can influence, and may be influenced by, its performance. Each of these elements and the interplay between them contribute to the uncertainty of complex systems. A system’s reaction to feedback, for example, may precipitate changes to strategy and structure. Culture may also be affected, but at the same time, can influence how a system responds to feedback. Because of the complex interrelationships among organizational elements, an integrated or ‘systemic’ approach to understanding performance is probably the most effective framework through which to view the operation of an organization. It can also provide a sound basis from which to more precisely define organizational change.
III) A DEFINITION OF CHANGE IN ORGANIZATIONS

Having established a systems-based definition of organizations and, on that basis, an understanding of their relationship with the environment, it is now possible to understand the process of change in organizations. More specifically, the nature of organizational change can be described in order to establish a systems-based definition of change and to distinguish between change and transformation. In an era of discontinuous change, this distinction will be key as it lays the basis for understanding how the various elements of organization influence, or are influenced by, transformation. In that regard, this Chapter has three principle objectives:

- To define and describe the differences between transformational and incremental change and the evolution of patterns of change in complex systems;
- To define and explain innovation as the basis for transformation of a complex system; and
- To understand the implications of the creative destruction cycle of innovation on the elements of organization.

By establishing a definition of transformation, the linkage between leadership and organizational change can be further investigated and more clearly understood. We begin then with an analysis of change versus transformation in organizations.

1. Change and Transformation

_In tomorrow’s world, winners will be characterized by their ability to handle continuous transformation; they will have made transformation – not process_
Improvement – a part of their culture. It is only by a process of transformation – continuous transformation – which organizations that are competitive today can change and be competitive tomorrow.66

In an era where the speed and nature of change is having a profound effect on organizations, most are looking for ways to respond to these forces: to make changes to their organizations to make them more flexible, more adaptable. Among these organizations, a smaller number are looking to do much more than simply improve or alter existing processes in their organizations: they are looking to fundamentally reform or “transform” their organizations. They are looking to make changes that will chart a new course, a new future for their organization – a course that will change behaviours and will dramatically alter their approach to fulfilling their missions. Ultimately, they are looking to remake their organizations.

It is the dramatic alteration of an organization versus mere adaptations to existing processes and structures that connotes one form of transformation. ‘Change’ in organizations has been advanced through management tools such as process improvement and re-engineering efforts. Change can be evolutionary or revolutionary. It can occur gradually within an existing paradigm, or it can represent a shift to an altogether new paradigm – a transformation.67 Organizational transformation can occur more rapidly, through a comprehensive initiative, or it can occur over time through a series of small changes. Neither is a simple process. Change, in this regard, is part of any transformation initiative.

66 Sullivan and Harper, 166.
67 Sullivan and Harper, 156.
Transformation can take change further. “Transformation is moving an organization to a higher plane, leading it to become something qualitatively different.”\(^{68}\) Pascale, Millemann and Gioja refer to transformation as fundamental change or revitalization.\(^{69}\) They suggest that corporate revitalization efforts go well beyond shifts in strategy, process or structure that they can result in fundamentally different organizations.

...Revitalization means a good deal more – it means a permanent rekindling of individual creativity and responsibility, a lasting transformation of the company’s internal and external relationships, an honest-to-God change in human behaviour on the job. Its realizable goal is a discontinuous shift in organizational capability – a re-socialization so thorough that employees feel that they are working for a different company, a leap in a company’s ability to meet or exceed industry benchmarks, a jump in bottom-line results.\(^{70}\)

Gradual change can occur that is not transformational. Depending on the organization and the environment, strategies of both gradual change and transformation may be appropriate and can emerge. Few organizations are able to sustain continuous ‘large-scale’ change. A balance between large-scale change programs and some smaller scale change is often required to ensure that the organization does not become ‘fatigued’. Such fatigue, along with the tendency to become too “change-focussed” may affect organizational performance as the organization struggles to balance its change programmes with the day-to-day operating requirements of the business. Thus, it seems

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\(^{68}\) Sullivan and Harper, 148.


\(^{70}\) Pascale, Millemann and Gioja, “Changing the Way we Change”, 128.
likely that organizations – even those in the midst of discontinuous change – will maintain a certain measure of consistency to ensure that they can continue to function.

1.1 Systems Theory as a Foundation for Understanding Organizational Transformation

Systems theory can provide a framework for understanding incremental change, transformational change and how patterns of change evolve in complex systems. Complex systems, it should be noted, are defined by the interaction of their many interdependent parts via a web of feedback loops, and by their capacity to change inputs into outputs in a non-linear way. An important aspect of systems theory that can help explain the change process in complex systems is the concept of autopoiesis. This refers to the ability of a living system to self-renew or self-create through a closed system of relations. The capacity for self-renewal is associated with three features of these systems: autonomy, circularity, and self-reference. The concept of autopoiesis suggests that changes in the system do not result from external changes but instead from variations within the system which modify the overall organization of the system. In other words, the environment is not seen as external to the system, it is instead seen as part of the overall system – part of its organization because of its domain of essential interaction.

There are inherent dangers for organizations that view themselves as separate from their environment. Such “egocentric” organizations, as Morgan refers to them, have a fixed notion of who and what they are, which can cause them to try to sustain a certain identity at all costs. He suggests that these organizations will, for example, try to

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72 Morgan, 253.
73 Morgan, 259.
sustain identities that don’t make sense in the context of which they are part.  

Typewriter and watch makers who ignored digital technologies, and didn’t understand the need to rethink their value chains as the larger system responded to the convergence of information processing and communication technologies are examples of egocentric organizations.

Chaos and complexity theory combine to reinforce the larger systemic view of the relationship between an organization and its environment as described by autopoiesis. In explaining change in a system, these theories can be combined to suggest that random disturbances or changes to a system create unpredictable events in a complex system that cause novel patterns of change to emerge. In that regard, “attractors” play an influential role in shaping of patterns of emergent change. In some instances, existing attractors will fight the energy and instability injected into the system, returning the system to a variation of its former equilibrium state. In other instances, an attractor can trap a system in loops of predictable but dynamic states. Oftentimes, this may be an undesirable state, at which point it may be advantageous to introduce instability in the form of another attractor to the system. This instability can push the system towards a more desirable state. Still other attractors can push it into a completely new configuration or form. Respectively, these three forms of attractors are known as point, cycle, and strange attractors. For the purposes of this discussion, ‘strange’ attractors, which can lure systems to the edge of chaos, are probably most relevant.

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74 Morgan, 259.
75 Morgan, 262.
76 Morgan, 262.
77 Morgan, 265.
78 Pascale, Milleman, and Gioja, Surfing the Edge of Chaos, 70.
As attractors push and pull a system, it can reach a point referred to as a “bifurcation point”, where the energy of the system can throw it into a new state. These points and their associated attractors are said to always exist in latent states in the system. In complex non-linear systems the influence of attractors can precipitate major “catalytic” change in a system or incremental changes which, over time, ultimately lead to major changes. While both scenarios are premised on the idea of transformation as discontinuous change, the latter recognizes that in many organizations transformation may result from a series of changes, which come together over time to create a significant enough basis for change to shift the system to a different state. This notion raises two important questions: how does this occur, and why? As enough changes focussed on improvement come together, they can eventually lead to innovation in products or services, or both. Eventually, as Drucker suggests, “continuous improvements lead to fundamental change.”

As for why this occurs, depending on the organization and its environment, discontinuities can sometimes be large enough that it may not be practical to think in terms of a single transformative event or initiative. General Electric, for example, has employed an approach to change which recognizes that major changes are not always appropriate and consequently should be balanced with less disruptive continual changes in order for the organization to succeed. This idea recognizes that these continual improvements can be employed as part of a strategy of “dynamic stability” whereby major discontinuities are bridged through a succession of smaller but nonetheless

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significant changes. Organizations, as suggested, must be able to balance the need to adapt and change with the need to maintain operations in order to ensure survival. This may also manifest itself in terms of a pattern of periods of incremental or “evolutionary” change, interspersed with periods of more “revolutionary” or transformational change. The capacity to balance these considerations may be another facet of the ability to ‘harness adversity’, as both reinforce the need for a learning orientation.

“Thin threads” of change is the name coined by Sullivan and Harper to describe these sorts of improvements, which eventually weave a pattern of change sufficient enough that the whole organization begins to shift to a new paradigm. They must also be realistic and should not be completely independent. In short, they should be linked with and precipitate other changes. In this way, a small change may lead to another, and another, and ultimately, to transformation.

The real challenge in transformation is to bridge the discontinuity while continuing to operate effectively today. While trying to look forward, organizations often lose track of what they need to do today. The reality for most organizations is that they cannot put their business on hold. Transformation, therefore, must recognize the realities of today while taking the organization to a new tomorrow. In this respect, thin threads can provide a means for building a future one key step at a time.

The concept of attractors, and their capacity to take a system towards a new state, is critical for understanding the role of leadership in circumstances of discontinuous change. The tasks of leadership, in this context, will be further explored in Chapter VI.

81 Abrahamson, 76.
83 Sullivan and Harper, 177-78.
The previous description of attractors and bifurcation points offers one part of an explanation for how transformation occurs within a complex, non-linear system. An extension of this explanation includes the influence of feedback loops on a system. More specifically, feedback loops have the capacity to draw a system towards that point where it can ‘flip’ into a new state – either positive or negative – or can maintain it in an existing state – either positive or negative. The feedback process of a system, therefore, can explain how systems change over time – either gaining or preserving a given form as a result of feedback. Some systems may experience exponential change, which is constant change that over time runs out of control. Positive feedback loops that do not have a stabilizing mechanism can prompt exponential change in a system. Effectively the system runs out of control as it continues to feedback into itself, sending signals that reinforce the existing state whether or not it is desirable. In so doing, positive feedback can produce a set of changes that are quite out of proportion with the initial change to the system.

In order to balance the positive feedback that drives the system to reinforce its existing state, negative feedback could be introduced into the system. The negative feedback acts to challenge the positive forces of change. In public policy, this can be seen in the influence of stakeholder groups over government legislative and policy agendas. It can also be seen in instances where a majority government is reduced to a minority government or voted out of office in order to keep the power of government in check.

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84 Morgan, 274-283.
1.2 Innovation and Transformation – The Concept of Creative Destruction

Another way of viewing the nature of transformation is to understand it in terms of “dialectical”, or opposing forces. Any process of change is therefore seen as containing elements of counter-development that will generate opposition to the change. According to Morgan, this form of dialectical thinking about change can also provide a basis for understanding the process of innovation. Innovation is typically associated with new technologies and the development of new products. A broader definition of innovation views it as “the process of bringing any new problem-solving idea into use.” It also includes the generation and acceptance of these ideas, as well as their implementation. These innovations can result in new products, services, or in new ways of doing things within an organization.

Innovations can occur in a variety of settings. Kanter suggests that the type of innovation is dependent on the stage of development of the industry or the products or services within it. While Kanter’s argument seems to suggest that innovation is dependent on the state of evolution of a system, it can also be argued that the process of innovation influences the evolution of a system. The connection between innovation, or technical progress, and development of new forms of organization has long been recognized. However, the exact relationship between innovation and organizational evolution has long been a source of debate. Two distinct schools of thought have been dominant in this debate. Marxist philosophy, on the one hand, clearly views technical

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85 Morgan, 292-297.
86 Morgan, 295-297.
88 Kanter, 20.
89 Kanter, 21.
progress as underlying every kind of change in social order. Another view sees technical progress as the outcome of changes in society’s institutions.

Viewed through a systems perspective, it becomes clearer that this relationship is not an either/or proposition. There is an important and necessary interdependence between the two. Social institutions shape and are shaped by innovation. The two effectively move in tandem. Innovation won’t occur unless an appropriate social environment is present. Mass markets, for example, have created, and been created by, innovations in techniques of mass production. From a systems perspective, this idea is consistent with the earlier assertion that systems both act upon and are acted on by the environment.

The nature of the innovation process in an organization can again be understood in terms of “attractors” and “feedback loops”. Attractors can draw a system towards a new state of being through the introduction of challenges and, ultimately, changes to established practice. The role of feedback is to promote the learning required to challenge the systemic wisdom of the existing organization. Through feedback, the organization must recognize and accept the need for the new practice, or innovation. This is where the two types of learning introduced earlier come into play: adaptive learning, which is important for the organization to survive, and generative learning, which is necessary for it to create. It seems clear that the ability of organizations to survive and thrive is enhanced through the internalization of both forms of learning in their operations. As Judy Rosenblum, Executive Vice President of Duke Corporate

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91 Burns and Stalker, 20.
92 Burns and Stalker, 34.
93 Senge, 14.
Education Incorporated – a company created by Duke University and the Fuqua School of Business – notes, “learning isn’t just something that occurs naturally – it’s something that the company uses to drive the business.” To do this she advocates that, “learning has got to be connected directly to the business...learning needs to be embedded in processes, projects, and experiences.”

The “dialectical” aspect of this thinking emerges from the fact that the organization must always be challenging the conventional wisdom, which pushes it in a certain direction. Practically speaking, this involves measuring results and asking “why did we get those results? And how can we use those results to grow what we know?” When an organization challenges conventional wisdom in order to reach a new and presumably better state, it can never be satisfied with that situation. In this way, a process is created whereby new innovations are constantly challenging the existing situation and, in so doing, rendering previous innovations obsolete. This process of “creative destruction” sees problems identified in systems, generating new solutions, which in turn, set the basis for new set of problems to arise. Innovations, in other words, “create the basis for their own downfall.” In this respect, transformation in an organization both follows from and promotes this process of creative destruction.

The ideas underlying the innovation/transformation concept for organizational development can be found in the approaches of a number of organization theorists. For example, co-evolution theorists view the evolution and adaptation of organizations in

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95 Webber, 276.
96 Webber, 278-282.
97 Morgan, 296.
terms their capacity for “exploration and exploitation.”98 While exploitation involves improving existing capabilities, processes, and technologies, exploration involves experimenting with new ideas, paradigms and strategies in the hope of finding alternatives to current practices.99 Thus, the evolution and survival of the organization may depend on its ability to exploit opportunities, and is enhanced by its effort to explore and operationalize new ones. In other words, its ability to realize increases in organizational performance is strongly related to its innovative tendencies.

Other theorists have applied the concept of innovation/creative destruction to further understand organizational development and evolution. Tushman and O’Reilly suggest that successful organizations may follow a pattern of “relatively long periods of incremental change punctuated by environmental shifts and revolutionary change.”100 Changes in strategies, structures, cultures and leadership skills are demanded as an organization moves through various stages of growth. Depending on the source and nature of change, more significant changes may be demanded in each of the aforementioned components of organization. Such discontinuities, they would suggest, may precipitate a need for revolutionary innovations in all four components at once, instead of incremental changes in each over time.101

Similarly, Greiner argues that there is a fairly predictable group of developmental phases that organizations pass through as they grow.102 In his model, each phase begins with a period of evolutionary growth and ends with revolutionary change and turmoil.

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99 Lewin, Long, Carroll, 536.
100 Tushman and O’Reilly, 11.
101 Tushman and O’Reilly, 24.
He suggests that there are certain dimensions to his model that interact to shape the organization’s development. These include: age of the organization, size of the organization, stage of evolution, stage of revolution and growth rate of the industry. The other factor that may work in tandem with the aforementioned factors is leadership.

It must also be recognized that factors, such as the industry to which an organization belongs, may influence whether it progresses through all of the phases and at what pace. One thing, however, is certain: organizations must move through the phases successively if they want to move forward. Greiner's five phases include:

- Creativity – the initial phase in the life of the organization whereby the emphasis is on creating a product and service.
- Direction – the second phase in the organization’s life whereby it has to find a good leader/manager to bring some structure to the organization as it rapidly expanded in the first phase. However, the structure ultimately becomes too bureaucratic, too stifling. The need for greater autonomy arises and the organization must deal with the tension between the need for delegation and those who were part of the control structure created.
- Delegation – is the third phase and results from the struggle between the two groups for that control. Eventually top management senses that it is losing control over the organization and seeks to regain the control given up in this phase. They do this under a new form of organization, which leads to the need for the next phase.
• Coordination – this is the fourth phase wherein previously decentralized units can be merged under the need for greater coordination. The inevitable result of this phase is the creation of a “red-tape” crisis, and creation of further bureaucracy.

• Collaboration – this is the fifth phase and is the response to the need to reduce red-tape.¹⁰³

The notion that organizations experience certain discernible stages of development where the drive to succeed and thrive leads them to seek new forms and structures is difficult to deny. Many Western governments in recent years have struggled to find their appropriate role and form within society as the utility of the “welfare state” structures, which have defined them for so long, have increasingly been challenged. This apparent ‘identity crisis’ has caused many to alter structure, management styles and ways of work in an attempt – rightly or wrongly - to shift the culture to a more market-focussed one. The experience of many of the high-technology start-up companies would also bear this out. Malone and Laubacher note that what they call the “The Dawn of the E-Lance Economy” has had a profound effect on the ways of work and on the organizational structures that support them.¹⁰⁴ They suggest that the introduction of the Linux Operating system points to the “devolution of large, permanent corporations into flexible, temporary networks of individuals.” They also point to outsourcing as further proof of this emerging trend in organizations.¹⁰⁵

Despite its apparent applicability to explaining organizational transformation, a note of caution should be added to the application of creative destruction to

¹⁰³ Greiner, 60-62.
¹⁰⁵ Malone and Laubacher, 146.
organizations. The promotion of this as a management philosophy may lead to the creation of new instabilities, or unintended consequences, with which the system may not be prepared to deal. As Morgan suggests, destruction is a “side-effect or consequence, not a conscious aim.” This discussion on the concept of creative destruction and its application as a management philosophy is addressed later in Chapter 7, which is devoted to understanding the role of leadership in transformation.

2. Transformation Experiences

There is no shortage of examples of organizations that have attempted dramatic or transformational change. Royal Dutch Shell and Sears are among two of the more notable private-sector transformations. At the Ford Motor Company, CEO Jacques Nasser launched a transformation effort the magnitude of which had not been previously experienced at Ford.

Nasser and the Ford executive have been involved in a process of trying to change the fiefdom perspective, which developed over the years in the organization. Nasser’s objective is to establish a mindset that focuses all employees on two things: thinking like shareholders and responding quickly and swiftly to consumer needs. To quickly and successfully move an organization of some 340,000 employees in more than 200 countries to adopt a new mindset requires a special approach. Nasser is attempting to achieve this using a tool which management scientist Noel Tichy has labelled, “the

106 Morgan, 297.
107 Pascale, Millemann and Gioja
109 Wetlaufer, 79.
teachable point of view".\textsuperscript{110} This approach, in essence, involves the leaders of an organization writing down their views on what it takes to succeed in their own business and in business in general. After they record their views, teaching is supposed to begin. The organization's leaders then share and, if necessary, debate their views with the next level of executives, who in turn develop their own teachable points of view and share them with the next level and so on. In this way, a valuable form of feedback may occur, which can advance organizational learning.

Recent efforts by the United States Army provide a good example of an organization that has combined major change efforts with gradual changes to bring about transformation.\textsuperscript{111} Through an approach based on continuous process improvement and gradual change, the Army created the best Cold War army in the world. Since then, however, the world has changed profoundly. The Army that was appropriate for the Cold War world had become outdated for the world that was emerging. Transformation had to focus on two key dimensions: transforming the Army from the industrial age to the Information Age and from a bipolar world with a single narrowly defined threat to a multi-polar world with a variety of threats. At the same time, the Army was also getting smaller by one third.

The recognition that the same approach, the same system would no longer work in the United States Army was an acknowledgement that transformation was truly necessary. There was a clear recognition, according to Sullivan and Harper, that the "old maps, the old ways of doing business" would not work in today's new territories. Isolated process improvements were not going to solve the problem – an idea that

\begin{itemize}
\item\textsuperscript{110} Wedaufer, 83.
\item\textsuperscript{111} Sullivan and Harper
\end{itemize}
acknowledges what they describe as the failure of the “R-words” – reshaping, reengineering, reinventing, and reposturing. Simply stated, the apparent failures of reengineering and reinventing can be attributed to the fact that continuing to do the same things – no matter how much you improve them – will still result in doing the same things, only better.

In other organizations change efforts, although at first glance not as dramatic as Ford and the United States army, nonetheless resulted in transformation. Through the process of innovation, many organizations have challenged existing organizational forms and ways of work. This process of self-reflection has led them to a different place; a different state. The experience of Intel, the microprocessor manufacturer, typifies how transformation can occur through this process. Intel, as any successful organization should, operated with the philosophy that technological innovation was necessary for its survival. During the late 1980s the near failure of its 386 microprocessor caused it to create a special interdisciplinary team or “web of inclusion”, as Helgesen refers to it, to consider the problem and how it should be addressed. The web of inclusion describes a form of organization characterized by high levels of integration, strong communication, and less emphasis on traditional top-down hierarchies. Others such as Mintzberg and Ludo Van der Heyden have also recognized the web-like qualities of some organizations. They argue that the reality of how many organizations operate is often not depicted in an organization chart, but instead in hubs, which represent organizational coordinating

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113 Helgesen, 53.
114 Helgesen, 10.
centres, and webs, which represent the communication and movement of people and ideas in a network.\textsuperscript{115}

The creation of a web at Intel helped to redefine the organization's customers and the nature of its business. Perhaps more importantly, it spawned the creation of other webs of inclusion. Much in the same way as Sullivan and Harper's "thin threads" of change wove together in a configuration that helped shift the Army to a new state, the "webs of inclusion" created at Intel wove together to reshape its overall strategy and transform the organization.

3. Summary

In order to create a sound and appropriate framework for understanding the impact of change on organizations, we must understand the scope and nature of change in modern organizations. To begin, it was established that change and transformation are not necessarily the same. Change, in other words, can assume a range of forms. In a relatively stable environment, improving existing ways of doing things may be sufficient to help maintain or achieve success in an organization. However, in an environment characterized by dramatic change, simply improving what has been done may be necessary but insufficient for future success. While isolated incremental changes can improve performance of the existing system, transformation, if successful, can take an organization to a qualitatively different place – a new state. However, it was also recognized that not every organization needs or can practically deal with large-scale

change. Small, carefully considered changes in complex, non-linear systems and their environments can lever effects considerably larger than the original change. So, while incremental change and transformation are not the same, change is part of transformation.

From a systems theory perspective, the nature of change in complex systems can be explained in a number of ways. One way of understanding it, as suggested, is in terms of attractors that shape patterns of change. Another is to view it in terms of thin threads of change that can come together to weave a new pattern of change from which an organization may be pushed into a new state. The influence of feedback loops on a system can also explain how change occurs, particularly when they run out of control.

Perhaps the most important way of understanding change is through the concept of creative destruction, which sees a cycle of innovation and destruction as the underpinning of organizational development and, ultimately, survival. The idea of creative destruction, as suggested, resonates through other management thought as evidenced in idea of the evolution of organizational forms.

The main point to be gleaned from all of this, and the one critical to understanding change in an organizational context, is that it should not be viewed as an event or point in time. Change - particularly when viewed through the lens of innovation and creative destruction - should be seen as a process. Therefore, the process of change, depending on how the organization chooses to address it, may strengthen its chances for survival. Perhaps more importantly, it may suggest particular roles for the leadership of the organization.
IV) FORCES OF CHANGE

The previous chapter suggested that transformation may be explained in terms of forces that can prompt changes – whether a major one or a number of smaller, but nonetheless significant ones – to a given system. Through a process of feedback, the system may respond to these changes by questioning the operating norms that guide it. The result of this process of challenging the existing state of the system is the development of innovations, which can ultimately shift the system to a new state.

Another key aspect of the nature of transformation is that it can differ from organization to organization, dependent on such factors as the industry, or the products and services offered by the organization. If the differences in transformation processes between organizations are explored in a greater level of detail, perhaps the more important question might be, what are the forces of change driving organizations – at a seemingly accelerated rate – towards new states or paradigms? The purpose of identifying some of the key forces of change and trying to understand their affect on organizations is to lay the basis for understanding the potential role for leaders and leadership in helping the organization address them. Therefore, the objectives of this section are:

- To identify the key forces of change that are creating discontinuities in organizations and driving innovation;
- To start to understand the potential implications of these forces of change for the organization and for the work of leaders and leader/managers; and
- To begin to understand why “linear solutions” are not applicable to dealing with forces of change in complex, non-linear systems.
1. Forces of Change and Discontinuities

When asked to identify the predominant forces for change in any organizational environment, most academics and management theorists are likely to identify information technology and globalization. The combination of these two forces is creating large discontinuities, the result of which is often described as a "new competitive landscape".¹¹⁶ This landscape is also characterized by increasing demands from customers and stakeholders, creating new tasks for the organization, and often in an environment of cost-cutting.¹¹⁷ The implications of this new competitive landscape are driving many organizations to seek new approaches and new ideas for undertaking business, or even more importantly, to rethink their businesses.

In many organizations, people are rethinking products, services, and distribution channels. In government, for example, both programs and services are being revisited for their continued relevance. As a result, some are being completely redesigned, while others are eliminated. The mantra of 'doing more with less', to some degree, has also been guiding the desire to rethink the programs and services of government, just as it has in the private sector. Technology has also touched both government and business. In government the emergence of 'on-line' services and single-window access bare witness to the influence of technology. In business, the emergence of electronic commerce has begun to profoundly change the way business is done, as well as the potential reach of any organization.

For both government and business, technology and globalization have influenced the evolution of their organizations. Globalization has reinforced in many organizations the need to broaden their view of the ‘world’ and to understand the importance of interconnections. Technology has been the facilitator or the ‘enabler’ of these connections. It has helped to bring down the boundaries – political, economic, and social – that have kept organizations, regions and nations apart. While technology has played a critical role, it is information, or the capacity to collect and disseminate information in a manner not previously possible, that is truly affecting organizations.

The “Information Revolution”, as it has often been labelled, is probably the principal force that is reshaping the competitive landscape in the world. In this context, it must be recognized that technology has been the key enabler, effectively redefining the capacity to collect, store and transmit information. Perhaps even more importantly, the information revolution that is unfolding is redefining the use and meaning of information. In turn, this redefinition is shaping the work performed with information, the roles of the workers involved, and the institutions where they are performing the work. Information and, more specifically, the knowledge built from information are associated with the emergence of new organizational forms, cultures and workers. “Knowledge worker” is a term that has developed to describe workers that use information along with their special skills to perform work. Unlike manual workers who are generally concerned with how a task should be done, knowledge workers, according to Drucker, are more concerned with ‘what the task is’.\textsuperscript{119}

\textsuperscript{118} Drucker, 97.

\textsuperscript{119} Drucker, 143-44.
The evolution of the 'knowledge' worker is a manifestation of a fundamental change in how organizations use knowledge. The 'old' approach to using knowledge saw many organizations devote significant energy into collecting information, which was then processed by managers and given to a core group of strategy making elite.\textsuperscript{120} In contrast, many organizations are now distributing the capability and responsibility to gather, analyse and disseminate knowledge to many parts of the organization. The distribution of computers and greater delegation of authority to front-line workers bears witness to this shift.\textsuperscript{121}

Changes in how knowledge is distributed and used in organization also reflect a growing recognition by managers and leaders that any successful knowledge organization must also be a learning organization. Absent the extensive communication that is typical of a knowledge organization, or the ability to challenge the status quo within an organization, knowledge workers cannot do their jobs. When knowledge workers cannot function effectively, neither can the organization to which they belong.

Managers may also be significantly affected by the shift in how information is accessed and used in organizations. On the one hand, information systems may allow managers to monitor, or 'police' their staff more closely. On the other hand, knowledge workers, through their access to and ability to use information, may threaten managers and traditional 'command and control' organizations. Managers in many organizations may feel threatened by the knowledge that their workers have, or are developing, as these workers gain the capability (through information) to challenge management and its ways


\textsuperscript{121} The Economist, 53.
of work. In observing the true implications of this challenge, Zuboff notes that, “The more blurred the distinction between what workers know and what managers know, the more fragile and pointless any traditional relationships of domination and subordination between them will become.”

Despite the potentially corrosive effects of knowledge on the traditional organization, both Drucker and Zuboff recognize it as a key force and a key competitive advantage for most organizations. Drucker suggests that “knowledge workers and their productivity” will be the most valuable asset of the 21st century institution. For her part, Zuboff recognizes that the process of “informating” an organization — that is, using knowledge to its best advantage — can be transformative. Both also agree that given the importance of knowledge workers, they should be treated as assets.

2. Implications for Organization

As suggested, the implications of forces of changes, in particular the role of knowledge for organizations, are considerable. As the complexity of the environment increases, it can create a need for increasingly complex forms of organizations. The apparent positive correlation between complexity of the environment and that found in the organization form is not new — having been accepted by business academics for approximately two decades. However, what may be new is that environmental...

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123 Drucker, 135.
124 Zuboff, 547.
125 Drucker, 142, Zuboff, 553.
complexity also seems to be precipitating the need for ‘new’, as well as more complex forms of organization. Some of the key forms that have emerged include webs, communities of practice, and networked organizations. The latter two forms will each be further defined shortly.

2.1 New Forms of Organization

Although we have referred to these forms of organization as ‘new’, it may be more accurate to say that they are evolving ‘variants’ of forms that have been around for a number of years. Webs, for example, may represent a more sophisticated form of the team. Communities of practice have been around for many years, but are gaining in popularity and recognition in a business context. Networks, some would argue, are a transitional form of organization that have existed for many years as a means to help bridge a major discontinuity.

Regardless of their age or origins, these forms of organization are becoming increasingly important. Why? The answer lays in two of their key common organizational attributes: flexibility and minimal hierarchy. Because neither organizations nor their environments are static, ‘flexibility’ – or the capacity for organizations to adapt – may be as necessary as having appropriate complexity in the organization. This requisite flexibility could likely not exist in a strongly hierarchical organization, as information typically does not flow as readily in a hierarchical structure.

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129 Ghoshal and Nohria, 24.
Thus, the capacity to react to that information is impeded. By extension, it could also be argued that the relationship between flexibility and hierarchy is one of the hallmarks of a learning organization.

The web concept discussed in Chapter III of this document represents a form of organization that has emerged to play an increasing role in how successful organizations operate. The web created at Intel provided a form of organization that allowed them to react quickly and effectively in response to a serious environmental threat. Through the web, the organization communicated effectively and was able to challenge conventional wisdom, including its core business strategies. In so doing, it was able to develop an entirely new view of its customers, and to dramatically alter its business model. The web, therefore, represents the type of ‘organic’ – that is, constantly evolving - form of organization that works to promote innovation by keeping its parameters open to allow a wider group of people to shape organizational direction.130

Communities of practice, as suggested, represent another form of organization that can encourage innovation. This form of organization can be described as “groups of people informally bound together by shared experience and passion for a joint enterprise – engineers engaged in deep water drilling, for example, consultants who specialize in strategic marketing, or frontline managers in charge of check processing at a large commercial bank.”131 These groups may convene through a variety of channels and with varying frequency. However, what links them as a form of organization is their common purpose to share knowledge and experience in free-flowing ways that can lead to innovations. Within the Manitoba Government, a network of Service Quality Partners,

130 Helgeson, 23.
131 Wenger and Snyder, 139.
who are individuals interested in finding ways to improve delivery of public services to Manitobans, was formed through innovations, which started in the Department of Labour, and ultimately led to the creation of this government-wide service quality initiative.132 Through their work they have, by most accounts, been able to share information and ideas more effectively, and help reduce the departmental ‘silos’ that so often characterize large organizations.

Networks represent another form of organization which has become increasingly prominent. The term networks is often used to describe “a range of non-market, non-hierarchical forms of organizational governance, including, but not limited to, joint ventures, partial equity, licenses, cooperative R&D, consortia, franchises, clans, and the like.”133 More broadly, they can represent alliances of a number of organizations with instrumental aims at both the individual and collective level. Network alliances have become popular in high-tech sectors where the knowledge base of the industry is complex and expanding, and the sources of expertise are widely dispersed. This is because they allow innovation to be located within networks rather than within individual firms.134

‘New’ forms of organization, therefore, have emerged in response to key forces of change and the need to ensure that organization can effectively respond and innovate. It could also be argued that they have responded through the natural process of evolution of organizations discussed earlier. In other words, the innovative process that causes

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133 Koza and Lewin, 638.
134 Koza and Lewin, 639.
organizations to evolve through different phases has prompted new forms of organization to emerge or to re-emerge.

2.2 Processes and Boundaries

Apart from the implications for structure, the forces of change discussed have also had specific implications for organizational processes and boundaries.\textsuperscript{135} It should be noted that the implications for all three dimensions of organization must be viewed in an integrated manner as being mutually reinforcing. In other words, flatter, more flexible structures will precipitate changes in processes and organizational boundaries.

Knowledge-driven organizations, as discussed, require greater flexibility. They are also characterized by more intensive interaction - both vertically and horizontally.\textsuperscript{136} Members of such organizations typically communicate and interact frequently. Large amounts of information are exchanged through these interactions which serve to unite the various parts of the organization. Information is also exchanged with those outside of the organization. In order to support their need for intensive interaction and communication, significant investments are made in information technology for the organization. New business processes are also developed to ensure that maximum benefit is derived from the new technology. The implementation of large-scale enterprise resource planning systems, for example, is typically accompanied by process redesign to increase the likelihood that benefits are fully realized. However, probably most important to the

\textsuperscript{135} Whittington, et. al, 586.
\textsuperscript{136} Whittington, et. al, 587.
success of such process/technology-driven change initiatives are the changes in staff
behaviours and management styles required. 137

If knowledge workers are seen as the organization’s principle asset, their interests
must be managed effectively. In this regard, career management across boundaries
within an organization is becoming critical. As well, managerial development across the
organization has become increasingly important as a way to link individuals.

To facilitate more interactive processes in organizations, boundaries are likely to
be drawn inward. Many organizations are focusing their attention on core competencies,
and consequently may be narrowing the scope of their business to focus on areas of
competitive advantage. 138 This can result in the creation of smaller, more decentralized
business units. In the corporate world, this trend has manifested itself in larger
companies trying to “imitate the virtues of their smaller rivals” by breaking themselves
into smaller units with the freedom to generally do things their own way. 139 In
government, this trend has emerged in various forms of alternative service delivery,
ranging from shared service arrangements to the creation of special agencies to run
segments of government business. It has even prompted the privatization of portions or
entire departments and agencies.

3. Summary

The previous description of the forces of change and their implications for
organization was not intended to provide an exhaustive discussion of either issue. What

137 Whittington, et. al, 587.
138 Whittington, Pettigrew, Peck, Fenton and Conyon., 587
139 The Economist, 53.
it was intended to do was provide a picture of the likely drivers of increasing complexity in organizations and their environments. A new competitive environment, it was suggested, has emerged in response to the influence of globalization and technology. However, it was further explained that the real force for change is information and its influence on workers, managers and the nature of organizations. The advent of new computing and communication technologies has given organizations the power to gather and make information more widely available than ever before.

Having identified the key forces driving change, the second objective of this chapter was to explain the key implications of these changes for organizations. The new competitive environment created by the revolution in information has created major discontinuities for many organizations. The need to bridge discontinuities and optimize the benefits of information in organizations has had specific implications for the form, processes and boundaries of organizations.

It was suggested that new – or perhaps, ‘renewed’ forms of organization - have emerged to facilitate the management of change in organizations. Webs, networks and communities of practice were identified as three emerging forms of organization which can be flexible and responsive to change. Each of these forms of organization, it was argued, is fostered by and, in turn, can itself foster innovation.

While much attention was devoted to organizational form, it was also suggested that changes to processes and boundaries are being prompted by discontinuous change. New organizational processes are being developed and implemented around information technology systems to insure that the benefits of an “informated” organization are realized. Changes to processes and systems are related to changes in the overall business
model which see organizations focussing on key areas of competitive advantage. Consequently many are narrowing the scope of what they do and redrawing their boundaries to reflect these changes.

Changes to both boundaries and processes should not be seen in isolation from changes in organizational form. Clearly, the same factors demanding changes in processes and boundaries to support success in informed organizations have also created a need for flexible, less hierarchical organizational structures.

The other objective for this section was to begin to identify the implications of these changes for the work of leaders and managers. While not an explicit area of focus in this chapter, some issues and roles for management were discernible. The first of these is to be able to understand the nature of the change in order to understand how the organization may best respond to the changes. This assessment involves understanding the dimensions of change. Sullivan and Harper have identified three dimensions: velocity, mass, and complexity.\(^\text{140}\) Velocity describes the rate at which change is taking place – which in most environments is increasing. Mass refers to how widespread change can be. Complexity, which has been described in the context of environments, refers to the fact that change typically does not occur in isolation as the changes are often interconnected, with a change in one area potentially affecting another. The leader/manager’s assessment should come through a lessons learned feedback process.

By understanding the nature of change, the insightful, leader/manager – whose defining traits of are discussed in greater detail in Chapter V - should be better positioned to identify the appropriate response from the organization. They may be more likely, for

\(^{140}\) Sullivan and Harper, 155-156.
example, to know which elements of organization should change to promote flexibility and encourage continuous innovation. They will ask themselves what needs to change. Is it structure, processes and systems, or both? The specifics of the leader, leader/manager role in promoting innovation and transformation are explored in further detail in the chapters that follow.

In short, it is strongly suggested that increasing environmental complexity is creating major discontinuities for organizations. These discontinuities have created a need for organizations to develop innovative ways of bridging them. This need, in turn, has prompted the emergence of new organizational forms and processes designed to encourage innovation and to ensure the effective use of knowledge in organizations. In an environment of complex change, it is clear that 'linear' solutions may no longer be as appropriate as they once were. In this regard, leaders and leader/managers can and should play a critical role in assessing the nature of change and in encouraging change in the appropriate elements of organization. How they do this and their importance to the organization's continued growth and transformation will be explored further in the Chapters that follow.
V) ELEMENTS OF LEADERSHIP

The previous chapter of this thesis raised the idea that the existence of major discontinuities and their impact on organizations suggest an important role for leadership and leader/managers. The idea that leaders are key to an organization is not new. The notion of the ‘messiah-like’ leader leading his or her followers out of the ‘proverbial desert’ has been prominent throughout history. Most people would not argue that leadership is important to organizational success — there are too many accounts of leaders such as George Marshall and Winston Churchill and their pivotal roles in navigating times of crisis. The question that is perhaps not as easily answered is just “how important?” Moreover, a commonly accepted definition of what leadership involves maybe more elusive than first thought, as it depends on what the scope of leadership is perceived as being.

For the purposes of trying to build a framework to test the idea that leadership is most strongly correlated with organizational performance and ability to adapt to change, a logical first step is to try to identify the key dimensions of leadership. It should be noted that for the purposes of this thesis, leadership is assumed to include more than just the designated ‘hierarchical leaders’ of an organization. The concept of leadership, as is explained, must also recognize that others throughout a learning organization can play a role in creating the conditions necessary for organizational success and in helping to address change. In addition, it will also be recognized that leadership involves some form of interaction between leaders and followers. This interaction can be described as transactional or transformational, with the latter being integral for dealing with major discontinuous change.
In order to ultimately understand the implications of leadership in transformation, the drivers, attributes and tasks of leadership must also be understood. Chapter IV attempted to lay the foundation for understanding some of the key forces of change or ‘drivers’ of organizational change and performance. However, the tasks and attributes - that is, the roles and demonstrable characteristics of leadership - were only alluded to. This chapter of the Thesis, therefore, builds on the foundation created in the previous one to provide a more general sense of the attributes and tasks of leadership. It draws on management literature and the work of historians to provide a profile of the key attributes and tasks of leadership. In so doing, it provides a basis for comparing the attributes and tasks of leadership, as suggested by systems theory, in order to build a framework for developing an accurate understanding the role of leadership in transformation.

1. Leadership Dimensions

Leadership has become an increasingly important issue in management circles for a variety of reasons. Probably the most important is the nature and scope of change with which most organizations find themselves confronted. Leaders, managers, and management scientists are searching to understand the competitive advantages that their organizations can have to deal with a new and increasingly competitive landscape. As alluded to in the preceding chapter, ours is an era where ideas and actions that inhibit innovation and reinforce the status quo are no longer appropriate. As Warren Bennis
suggests, "linear information, linear thinking and incremental strategies are no match for the turbulence of today's business climate."141 New strategies, new ways of viewing customers, new organizational forms and new management systems are all emerging in the wake of discontinuous change. But is it mere chance that is causing these changes in our organizations? Or, is another element the catalyst, which is encouraging such changes. It is this author's contention that leadership is the catalytic element promoting an environment that adapts to change, and encouraging innovation within organizations.

1.1 Hierarchical versus Distributed Leadership

At the outset, it should be noted that the concept of "leadership", for the purposes of this thesis, refers not only to the work of the hierarchical leader, but also to that of others - including managers and staff - in promoting change in the organization. Leadership, in other words, should not be seen as residing exclusively with the person at the top of the organizational structure. Kotter suggests that the pace of change in our world is making the traditional concept of leadership - with one 'all-knowing' person at the top driving the organization - increasingly obsolete.142 In a rapidly paced world, it can be extremely difficult - although not impossible - for one individual to be conversant with all possible forces of change and to understand how the organization must respond to these. Moreover, the ability to deal with unintended consequences and uncertainty should be enhanced if the burden does not fall on the shoulders of one individual.

Gardner sees the leader, the leadership team, and individuals throughout an organization

as sharing responsibility for many of the tasks or functions of leadership.143 This idea, it will be shown, is connected to one of the key attributes of leadership: taking responsibility.

Sullivan and Harper believe that the distribution of leadership throughout an organization occurs through the development of a learning organization.144 Continuous feedback, which is the hallmark of a learning organization, fosters trust and leads to the emergence of teams that participate in leading change and growth in the organization. At this point, leadership no longer rests solely with the leader.

These ideas are important because they suggest that leaders are not simply born; instead they can be, and very often are, developed. As Gardner suggests, “most of the capabilities that enable an outstanding leader to lead, can be learned.”145 Yet he also leaves room for the idea that innate leadership gifts can be cultivated through individual motivation and through opportunity.146 This is a concept that will ultimately be important in developing a complete understanding of the role of leadership in driving successful organizational transformation.

While the previous discussion strongly suggests that leadership functions can indeed be distributed across the organization, this does not in any way negate the role of the hierarchical leader. It instead suggests a somewhat different one. The notion that leadership can be dispersed across an organization appears related to the existence of a learning culture – whereby individual responsibility, and the capacity to think and challenge existing norms are encouraged. A learning culture does not simply emerge; it

144 Sullivan and Harper, 232.
146 Gardner, 158.
must be fostered by a diligent leader, and then ultimately nurtured, with the help of the leadership team and the other members of the organization. Referring to the role of the leader in fostering a learning culture, Bennis and Nanus suggest that organizations must be led to help them overcome their “trained incapacity” to adapt to changing conditions.\textsuperscript{147} Additionally, Senge notes that the new profile of the leader is one of a designer, steward and teacher. According to him, the leader is responsible for “building organizations where people continually expand their capabilities to understand complexity, clarify vision, and improve shared mental models – that is, they are responsible for learning.”\textsuperscript{148} This point is returned to in Chapter VI, which looks at the tasks, attributes and drivers of leadership as suggested by systems theory.

1.2 Transformational versus Transactional Leadership

Another important dimension of leadership is the concept of transactional and transformational leadership. The distinction of the two owes much to the work of James MacGregor Burns, who studied leadership as an aspect of the dynamics of conflict and power.\textsuperscript{149} Starting from the leader-follower relationship, Burns suggests that what is critical about the relationship is “the interaction of persons with different levels of motivations and of power potential, including skill, in pursuit of a common or at least joint purpose.”\textsuperscript{150} However, this interaction can take two different forms represented by transactional and transformational leadership. Transactional leaders are result focussed and are able to extract effort from their followers by exchanging something of value for

\textsuperscript{147} Bennis and Nanus, 19.
\textsuperscript{148} Senge, 339-340.
\textsuperscript{149} James MacGregor Burns, Leadership (New York: Harper & Row, 1978)
\textsuperscript{150} Burns, 19.
this effort. The exchange could include something tangible such as a good or service for money; something political, such as a vote; or something psychological, such as sympathy and time to listen to another’s problems in exchange for hospitality. Bennis and Nanus also acknowledge that leadership involves a transaction: a transaction between leaders and followers.

What is missing in the transactional leadership equation is some enduring purpose to bind the individuals together. This is where transformational leadership comes in. Transformational leadership is characterized by a fusion of purpose between leader and follower. In transformational leadership, the two interact with one another in such a way as to raise each other to higher levels of motivation in pursuit of their common purpose. In so doing, leaders motivate individuals to reach beyond their original performance expectations. Building on the shared sense of purpose, transformational leaders have a very specific role to play in the organization. Noel Tichy describes the role of the transformational leader in terms of defining the need for change, creating new visions, mobilizing commitment to those visions, and transforming the organization.

On the surface, Tichy’s assessment would appear to endorse the need for a “charismatic” or “messiah-like” leader. However, more detailed analysis would suggest otherwise. While Tichy clearly acknowledges the role of a special kind of leader, he also recognizes that one of the leader’s principle roles is in fact that of an architect/designer, and requires the support of many others in the transformation process. In other words,

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151 Burns, 19.
152 Bennis and Nanus, 30.
153 Burns, 20.
155 Tichy and Devanna, 4.
bringing the organization to a new state requires the commitment of many to the leader's proposed design and vision. Tichy and Burns, therefore, clearly support the notion that "leadership" encompasses both the clarity of thought and foresight of a 'leader", and the willingness of many to take responsibility for articulating change in the organization.

The previous paragraph has gone to great pains to clarify the differences between transactional and transformational leadership; however, the question is why? The answer to this question relates to the types of change and discontinuities discussed in Chapter IV. The nature of change in our world is driving organizations to seek ways to deal effectively with a new competitive environment, and to ensure that innovation and, hence, transformation is not inhibited. Traditional solutions and approaches to change, as suggested, are no longer adequate. Looking at the various components that can affect organizational performance, many are starting to turn to leadership. At the same time, they are also recognizing that traditional notions of leadership may no longer be adequate in addressing increasing organizational complexity. Bass, for example, refers to the transactional leadership approach and its appropriateness for what he labels as "first order of change", or changes of degree.¹⁵⁶ However, increasing complexity is demanding "higher order" of change, which can encompass large changes in attitudes, beliefs, values and needs.¹⁵⁷ Higher order change is, in turn, demanding a higher order approach to leadership – namely transformational leadership. Tichy similarly recognizes the need for transformational leadership, noting that in this new environment "Systems can be

¹⁵⁷ Bass, 4.
designed to create operating efficiency, but it is leadership that enables an organization to maintain a dominant position in its industry."

The above discussion is not intended to imply that transactional leadership is negative. It is intended, more simply, to highlight the differences so the reader can understand that while important, transformational leadership should not be the only form in use in organizations. As pointed out in earlier chapters, organizations have to balance the need for evolutionary and revolutionary change. In other words, organizations must balance the need to adapt to change with the need to keep the organization operational. Accordingly, Bass suggests that transactional and transformational leadership may be demonstrated in the same leader. He sites the example of Franklin D. Roosevelt, noting that Roosevelt was obviously transformational in his remaking of the American political landscape with the New Deal, and transactional in his give-and-take in the balance of powers between executive, legislature, and court. The application of transactional and transformational leadership is consistent with the idea discussed in Chapter III and supported by Sullivan and Harper, Morgan, Drucker, and Abrahamson: that carefully chosen ‘incremental’ changes are sometimes all that is required by an organization.

Bass’s notion that leaders demonstrate both transactional and transformational qualities underscores an important point: that successful leaders do a certain amount of both leading and managing. In other words, while managing is not always synonymous with leading, effective leading often encompasses a certain amount of managing. Thus,

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158 Tichy and Devanna, 4-5.
159 Bass, 26.
160 Bass, 27.
transformational leaders, with their strong emphasis on shared purpose, may more
directly fulfil the expected 'leader' role. Transactional leaders, on the other hand, may
act in a way seen as more synonymous with 'managers'.

The implications of leading versus managing can affect the success of
organizations undertaking significant change and transformation. Effectively managed
organizations may survive in a relatively stable environment. However, in more complex
environments, transformational leadership, as suggested, is likely required to help the
organization bridge major discontinuous change.

Implicit in the discussion of transactional and transformational leadership is that
transformation and, by extension, transformational leadership, will be positive. It is this
author's contention that transformational change which is not necessarily positive can
occur. Unintended consequences, as explained in Chapter I, can push organizations into
less desirable states. However, cybernetics theory would suggest that the self-reflective
tendency of learning organizations should reduce the likelihood of remaining 'stuck' in a
'negative' state. At a minimum, it seems likely that organizations which practice
learning will be more apt to 'harness' an adverse situation and possibly make something
more positive from it.

Using the definition just described of transformational, distributed leadership, the
subsections that follow identify the general attributes and tasks of leadership –
particularly as they relate to leadership in a learning organization.
2. Attributes of Leadership

While much of the literature on leadership seems to focus on a broad group of attributes as being critical for successful organizational transformation, there does not appear to be much agreement on the relative importance of each. In order to accurately assess the relative importance of each attribute, a more exhaustive empirical study would be required. Their importance aside, I have identified a group of attributes that seem to be generally accepted by renowned leadership authorities as being required in some combination for effective leadership. Their assessments emerge from a combination of normative theory and some empirical research.

The leadership attributes identified are intended to provide a general understanding of the elements of leadership, and more importantly of those relevant for transformation. Some of the attributes described are more applicable to what I have labelled as the hierarchical leader. Others can be related to the broader idea of leadership – that is, a dispersed, broadly based approach to leading. And some of the attributes may be related to both dimensions of leadership. Regardless of their application, the attributes are important to identify as they provide a context for understanding the tasks of leadership.

The following are critical attributes for leadership analysis:

1) **Leading and Managing** – Contrary to what some authors would suggest, leadership does have to do with management; although, the two can be distinguished. The former point speaks to the idea that it is difficult for any one individual to keep abreast of all knowledge required to respond to key changes in the environment, and to determine and implement the strategic response. The
latter point recognizes that the leader is the one who can foster a culture that promotes individual responsibility. This also recognizes that leaders, as already suggested, can demonstrate both transactional and transformational leadership.

Gardner suggests that the term ‘manager’ usually indicates that the individual holds a directive post in an organization, presiding over the processes by which the organization functions, allocating resources prudently, and making the best possible use of people.\textsuperscript{161} He further distinguishes leaders and leader/managers, from managers, suggesting that the former:

- Think longer term – beyond the day’s crises;
- Grasp the relationship of the unit they are heading to the larger realities, the larger relationship of which they are a part;
- Reach and influence individuals beyond their jurisdiction, beyond boundaries;
- Put heavy emphasis on the intangibles of vision, values, and motivation and understand intuitively the non-rational and unconscious elements of leader-constituent relationships;
- Can effectively manage the conflicting requirements of multiple constituencies; and
- Think in terms of renewal. The leader/leader-manager seeks the revision of structure and process as it exists.\textsuperscript{162}

His definition clearly connects the idea of transformational leadership with ‘leading’, and transactional leadership with ‘managing’. Although Gardner makes an apparent distinction between the two roles, he nevertheless notes that the two often share key tasks and attributes:

\textsuperscript{161} Gardner, 3.
\textsuperscript{162} Gardner, 4.
Every time I encounter utterly first-class managers, they turn out to have quite a lot of the leader in them...Even the most visionary leader is faced with decisions that every manager faces: when to take a short-term loss to achieve a long-term gain, how to allocate scarce resources, whom to trust with a delicate assignment. 163

It is important to note that Gardner’s definition reinforces the point that the ‘traditional’ view of the leader is less appropriate in our world. Leaders and managers clearly share responsibilities for helping organizations navigate an environment of increasing complexity and change.

2) **Leaders are not a Homogeneous Group.** There are many kinds of leaders – as there are many kinds of people. Some are charismatic, others less obviously so. Because leaders differ they also employ different styles. George Marshall, for example, was a low-key individual with superb judgement. 164 Consequently, Marshall will undoubtedly be recognized as one of the greatest staff officers in history of the United States Army. His hallmarks were his quiet, thoughtful nature. He was known as an active thinker and encouraged higher thinking in those he led. Moreover, he also was an outstanding teacher who encouraged learning – both formally and informally - in all that he did. Part of the reason he was successful in encouraging people to take pride in themselves and their own learning was his capacity to inspire trust.

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163 Gardner, 4.
Douglas Mac Arthur, by contrast, was a noted field commander with a flamboyant nature. However, like Marshall, he was also a great thinker and brilliant strategist. Moreover, he inspired those he led and was noted for his communication skills. Thus, while he may have been noted as more of a "charismatic" leader, he and Marshall shared a number of core traits.

The examples of these two leaders reinforce the idea that as individuals, leaders will have different styles. Different leaders are also apt to employ different styles of leading in order to achieve some key tasks of leadership. Daniel Goleman notes that certain styles – authoritative, democratic, affiliative, and coaching styles – are all associated with positive organizational climate and effective performance. Moreover, he advocates that successful leaders employ some combination of all of these styles.

3) **Leadership and its Relationship to Timing.** Leadership can be also be contingent on timing in that events can determine the need for leadership and the type of leadership needed – whether transformational or transactional. Winston Churchill tried for leadership many times before history was ready for him. Then, when the clock of history ticked on, and the war was over, the voters dropped him unceremoniously.

4) **Vision.** Many leadership theorists refer to the importance of the leader’s vision. While some view vision as a clear, definitive picture of what the leader wants

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165 Puryear, 103-151.
167 Goleman, 87-90.
168 Gardner, 7.
their organization to be, others relate it more to identifying and affirming a sense of purpose for the organization. Others, still, see it more in terms of the capacity to understand how the organization is likely to respond to change. Vision, I would suggest, involves a combination of all of the above. A sense of purpose is key as it frames everything the organization does and it also provides a basis for determining goals and a desired state for the organization. The capacity to see and understand trends and, on that basis, to look forward and determine organizational priorities in support of the purpose and goals is also critical.

Core purpose defines an organization’s reason for being and provides a framework or context, which enables an organization to understand why it does things. Moreover, it provides the basis for developing goals, as well as the norms and guidelines. It also serves as an integrating mechanism for linking the vision and work of members of an organization. In so doing, a collective sense of commitment to the organization and its purpose develops. By understanding this fundamental tenet of the organization’s character, it should be easier to assess how the organization may respond to change – particularly discontinuous change.

The leader’s vision can also guide how the organization ‘chooses’ to respond to change. Leaders must truly understand the character of their organization to determine the most appropriate ways to address change. Effective leaders will understand the natural ‘rhythm’ of their organization and the implications of this for how and when they change. They will also understand and encourage the

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design of the structures necessary for innovation and learning, and the systems 
that may support these structures. 171

Vision, therefore, can have a predictive quality, which, in turn, is contingent 
on possession of a clear understanding of the “enduring character” of the 
organization. 172 It is clear that this notion of vision may depend on the existence 
of a learning culture for two reasons. Firstly, engaging people to commit to an 
organization’s (or leader’s) purpose, requires them to truly understand that 
purpose in a way that is meaningful for them. This requires teaching, and 
learning. Secondly, the ability to understand and/or predict how an organization 
may respond is based on understanding how an organization has reacted in the 
past and to make adjustments as necessary. In short, vision can “place the 
organization’s purpose, its reason for being, within a context of ‘where we’ve 
come from and where we’re headed’. 173

5) Intelligence and Judgement-in-Action. Effective leaders need to be able to 
arrive at conclusions by taking data, assessing it and then using it to solve 
problems, design strategies, and set priorities. Although he recognizes that 
intellectual rigor alone will not drive transformational leadership, Bass 
nevertheless notes the importance of the intellectual component of 
transformational leadership. 174 Gardner also notes the importance of intelligence

171 Sullivan and Harper, 204.
172 Collins and Porras, 66.
173 Senge, 346.
174 Bass, 114.
and judgement-in-action, citing James Madison as an example of a leader who personified these attributes.\(^{175}\)

Intelligence and judgement-in-action are related to vision, in that both are predicated on the existence of a learning culture. They are also very much linked to the leader’s role as a teacher and his/her ability to cause students to think critically and to question prevailing beliefs and paradigms.\(^{176}\)

6) **Capacity to Motivate/Capacity to Win and Hold Trust/Communicate.** A strong relationship exists between the capacity to motivate and the capacity to effectively communicate. Motivation, as was already suggested, is one of the keys of transformational leadership. Through effective communication, leaders can move people to action and strengthen their confidence. Perhaps more importantly, effective communication can help to build trust. Through trust, the leader can motivate and inspire people to do things. Effective communication, and hence trust, is necessary to ensure unity of effort.\(^{177}\)

Trust is manifested through consistency of actions and words. It is often quietly built in people such as George Marshall, who have the capacity to do things well and, in that respect, inspire trust. They also do it by treating people with respect and demonstrating that they mean what they say. Puryear sites a number of examples of how Marshall engendered trust in people. In one particular incident he notes how Marshall was able to solicit positive behaviour

\(^{175}\) Gardner, 49.
\(^{176}\) Bass, 100.
from a previously recalcitrant group of military prisoners based, in large part, on his communicating trust in the men.\textsuperscript{178}

7) \textbf{Adaptability/Flexibility of Approach.} Leaders must have stable goals, but flexible tactics.\textsuperscript{179} Linked to vision and to intelligence and judgement-in-action, this attribute is predicated on a commitment to using feedback and learning so that approaches can be adapted to meet changing environmental conditions.

Although not the focus of this discussion, it could be argued that many of these attributes can be developed through learning and experience. Indeed, two of the key tasks of leadership, as the next section will suggest, are that of learning and teaching. At the same time, some individuals, regardless of their learning or experience, may prove to have a stronger innate capability for successfully navigating change. For the purposes of this discussion, it may be sufficient just to suggest that while the leadership capabilities of most individuals can be enhanced, some may have greater innate ability than others.

3. \textbf{Tasks of Leadership}

The tasks of leadership are key to understanding how transformational leadership is articulated in an organization and what it can ultimately mean for the organization.

The tasks are strongly linked to attributes just described. Like the attributes, some of the tasks are more the purview of hierarchical leaders, while others may be seen as part of the broader concept of leadership – at any level of the organization. None of the tasks should be viewed as mutually exclusive. All, in fact, are highly interconnected and should be

\textsuperscript{178} Puryear, 66.
\textsuperscript{179} Gardner, 53.
considered as part of a larger agenda for leaders, especially those dealing with complex systems in highly unstable environments. In short, these tasks may provide the means by which leaders and leadership help an organization navigate discontinuous change. In this context the following are key tasks of effective leadership, particularly as they relate to transformation:

1) **Setting Mission/Purpose and Values.** Leaders play a central role in identifying and ensuring that the organization fulfils its mission or purpose. The organization’s purpose, as suggested, provides a frame of reference for why the organization does things. It also provides the basis for framing vision and goals for the organization. To be effective, the organization’s sense of purpose must have the commitment of its members. This effectively means that members of the organization must be able to align their own sense of vision and purpose with that of the leader’s so that a collective statement emerges for the organization. In so doing, it unifies the efforts of its members and enables a broader group of individuals to play a leadership role in the organization.

Purpose is an integral part of an organization’s enduring character – that is, it has a longer time frame behind it. Purpose, therefore, remains fixed while the organization adapts its strategies and practices to changes in its world.

The importance of purpose to organizational success has been recognized in many arenas. Bartlett and Ghoshal cite Royal Dutch Shell and ATT as examples of organizations that have moved beyond the “old doctrine of strategy, structure,
and systems to a softer, more organic model built on the development of purpose, process and people." The United States Marine Corps book of strategy entitled Warfighting refers to the need for establishing intent in the conduct of war: “Without a clearly identified intent, the necessary unity of effort is inconceivable.”

Clearly articulated values are often cited as another cornerstone of organizational success. For a given time and place, values can define what is right, wrong, legal, illegal, virtuous, vicious, good or bad taste. Along with purpose, they are, according to Collins and Porras, part of the enduring character of organizations. Each generation must find and adapt values to the realities of their time.

Identifying and institutionalizing a shared sense of purpose and values is the work of leadership. As part of this work, Gardner refers to the need for leaders to translate their ‘purpose’ into institutions so that it has some enduring quality. Collins and Porras cite a number of examples of organizations such as Hewlett Packard to explain the importance of purpose and values to an organization. Senge refers to the work of articulating and institutionalizing purpose and values as being part of the leader’s role as steward of the organization.

It should be recognized that purpose and values need not always be positive,

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183 US Marine Corps, 85.
184 Collins and Porras, 66.
185 Gardner, 13-14.
186 Gardner, 15.
187 Collins and Porras, 68.
188 Senge, 345-352.
in a moral sense. Collins and Porras recognize this in their research noting that, “great companies need not have likeable or humanistic core values; although many do. The key is not what core values an organization has but that it has core values at all.”\textsuperscript{189}

A sense of purpose and, perhaps more importantly, values also provide the underpinnings for the organization’s culture, which in turn can affect the organization’s ability to navigate or adapt effectively to change.\textsuperscript{190} Culture influences group behaviour and as such can have a considerable impact on the success of change initiatives. For example, an organizational culture that values shared responsibility, adaptability, and individual initiative may have greater success with major change.

A strong sense of purpose can have another important effect: promoting innovation in the organization. Because a purpose is meant to be an enduring aspect of the organization, it is unlikely that it is ever fulfilled. By its very nature then, purpose can give an organization something to continually aspire towards. Consequently, it should stimulate change and progress – that is, innovation - in the organization.

2) \textbf{Scanning the Environment}. Scanning and understanding the environment is a critical task of the work of leadership. Environment, in this context, refers to the milieu, which we understand to characterize the internal workings of the organization, and the ‘external’ environment, of which the organization is part. The act of scanning the environment helps the leader and organization to better

\textsuperscript{189} Collins and Porras, 67.
\textsuperscript{190} Kotter, 148.
understand the relationship between the organization and environment, and in so doing, shapes the development of goals and what is hereafter described as the ‘strategic framework’.

Scanning is not an event as much as it is a continuous learning process. Although leaders may undertake an initial scan to acquaint themselves with the specifics of a given situation so that a plan can be developed, they will have to continue to assess changes in the environment – both internal and external – as a basis for adjusting plans and strategies as required. Scanning, therefore, is a mechanism which supports both adaptive and generative learning. It is on this basis that it was deemed to warrant discussion as a separate point.

In the military context, the leader scans the environment to understand the enemy, to identify challenges and opportunities based on an understanding of both the enemy and themselves, and to shape intent – that is, to identify what needs to be accomplished and how. Scanning the environment enables the leader to develop a more informed understanding of how the organization can and should operate, which, in turn, enables the leader to both plan and adapt as required.

In other contexts, scanning may allow legislators and policy makers, for example, to determine a range of available policy options. Their understanding of the ‘external’ environment, juxtaposed against that of the organization’s ‘internal’ environment, allows them to focus on those options that are more easily advanced given any ‘systemic’ constraints. They should better understand, for example, the organization’s capacity to assimilate change, against the changes

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191 United States Marine Corps
being demanded of the organization by its 'external' stakeholders. They can balance this understanding with the knowledge of what the organization must also do to keep the business operational. As a result, they should be better able to set priorities and develop effective strategies.

3) Setting the Strategic Framework – Goals, Measures of Success, Guidelines.

Using the organization’s shared sense of purpose as a basis, leaders have a responsibility for establishing a strategic framework for the organization. A strategic framework includes goals and measures of success for the organization, as well as 'guidelines' which suggest how the goals might be realized. Guidelines may be established around activities such as reporting and information sharing to ensure coordinated effort. In this sense, the strategic framework provides a basis for ‘planning’ and priority setting for the organization. While the leader may establish priorities, goals and measures, the specifics of individual plans – that is, their supporting strategies – are not set by the leader, but instead are determined by those who will implement them. Strategy, in this regard, may be said to ‘emerge’ from the various parts of the organization.

The principal role, therefore, for the leader is to ensure co-ordination of effort and consistency with the overall strategic framework. By way of example, the Marine Corps provides its soldiers with a clear mission based on Commander's intent, but leaves the manner of tactics to the soldier. At the same time it is recognized that the leader must provide some sense of unity and focus to efforts. This approach of decentralized decision-making is discussed later, as one of the

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192 United States Marine Corps, 91-92.
hallmarks of a learning organization.

This type of approach is also evident in organizations outside of the military context. Brown and Eisenhardt have observed a number of businesses that follow a strategy of “patching”, which is based around the notion that strategy making (business goals, objectives and target) is not a centrally-driven exercise. They develop strategy in a different way, in that they keep the organization focussed on understanding the correct business opportunities and then they let strategy (and structure) emerge from the individual businesses. Whether in a military, public sector, or business context, the following passage clearly captures the essence of this type of emergent strategy:

*It is obvious that we cannot allow decentralized initiative without some means of providing unity, or focus to the various efforts. To do so would be to dissipate our strength. We seek unity, not through imposed control, but through harmonious initiative and lateral coordination.*

While leaders do plan in the manner described, they and their organizations must also be prepared to adapt or improvise their plans as required. The need to adapt priorities and plans will increase the further out in the future that plans are established. In a rapidly changing environment, leaders and their organizations must be able to assess and refocus their efforts quickly. This requires a well-developed capacity for learning, effective communication and information sharing.

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194 United States Marine Corps, 92.
4) **Motivating** – Leaders must tap into the motives of members of their organizations in order to foster collective action in the pursuit of shared goals. To transform an organization, they must ultimately be able to encourage learning and innovation. They do this in a variety of ways: by developing the right culture, shifting behaviours and attitudes, and developing a shared sense of purpose and values among people. Culture, as already suggested, is based around a shared sense of purpose and set of values. Tichy refers to the importance of organizational culture to transformational leadership noting that, “transformational leaders reinforce values and refocus organizational priorities through effective dealings with people.”\(^{195}\) He suggests that culture can be built and institutionalized through very specific human resources practices such as selection and placement, reward and recognition systems and succession planning.\(^{196}\)

More generally, people are motivated and a positive culture reinforced through strong communication, which, in turn, builds trust. Communication and trust, as is suggested, are fundamental to the development of a learning organization.

5) **Communicating/Building Trust** – Communication and the capacity to build trust are highly inter-related. Leaders must build and preserve trust. They must “have the capacity to inspire trust in themselves.”\(^{197}\) Their effectiveness as communicators affects the ability of any leader to be an effective teacher, a role

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\(^{195}\) Tichy, 242.
\(^{196}\) Tichy, 242.
\(^{197}\) Gardner, 17.
model, or mentor. Trust is built through effective communications, and communications are more effective when there is trust. Trust and effective communication, therefore, are cornerstones of a learning organization.

Effective communication is characterized by the ability to convey and clarify meaning. Kotter notes that transformation efforts can be derailed by poor communication as defined in terms of under communication, ineffective communication and inconsistent communication.198 These three communication pitfalls are interrelated. Under communication occurs when elaborate change efforts are communicated to members of an organization through a single memo or meeting, with the result being that few people grasp the essence of the transformation. Ineffective communication characterizes the inability to communicate a message despite intentions to do so. Without clarity and understanding, the leadership of an organization will find it difficult if not impossible to communicate meaning to the members of the organization. In the absence of shared meanings and interpretations of reality, coordinated action will be difficult to facilitate.199 Inconsistent communication is all too common and can be extremely damaging to an organization. When the leaders of an organization go to great lengths to communicate a change program and the need for change, their efforts can be easily undermined when their day-to-day actions are inconsistent with their messages.

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199 Bennis and Nanus, 37.
6) **Leadership Development.** Leadership development is a dimension of the leader's role as teacher. However, it is a significant dimension, and as such, warrants separate discussion.

Can leadership be taught? I, along with a number of leadership theorists would suggest that it can, but with certain qualifications.\(^{200}\) Certain characteristics in a leader may be genetically determined, such as level of energy. It is the course of events and influences on an individual that can ultimately determine their development as a leader.\(^{201}\) And one of the most influential events affecting the development of a leader is their exposure to opportunities to develop leadership traits.

It is the work of leaders to develop young leaders. Gardner suggests that society and its institutions should concentrate their efforts as follows:

*Offer promising young people opportunities and challenges favourable to the flowering of whatever leadership gifts they may have. Some will become leaders, partly from what we enabled them to learn and from challenges set before them, partly from the self-knowledge we helped them achieve. Beyond that, time and events will teach them. Mistakes and failures will teach them. And with respect to the very greatest leaders, a decent humility should remind us that we do not fully understand – may never fully understand - their emergence.*\(^{202}\)

Young people need experience in leading but they also need exemplars and mentors because leadership is learned from living examples. The role of

\(^{200}\) Gardner, 157-158.

\(^{201}\) Gardner, 157-158

\(^{202}\) Gardner, 158.
mentors is central. Mentors are growers of leaders.

The development of leaders extends beyond the youth of our world. It must also focus on those who are already part of our organizations. Leadership, as was already described, can and should be distributed throughout our organizations. The increasing complexity of our world necessitates this. Development of leaders, as a way of distributing the leadership function, would appear to be a task of leaders in any organization. Developing leaders, as Sullivan and Harper suggest, is “bottom-line behaviour.” Progressive and successful organizations seem to recognize this as a fundamental truth. As Kotter points out, “successful organizations in the 21st century will have to become more like incubators of leadership.” Having recognized this imperative, the United States Army has employed a model for leader development which encompasses education and training, on-the-job experience, and self-development. Coaching, counselling, mentoring, and a well-developed system of feedback are also integral aspects of leadership development.

7) Teaching/Learning. The capacity for both teaching and learning are vital for successful leadership, particularly transformative leadership. Looking first at the importance of teaching, there is little debate as to its relevance to leadership, particularly in learning organizations. Senge identifies teaching as one of three major roles for leaders in learning organizations. More specifically, he sees the

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204 Kotter, 166.
205 Sullivan and Harper, 214.
206 Sullivan and Harper, 216.
207 Senge, 353-357.
role of teacher as one whereby leaders help others develop systemic understandings, and encourage independent thought. In that regard, the leader will invite debate over his/her strategic framework for the organization as a way of encouraging deeper understanding and learning among members of the organization. This approach is also associated with Tichy’s “teachable point of view” philosophy, which has been used by organizations such as Ford to articulate a vision for change across the organization. This point is further elaborated in the next section, as it is critical in a learning organization context.

Recognition of the leader’s role in teaching has emerged from a number of other sources. The United States Marine Corps has clearly recognized the need for learning, stating that:

*All commanders should consider the professional development of their subordinates a principal responsibility of command....Commanders are expected to conduct a continuing professional education program for their subordinates which includes developing military judgement and decision-making and teaches general professional subjects and specific technical subjects pertinent to occupational specialties.*

Sullivan and Harper also acknowledge the importance of teaching. In fact, they identify it as one of three principal roles for leaders in the learning organization. Moreover, the idea that leaders teach by explaining and encouraging greater awareness is prominent in their work. Bass also speaks of the

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208 Wetlaufer, 77-97.
209 United States Marine Corps, 66.
leaders’ role as teacher, noting that leaders can transform people by reshaping their values and beliefs.211

Sometimes, this reshaping of values, beliefs, as well as behaviours, occurs through another form of teaching: role modelling and mentoring. Bennis and Nanus cite numerous examples of how leaders have encouraged organizational learning through their influence as role models.212 By modelling learning behaviours such as creativity, innovation and knowledge sharing, leaders can encourage learning in members of an organization. Gardner acknowledges the importance of mentors – both formal and informal - who help people perceive and understand key dimensions of leadership by providing them with living examples.213

Leaders can also encourage learning – in a more transactional sense – by rewarding learning behaviours in the organization. Rewards may take the form of increased compensation, recognition, and promotions.214 The transactional nature of such an approach should not by any means detract from its desirability or effectiveness. If by offering a reward for an innovative idea, a leader or leaders encourage the development of a new approach, or a new team is established to pursue an innovative idea, this form of leadership has served a useful purpose.

The flip side of the leader’s role as teacher is that of learner. Part of the means by which the leader teaches is through demonstrating their capacity for learning. Leaders need to learn. In an era of increasing complexity, it is vital to

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211 Bass, 100.
212 Bennis and Nanus, 190-194.
213 Gardner, 169.
214 Bennis and Nanus, 192-194.
the organization that its leadership is continuously learning. In that regard, leaders who do not engage in their own learning to better understand the issues of relevance to them, do so at their own peril. As Bennis and Nanus suggest, "learning is the essential fuel for the leader, the source of high-octane energy that keeps up the momentum by continually sparking new understanding, new ideas and new challenges…those who do not learn do not survive as leaders."\textsuperscript{215} Kotter similarly observes the emerging imperative for leaders (and all others) to learn for organizational success. He observes that, "we will see more of these remarkable leaders who develop their skills through lifelong learning, because that pattern of growth is increasingly being rewarded by a rapidly changing environment."\textsuperscript{216}

The notion of continuous learning both through technical education and training, and through a lessons learned cycle, is thoroughly ingrained in most military organizations. The price of not learning in a military environment — loss of freedom, serious injury, or death — is too great to ignore. The United States Marine Corps recognizes the importance of continuous learning for all of its soldiers, and in particular for its senior officers, noting that the officer’s principal weapon is his mind.\textsuperscript{217} In very direct terms, The Marine Corps manual, \textit{Warfighting}, suggests that “the leader without either interest in or knowledge of the history and theory of warfare — the intellectual content of his profession — is a leader in appearance only.”\textsuperscript{218}

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\begin{itemize}
\item \textsuperscript{215} Bennis and Nanus, 176.
\item \textsuperscript{216} Kotter, 177.
\item \textsuperscript{217} United States Marine Corps, 67.
\item \textsuperscript{218} United States Marine Corps, 67.
\end{itemize}
The United States Army operates on the basis of a similar commitment to continuous learning. The After Action Review (AAR), implemented to encourage learning, improving, and doing better the next time, has become the cornerstone of continuous learning in the Army. Through the process of the AAR, members of an Army unit learn how to give and receive feedback in a non-threatening a manner. Communication and trust are vital in order for the AAR to work and be of benefit to the unit. It should be noted that institutionalizing this type of learning process takes time – particularly in an organization where performance is rarely reflected upon and if so, is done in a punitive versus adaptive learning manner. As is often the case in such organizations, communication and trust – if found at all - are in scarce quantities. This is where the role of leaders and leadership is critical.

In the Army's experience, "learning leaders" have clearly been necessary to successfully institute a learning culture, and for the larger success of the organization. As a learning culture is implemented, it will initially generate adaptive learning. As the feedback process becomes effectively institutionalized, trust and communication should increase, as should information sharing. A culture of information sharing and shared responsibility by team members is necessary to encourage the type of generative learning necessary for innovation and growth. Leaders affect both types of growth through their own commitment to learning and through fostering a culture of trust and open

\[221\] Sullivan and Harper, 194-195.
communication. Noting the value of the learning leader, Sullivan and Harper point out the following:

*A learning leader is able to gain and sustain initiative. Having the initiative means setting the conditions for competition and growth, not constantly reacting. A passive leader will try to accommodate change, reacting to the environment, but change is happening so fast that reaction - accommodation - is not good enough....Gaining and maintaining the initiative are the essence of growing an organization.*

Learning leaders - whether in a government, business or military context - do not see their work as done. As was suggested, they are guided by a purpose that is unlikely to ever be fully realized. In an increasingly complex world, their strategies will change to ensure that they can address the challenges that might impede them from realizing their purpose. However, their purpose should remain constant.

How might the leader’s and the organization’s learning enable them to keep advancing the organization’s purpose? Because their environment is changing – and often very quickly – they must always be learning in order to be able to foster generative learning and to sustain initiative. In other words, the organization must be learning to continue to innovate. In Chapter III, we described the process of ‘creative destruction’- whereby today’s solutions can become tomorrow’s problems - as a way of viewing the process of innovation. Leaders, in this context, must always be learning in order to build and sustain a culture of

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innovation in their organizations. Perhaps a more ‘positive’ way of understanding creative destruction is as a mechanism for renewal. In this regard, learning leaders, according to Tichy are, “always in the business of renewal.” ²²³

4. Summary

The purpose of this chapter was to identify the dimensions of leadership, the key attributes and perhaps most importantly, the tasks of leadership. The idea underlying this approach is to provide an understanding of the role of leadership in organizational change as a basis for building a case for further exploration of the relationship between leadership and transformation in a learning organization.

Two key dimensions of leadership were identified to provide a context within which the attributes and tasks could be more easily understood: 1) hierarchical and distributed leadership, and 2) transactional and transformational leadership. As was suggested, the importance of the former dimension is that increasing complexity is requiring individuals at a variety of levels in organizations to assume greater responsibility for addressing change and for nurturing a culture of learning and innovation. This does not imply that there is a lack of clear leadership, in a hierarchical sense. On the contrary, the discussion has suggested that to be successful, most leaders must encourage the development of distributed leadership. In an environment of increasing complexity, the organization’s ability to innovate and cope with discontinuous change requires the commitment and effort of many. Innovation, for example, is less likely to become ingrained in an organization’s culture if it is the province of a single

²²³ Tichy, 278.
isolated group of individuals. Greater innovation and, in turn, change is more likely to occur if there are individuals leading and promoting innovation across the organization.

Increasing complexity is having a clear impact on the type of leadership required in organizations. "Higher order change" is precipitating a need for "higher order" leadership. In other words, transformational, as well as transactional, leadership, is required to deal with a complex environment. The delineation of transformational and transactional leadership explains the difference, to a great degree, between the leader’s capacity to simply extract action from members of the organization and to motivate them towards it based on a greater sense of purpose. It also provides a basis for understanding how leadership can be distributed throughout an organization, which is characteristic of a learning organization, and why this is necessary for transformation.

Leadership, it has been suggested, has a key directional and facilitative role to play in the development of a learning organization. The leader (and his/her leadership team) must play an integral role in establishing the sense of purpose and strategic framework for the organization, that is the goals, measures of success and the guidelines. It is up to other members of the organization to find the ways and means, consistent with the framework and the organization’s overall purpose, to operationalize the purpose and strategic framework. The leader’s principal role, in this regard, is to ensure that the strategies developed and tactics employed by the various units of the organization are effectively coordinated in support of the organization’s larger purpose and direction.

The leader’s other major roles, and a necessary condition for the development of the learning culture it would seem, are that of teacher and learner. Leaders must have a strong commitment to their own learning and that of the organization. This commitment
to learning is also reflected in a commitment to self-renewal and to the reinvention of themselves and the organization, as required. It is demonstrated more specifically in the commitment to scanning and understanding the organization's environment, and in gathering and using feedback on performance and from the environment to encourage both adaptive and generative learning.

More directly, the leader has a principal role to play as a teacher and developer of leaders. Through his/her learning the leader serves as a model, reinforcing the importance of learning in the organization. The distribution of leadership - that is, the development of others who can assume leadership roles – seems to occur with the institutionalization of a learning culture in the organization. The culture is built as information is shared in the organization, and as education and targeted training programs are introduced. The sharing of information facilitates performance assessment and the use of feedback. The feedback or "lessons learned" cycle is critical to individual and organizational learning. Its effective use, therefore, appears to be one of the hallmarks of a well-developed learning organization.

The common 'thread' that ties the discussion of dimensions, attributes and tasks of leadership is their contribution to the development and institutionalization of a learning culture in organizations. Systems theory, as explained in Chapters II and IV, suggests that systems (organizations) can be influenced by attractor patterns, which shape their relationship with their environment. Forces acting on a system may shift it into a new configuration, a new form - whether positive or negative. Through understanding and gathering feedback, it may be possible to identify the types of changes necessary to 'nudge' a system towards a positive new context, and where and when these changes
should be introduced. The leader’s role, in this context, is to understand the system constraints, which can affect the organization’s ability to adapt in this way. Leaders can do this through understanding the system and its relationship with its environment. They can use feedback to try to develop an understanding of prevailing patterns of feedback in the system. This information may help them break existing patterns that can trap the organization in a negative configuration. At the same time, the effective leader must also be cautious about using feedback to ‘direct’ an organization instead of designing adaptations to ‘nudge’ it in a different direction. The effective leader will employ a ‘team of leaders’ to assist in developing an understanding of the system and to deploy the changes necessary to nudge the system as required.

In short, the leader’s learning and ability to encourage a culture of learning, seems to be a key condition for dealing with change and facilitating transformation in any organization. This reinforces the idea that the key role of leadership may, to the extent that it is possible, be the management of change. Moreover, this notion is key to the assertion that leadership – of all the organizational elements – may be most strongly correlated with effective transformation.
VI) LEADERSHIP AND TRANSFORMATION IN A LEARNING ORGANIZATION

In the introductory chapter of this thesis, the purpose of this document was defined as exploring the role of leadership in organizational change in order to build a framework to assess its potential influence as compared with other elements of organization. Towards this end, Chapter V defined the dimensions, attributes and tasks of leadership that may influence organizational performance and capacity for change. The identification of these aspects of leadership was premised largely on the role of leadership in a learning organization context. Given the linkages between a learning organization and systems theory, as explained in Chapter II, a more in depth discussion of the linkage between the proposed ‘profile’ of leadership and systems theory is warranted. This chapter, therefore, seeks to take this profile and explore in greater depth, the roles of leadership as suggested by systems theory. It recognizes, as much of the literature on organizations increasingly has, that complex systems theory has much to offer in terms of explaining what were previously thought to be ideologically rooted concepts such as employee empowerment.224

In trying to draw the previous chapters together, the specific roles and challenges of leadership, as suggested by systems theory, are identified in order to develop a comprehensive understanding of when and how leadership may affect organizational change. The purpose of this chapter is to provide a sound teleological framework for connecting leadership with organizational performance and transformation. In so doing,

this chapter supports the case for further investigating the relative importance of leadership in organizational transformation.

Prior to any further investigation of the role of leadership relative to other elements of organization, one other aspect of the discussion must be completed: the identification of those elements of organization, that in addition to leadership, affect transformation in systems. Earlier in the document, the components thought to affect organizational performance were identified. Of those identified, there are specific elements including leadership, which are thought to be more transformational in terms of their impact. Those elements seen to be transformational are identified, and their relationship to leadership is explained briefly as a means of further reinforcing the important role of leadership.

1. Transformational Elements of Organization

Building a framework to describe the role of leadership in influencing organizational change will require identifying the other elements of organization that also effect the change process. As was suggested in Chapter II, the components of organization that affect performance can be divided into two sets of factors: transformational and transactional factors. Using the Burke Litwin model of organizational performance as a basis for our understanding, we determined that the following, in addition to leadership, can be critical elements for transformation:

- Mission;
- Strategy; and
- Culture.
This classification of factors should not be seen as negating the importance of the transactional factors. It simply recognizes that changes in each of the aforementioned factors, as compared with the transactional factors, may have widespread effects on the organization as a whole.

1.1 Transformation: The Relationship Between Mission, Strategy, Culture and Structure

While Burke and Litwin offer one of the more comprehensive models of organizational performance, others have recognized the importance of the aforementioned elements in relation to transformation and organizational success. Collins and Porras have noted the importance of mission to organizations, particularly in terms of helping them understand and balance continuity and change. Bartlett and Ghoshall believe so strongly in a change in doctrine for organizations - to one guided by purpose and not strategy - that they suggest the definition and articulation of purpose must be top management's first responsibility. The military, as already pointed out, has long recognized the importance of strategy in linking vision and values with deliberate concepts for action. Using the concept of creative destruction as a frame of reference, Tichy observes that fundamental change in organizations requires people to "unlearn and relearn, to exchange power and status, and exchange old norms and values for new norms and values." In other words, changes in culture are required for effective transformation.

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225 Collins and Porras, Bartlett and Ghoshall.
226 Bartlett and Ghoshal, 88.
228 Tichy, 265.
In addition to mission, strategy and culture, I have included structure among those elements which can and should influence transformation. To truly realize a new way of being, an organization should not be guided by the same architecture – that is, the same pattern of interactions and coordination. These patterns, as Duncan suggests, provide a mechanism for facilitating information flow. In so doing, they influence and reinforce power relationships within an organization. But if the forces of change are pushing an organization towards transformation, the dissolution of established power relationships or hierarchies should, of necessity, be required to encourage new behaviours and shift attitudes. The creation of a learning organization, for example, is facilitated by a structure that encourages flexibility, communication and supports information sharing. In this case, a traditional hierarchy that inhibits flexibility and information sharing because of a layered structure would clearly not be appropriate.

Structure, therefore, can be critical for realizing an organization's purpose, supporting its strategy, and promoting its culture. At the same time, this does not suggest that structure is static. Structure, like strategy, it will be pointed out, should have an emergent quality. Helgeson's discussion of webs supports the notion that flexible structures are required to address the problems of an increasingly complex business environment. More generally, as Ghoshal and Nohria point out, organizations are fluid like their environments. Accordingly, a more complex environment may demand a more complex, or simply 'different', organizational structure.

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229 Duncan, 60.
230 Tichy, 265.
231 Sullivan and Harper, 206.
232 Helgeson. 51-92.
233 Ghoshal and Nohria, 24.
1.2 Relationship to Leadership

While each of the elements just described was identified on the basis of their transformational potential, none of these, I would suggest, is truly transformational on their own. Their potential to influence transformation, particularly in complex non-linear systems, may be unleashed through an integrated approach to change. Such an approach recognizes the strong inter-relationships among these elements. It must recognize, for example, that an organization's mission or purpose plays a significant role in shaping culture and in determining structure. An organization's purpose, along with values, comprises its enduring character. Values and purpose, in turn, influence the development of norms and standards which provide the basis for culture. Strategy, if it is to be successful, should be linked to the realization of the organization's purpose. At the same time, culture, particularly an organization's norms and values, can provide the parameters for strategy development, and the types of structures that emerge in organizations.

The point of the previous discussion is simply this: that mission, strategy, culture and structure are clearly linked, clearly inter-dependent with one another. However, one question remains unanswered: what is their linkage to leadership? It is this author's contention, that the mechanism which weaves these elements together to optimize their transformational potential is leadership.

Looking first at mission and strategy, it is clear that leadership and the organization's leader are integral to the articulation of mission. The leader, as motivator and teacher, can clarify and communicate purpose, and encourage commitment towards its realization. This notion recognizes that while important, strategy alone is insufficient
to inspire the extraordinary effort and sustained commitment necessary to deliver consistently superior (organizational) performance.\textsuperscript{234}

Strategy is the purview of leadership; although not necessarily established by those ‘at the top’ of the organization’s hierarchy. Can strategy ‘emerge’? From a systems perspective, the answer is yes. The work of the leader, in this context, is to establish a set of ‘reference points’ such as vision, values, norms and behaviours that create a space within which many possible actions may emerge.\textsuperscript{235} The concept of co-evolution in organizations reinforces the idea of emergent strategy. It suggests that corporate and other leaders – particularly those in high velocity organizations – should not even try to control or predict strategy.\textsuperscript{236} What they should instead do is set the context or parameters within which strategy can be ‘made’ at the unit level.\textsuperscript{237} This idea of setting the “strategic framework”, or context within which unit strategies can be made, will be returned to latter in this Chapter. This view of strategy development clearly assumes the existence of a strong leader who knows and understands their environment, and thus can shape or influence the context as required. It also assumes the existence of the distributed leadership, necessary to be able to set and implement strategies within the framework set by the senior leaders. The concept of emergent strategy, it will be shown, is important for understanding the implications of viewing organizations through a lens of complexity and chaos theory.

In terms of culture, leadership, as suggested, plays a critical role in promoting the

\textsuperscript{234} Bartlett and Ghoshal, 81.
\textsuperscript{235} Morgan, 95.
\textsuperscript{237} Eisenhardt and Galunic, 92.
development of culture and, more specifically, a learning culture. The vision, values and sense of purpose that bind members of an organization together can help them understand and absorb the mission and challenge of the whole enterprise. Through this knowledge, members of the organization will become bound to the larger enterprise and what it stands for. As Schein suggests, "if one wishes to distinguish leadership from management or administration, we can argue that leaders create and change cultures, while managers and administrators live within them." Leaders, he argues, encourage culture formation through "integrating" or bringing a group together, and through the shared learning or "patterning" of group behaviours and norms that occurs when the group undertakes a given course of action.

In identifying culture as a key element of transformation, this is not to suggest that cultural change is simple or fast. Indeed, cultural change takes time as it represents those things, such as values and philosophies, which usually are longer in development and, thus, are clung to more vociferously when challenged. Cultural change is not something that the leader simply 'checks off' a task list for successful implementation of organizational change. Kotter, for example, recognizes that the "actual changing of powerful norms and values occurs mostly in the very last stage of the process, or at least in the very last stage in each cycle of the process." Often times it takes well beyond the duration of any change project to anchor a change initiative in the organization's culture. Moreover, cultural change can take a lengthy period because it affects or relates

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239 Schein, 10-11.
240 Kotter, 156.
to all of the transactional systems or elements of an organization. As such, it may precipitate change in all of them.241

For many, structure has been viewed as a means for controlling organizational behaviours.242 Another view of structure has emerged which challenges this idea. From a systems perspective, structure, much in the same way as strategy, may be viewed as something that is not readily controlled. In this regard, leadership can again play a critical role in setting the context within which structure develops.

A retrospective look at the re-engineering movement that swept across many organizations has shed new light on weaknesses of the ‘structure follows process’ dictum that underpinned this movement. It suggests that changing structure to support re-engineered processes may not be sufficient to transform the way employees behave and work with one another. What may also be needed is a change in culture. Majchrzak and Wang note the failings of many re-engineering efforts as a testament to the need for more than just creating “process-driven” organization.243 In this respect, leaders have a clear role to play in influencing culture to ensure that it works with structure.

In addition to shaping culture, leaders, as suggested, may create the context within which organizational ‘form’ or structure can emerge. Because many managers and leader/managers are inclined to rely on structure as a chief means of controlling behaviour, it may be difficult to get them to accept the notion of letting organizational form emerge. From a systems perspective, the successful transformational leader may be distinguished by his or her ability to create new contexts that break the hold of dominant

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241 Burke and Litwin, 11.
242 Ouchi, 95.
ways of thinking and doing in favour of new ones. In this regard, leaders must be able to effectively balance the need for control with the need to let organizational form emerge. This is not to say that hierarchies won’t continue to exist, it instead means that they may work in tandem with other ‘emergent forms’ of organization such as project teams and communities of practice.

2. Systems Theory and Roles for Leadership

Throughout much of this discussion, the idea has been advanced that systems theory can offer a comprehensive framework through which to understand organizational change and transformation. The growing complexity of our environment and organizations has underscored the weakness in many traditional management approaches and has highlighted the need for different ones that recognize the non-linear nature of many systems. It is in this context that the idea has been advanced that leadership, from a systems perspective, can play a central role in transformation.

In the context of complex, non-linear systems, and discontinuous change, there are a number of challenges that the leader and leader/manager may confront. These challenges, which are described shortly, can be understood through a lens of chaos theory. Chaos theory, as alluded to in earlier chapters, suggests that random disturbances to a non-linear system can precipitate “unpredictable events and relationships that reverberate throughout a system, creating novel patterns of change.”

Despite the unpredictability of complex, non-linear systems, order can emerge

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244 Morgan, 267.
245 Morgan, 262.
from apparent randomness and chaos. What this means for organizations is that forces of change acting on an organization can produce positive patterns of change for the organization, and can ultimately drive it towards transformation. The United States Army transformation cited in Chapter III typifies this sort of shift. At the same time, these forces of change can also produce patterns of change that drive an organization towards a negative state. Here, feedback loops, which were introduced in Chapter II, can drive a system to over respond to a given disturbance and become trapped in a negative state. Moreover, the concept of creative destruction recognizes that random disturbances to a system can reinforce an existing state, as the system tries to resist being drawn towards a new state. Many theories around the management of change recognize this "dialectical pull" or resistance to change as natural, and as such, focus on trying to help the organization's members deal effectively with it.246 As a related theme, it was also suggested that efforts to 'manage' change by using ideas such as creative destruction can be dangerous because of the potential for unintended consequences to arise.

Before advancing this discussion further, one point raised in Chapter III warrants repeating: that transformational change need not imply quantum change. Systems theory, under conditions of non-linearity and randomness, allows for the idea that small but well-timed and positioned changes can create effects much larger than the original change. This can occur, as explained earlier, because systems fall under the influence of attractors, which can be understood in a manner similar to feedback loops. Attractors, as suggested, represent patterns of behavior in the system which can keep it locked in one state or shift it to an altogether new one. Sometimes, a small change introduced into a

system can produce a series of small changes that push the system towards a bifurcation point, or what some have called “a Tipping Point”. At those points, another change may be absorbed by the system, with the result that the system maintains a configuration close to its original state. Alternatively, a change may be enough to launch or tip the system into an entirely new configuration or state.

2.1 Emergent Organization

So what does all of this suggest for leaders and leader/managers? For one, it may suggest that the traditional attempt to control and the mechanisms, such as structure, used for this should be rethought. This is because structure and hierarchy may not have a fixed form – they will never be more than a ‘snap shot’. Various forms, depending on the organization and where it is in its lifecycle, will develop and further define themselves over time. If we approach the development of organizations from a perspective of creative destruction, whereby today’s solution can become tomorrow’s problem, this reinforces the idea that we can’t really look to organization structure as a lasting form of control. This may suggest that structure – absent certain other conditions, such as leadership – will not influence organizational effectiveness. Through their study of American electronics manufacturers, Majchrzak and Wang concluded that changing organizational structures from functional into process-complete departments does not cause people to shed their functional mindsets and instantly become teams. Moreover, they also note that cycle times for the organizations studied did not improve.

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248 Majchrzak and Wang, 93-99.
249 Majchrzak and Wang, 94.
250 Majchrzak and Wang, 94.
In terms of specific implications for leaders and leadership, the potentially emergent and evolving nature of organizations suggests a couple of things. First, it reinforces the idea that leaders must scan their external and internal environments to gain insights about their organization – both retrospectively and prospectively. By doing this, they should be better informed, better able to judge what is actually 'within their power' to influence in terms of the organization's performance. As Greiner notes, the evolutionary nature of organizations suggests that leaders have to "evaluate company problems with a historical understanding instead of pinning the blame on a current development. Better yet, it should place managers in a position to predict problems and prepare solutions and coping strategies before a revolution gets out of hand."251

2.2 Creating Context

The idea that structure is emergent also suggests that leaders – if they can’t create the structures - may have a role to play in creating the conditions or 'context' necessary for the best structures to emerge. This involves defining what Morgan refers to as "minimum specs".252 The principle of minimum specs argues that leaders and leader/managers should not define anything more than absolutely necessary in order to launch an initiative. Morgan warns that leaders should "avoid the role of 'grand designer' or strategist, in favour of one that focuses on facilitation, orchestration, and boundary management, creating "enabling conditions" that allow a system to find its own form."253 Leaders, therefore, need to be skilled in identifying and shaping the parameters

251 Greiner, 67.
252 Morgan, 114.
253 Morgan, 114.
that define a context. This idea is consistent with what was identified in Chapter V as ‘setting the strategic framework’, whereby mission, vision, values, goals, measures of success, and norms, provide a context within which structure, strategies and tactics can ‘emerge’ across the organization.

By setting the appropriate context, leaders can facilitate distributed leadership, allowing strategies to ‘emerge’ from leaders at various levels of the organization’s hierarchy. Eisenhardt and Brown, through their research, have found that a number of progressive companies have embraced this idea of setting contexts and then letting strategies, tactics and organization structures emerge. ‘Patching’, as already suggested, reflects this trend. Change in organizations that ‘patch’ happens frequently, as those leading the organization are vigilant about ensuring that the size of business units does not become prohibitive for growth. In other words, business units cannot become too large to be flexible. Organizations such as Hewlett Packard and Johnson and Johnson have practiced this philosophy with apparent success.

Through creating or changing contexts, leaders can break dominant attractor patterns. Creating new or different contexts can mean a variety of things. Sometimes an organization may want to maintain stability, which, in turn, requires manipulating organizational context such that it can stay under the influence of an existing attractor pattern. In other instances the leader or leader/manager may need to introduce instability into the system in order to push it towards the edge of instability - that is, to its tipping point - and possibly into an altogether new configuration. Reshaping the context, in both

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254 Eisenhardt and Brown
255 Eisenhardt and Brown, 74.
256 Tushman and O’Reilly, 25.
cases, may mean shifting prevailing attitudes and ideas – that is, shifting culture. Shifting culture, according to Pascale, Milleman and Gioja, was integral for Sears to turn around its floundering organization.\(^{257}\) It may also have been the inability to anchor this shift that effectively inhibited the organization from sustaining its positive new direction. Reflecting on this, the three authors suggest that Sears struggled with “the unending tension between the preserving forces of tradition and the transforming forces of change.”\(^{258}\)

Anchoring a change in culture may entail more direct, more specific efforts such as using experiments or pilot projects to demonstrate that different ways of approaching something may work. It may also mean shifting responsibilities in the organization, changing personnel, or altering how people work together through the establishment of teams.

In either scenario, the key competency and tasks for leaders may lay in reading, understanding, and knowing the organization, so that they can best judge when and how to shift or change a context. To do this, they must scan their environments and be able to gather and apply learning from all that they do. Organizations, as suggested, have their own distinguishing characteristics, including their own natural rhythms, which influence their capacity to assimilate change. This is something that the astute and informed leader should know and honour.\(^{259}\)

One additional aspect of creating context - perhaps the most important for the leader - is creating the context that encourages the process of learning to learn.\(^{260}\) The

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\(^{257}\) Pascale, Milleman, and Gioja, *Surfing the Edge of Chaos*, 56.
\(^{258}\) Pascale, Milleman, and Gioja, 57.
\(^{259}\) Eisenhardt and Brown, “Time Pacing: Competing in Markets that Won’t Stand Still”, 66.
\(^{260}\) Morgan 115.
process of learning to learn is reflected by the capacity of an organization to use learning to challenge the norms and assumptions that guide the operation of the organization. Challenging the existing ‘context’ or strategic framework can be understood in terms of double loop learning, which links to the earlier discussion in Chapter II of the autopoietic or self-reflective tendencies of organizations. While single loop learning involves reflection of what is happening and the capacity to correct for error, double loop learning enables a system to correct for negative patterns of behaviour that may result from existing operating norms. Absent the capacity for this type of learning, an organization may stay trapped in an established attractor pattern, or what was identified in Chapter III as a cycle attractor.

In more practical terms, an organization that finds itself trapped in a negative state may be characterized by fear and an aversion to the unknown. Typically, its members are less likely, less compelled to seek new ways of doing things – a state which can seriously inhibit innovation. As one of the leaders interviewed suggested, their organization’s success hinges, in large part, on becoming an organization where its members are “ready, willing and able to embrace change.” In this way, each member of the organization is more willing to look for opportunities to be creative, to innovate – in other words, to promote change. “Change then becomes a process of many (smaller) changes – all the time.”

In trying to develop an organization that can engage in the kind of double-loop feedback necessary to learn to learn, the leader and leader/manager must shift the culture

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261 Interview with David Williams, President and Chief Executive Officer, Workplace Safety Insurance Board of Ontario, Toronto, August 31, 2000.
262 David Williams interview.
to encourage this behaviour. In order to facilitate this, the leader may have to identify and remove structural or other barriers to double-loop learning within the organization. Hierarchical divisions, for example, can inhibit the free flow of information, which is the cornerstone of a learning organization. Without the free flow of information within and between parts of an organization it becomes difficult, if not impossible, to encourage systemic thinking and a common understanding of the larger context. Accountability mechanisms and other systems, when used with a punitive intent, can entrench defensive routines that reinforce the status quo in an organization. The development of trust becomes critical in this context, as this type of reflection is only possible under conditions where the fear of making errors does not paralyse individual action and initiative.

2.3 Leveraging Change

As discussed, one of the most important potential tasks for leaders and leadership, as suggested by systems theory, is to understand the leverage capability of changes to a given system. Small, but critical changes injected into a system can trigger a larger, and potentially transformational, effect than the original change, when they push a system past its bifurcation or ‘tipping point’. In social systems, one means of explaining the concept of a tipping point is using a “contagion model”. The basic assumption of such a model is that the spread of social problems can be understood to work in the same manner as an “infectious disease” might spread. The contagion model assumes that the

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263 Morgan, 88.
264 Morgan, 89.
incidence of a disease tends to move towards equilibrium levels. If the incidence or frequency of a disease stays below a critical point, the disease tends to hover around some low-level equilibrium – in other words, it remains relatively constant. However, if it reaches a certain point, it is likely to explode into an altogether new state: an epidemic.266

The AIDS epidemic in the United States offers an example of epidemic theory and the tipping point in practice.267 Since the late 1980s, the number of people dying from the AIDS virus has equalled the number estimated to become infected with H.I.V. on an annual basis. In other words, if each person who dies infects one individual, the virus effectively hovers around an equilibrium state. Should the number of individuals that the average carrier infects over the course of their lifetime increase – even by a small amount – the result could push the current level from its equilibrium, precipitating a substantial increase in incidence of the disease. Conversely, epidemic theory would also suggest that small reductions in the rate of infection per carrier of the disease could send the level of incidence plummeting. As Gladwell, points out this is “the fundamental lesson of non-linearity”.268

The concept of epidemic theory reinforces – yet again – the idea that the parameters within which leaders can influence the outcome of a system are somewhat limited. Does this suggest that leaders should feel helpless? No. What it suggests is that they need to make thoughtful, and carefully informed choices when trying to leverage the effects of small changes.269 More specifically, leaders and leader/managers must be able

266 Crane, 1227.
267 Gladwell, 34-35.
268 Gladwell, 35.
269 Gladwell, 35.
to identify the bifurcation or tipping point of a system – no small feat – and then identify the change necessary to push the system in the right direction. For the organization trying to break free of a negative state, this may mean creating a new context, which challenges the ‘status quo’ as a way encouraging members of the organization to become more accepting of a proposed change. Alternatively, it may mean introducing changes to help maintain an existing state. Regardless of the objective, timing of the introduction of changes is also important, as the ‘leverage’ effect may be limited if introduced too soon. A change, for example, may be instituted too early, in the absence of adequate information, causing a leader to misidentify the tipping point of a system.

While much of the discussion has focussed on the leverage effects of introducing small changes, the other idea that leaders should not lose site of is the “critical mass effect” of a number of small changes. Collectively, a number of small, individual changes can combine to change or shift the behaviour of a system pushing it towards a new state, a new paradigm. Cultural change, which involves shifting the attitudes and behaviours of an organization, illustrates this concept. Change in an organization’s culture will occur as each member of the organization begins to think and act in a different manner. As one of the leaders interviewed noted, culture change is, at this point, his most significant task, as change cannot be institutionalised until employees become customer-driven in their work. As their efforts to serve customers more effectively generate changes in how things are done, over time, each of these changes may weave together to create an entirely new way of operating for the organization.

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270 Morgan, 272.
271 David Williams interview.
Clearly, the capacity for learning – both generative and adaptive – can affect a leader’s ability to know when and how to introduce change or ‘instability’ to an organization. This is not to suggest that this is simply a ‘due diligence’ exercise whereby the well-prepared leader will be able to mechanically predict, effect and ultimately, manage change in their organization. The experience of successful organizations seems to suggest that learning is an ongoing and involved process whereby leaders regularly scan their environment and reflect on lessons learned. This information is shared with other members of the organization so that they can use it to determine appropriate strategies and tactics and, if necessary, to question the assumptions that shape the existing organizational context.

At this point, a cautionary note must again be added. The capacity of any organization to harness change and respond to unintended consequences is not as simple as good planning, review and reflection. Nevertheless, it seems likely that engaging in these activities will increase an organization’s ability to effectively respond to change if it does so from an informed position. Leaders, therefore, have a role to facilitate system, scanning, dissemination of information, and informed strategy making. The chance of successfully orchestrating these activities seems likely to be enhanced through a distribution of leadership. In this way, distributed leadership may ultimately increase the effectiveness with which small changes can be introduced to leverage larger effects, and any unintended consequences of these actions be addressed.

The other aspect of managing change in a system involves understanding and managing the tensions created when elements of a system try to push it in a particular direction. The leader and leader/manager, in this context, must be able to effectively
manage the tensions that can naturally arise as an organization is confronted with change or the prospect of change. In large part, this involves fostering a culture which views the future as inviting. Such a culture recognizes that existing ways of operating will become obsolete, and as a result, is prepared “to innovate in ways that will undermine current success so that new innovations can emerge.”272

2.4 Support Mechanisms

Apart from the integrated set of leadership tasks described in the preceding sub-sections, leaders have one additional role to play in terms of creating and/or ensuring that the structures and systems required to support organizational learning are in place. Appropriate information systems, for example, help to build the organization into a “networked” learning organization.273 Information systems provide the infrastructure for an effective knowledge management system whereby individuals and units within the organization harvest, create and distribute knowledge to promote learning. Sound information systems are also necessary for an effective business planning process which, according to Rosenblum, “should be the central learning process of any company.”274 Learning also occurs through organizational training and education systems, including less formal programs such as on-the-job training.

Learning organizations are also created through the use of different approaches to job design, which can define work in a more holistic manner, ensuring that jobs are

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272 Morgan, 296.
273 Morgan, 104.
274 Webber, 280.
defined more broadly, with overlapping roles where necessary.\textsuperscript{275} In this way, the organization should be more nimble, more flexible and adaptable.

A certain amount of parallel processing or “redundancy” may be necessary to encourage different analyses of the same organizational problems/issues in order to identify innovations for the organization, as it allows the entry of random variation.\textsuperscript{276} In this regard, the leader may have to identify the need for structures and create the culture or context, which encourages their development. “Communities of practice”, for example, may offer one way for this type of information exchange to occur within an organization. While communities of practice, like other forms of organization structure, cannot be ‘forced’ to grow, they can “benefit from cultivation”.\textsuperscript{277} Multi-skilled teams represent another opportunity for redundancy in an organization, as each member performs a wider range of functions. As with other measures listed, the idea is again to increase flexibility in the system.

The principal of requisite variety, or requisite complexity as it was described earlier, suggests that any system must be as varied and complex as the environment that it is trying to control.\textsuperscript{278} Requisite variety principals suggest that it should be built into the system at the point where it is directly needed rather than at a distance. If it is built in at a distance – as might be the case under a traditional hierarchy – evolutionary and innovative tendencies may be inhibited. This notion was clearly reflected in the approach of one of the leaders interviewed, who, as part of their transformation effort, found it necessary to reduce the number of layers in their organization in order to ensure greater

\textsuperscript{275} Majchrzak and Wang, 96-97.
\textsuperscript{276} Morgan, 110.
\textsuperscript{277} Wenger and Snyder, 143.
\textsuperscript{278} Ghoshal and Nohria, 23-24.
proximity between the customer and the President, and the President and the sales force.279

Under conditions of requisite variety, teams should be empowered to find innovations specific to their unit's local needs, and then share their learning across the organization. This is why efforts to innovate that rely on one isolated group operating on behalf of the organization may find it difficult to realize their goals. Leaders, therefore, must ensure that units, as sub-systems, can balance their local needs with those of the larger system. Moreover, they must also ensure that they have the necessary structures and systems to do so.

3. Summary

This chapter was developed with a dual intent. First, it was intended to provide an overview of the elements of organization which can affect transformational potential. Secondly, it was intended to identify the key tasks of leadership as suggested by systems theory, and in so doing, to expand the profile of leadership advanced in Chapter V.

To the first objective, mission, strategy and culture were identified as key elements of organization affecting performance and transformational potential. Mission, or the organization's sense of purpose, provides the basis for its enduring character. It provides the thread that links together members of the organization. Although it should be constant, mission, it was suggested, should stimulate change and progress through the

279 Interview with Garry Leach, President, Gerdau Manitoba Rolling Mills Steel, Winnipeg, September 8, 2000.
process of trying to realize it.\textsuperscript{280} Strategy was recognized as being integrally connected with mission as it provides the means by which mission is realized. Accordingly, it also provides the means by which transformation may be realized. Culture, it was pointed out, plays a vital role as it shapes and, in turn, is shaped by mission and strategy.

In addition to mission, strategy, and culture, structure was identified as a key element affecting organizational performance and transformational potential. The notion that structure is critical recognizes that the articulation of strategy and the capacity to shift culture are strongly tied to organizational form. For example, it may be impossible to encourage new behaviours and new attitudes around activities such as communication and information sharing, if existing structures inhibit the flow of information within and between parts of an organization.

Each of these elements of organization can be viewed as strongly tied to leadership; even dependent upon its existence. A key task of leadership, for example, is the articulation of mission as a means of building commitment and motivating members of the organization. The articulation of mission provides a basis for developing strategy. The organization’s leaders may drive ‘broader’ strategy, but not necessarily engage directly, in its development – particularly at the unit level. In this way, while each unit may develop its own strategy, integration is maintained through the leader setting the context or parameters within which it is framed. Similarly, the leader influences and shapes culture through the establishment and reinforcement of purpose, values and standards. Structure, in turn, is strongly influenced by strategy and culture. As with strategy, the leader influences, but does not necessarily direct the development of

\textsuperscript{280} Collins and Porras, 69.
organizational structure. They use context to create the conditions for appropriate structures to emerge.

Building on the idea that leadership may provide an important element of organization - possibly the most important element - the key challenges and tasks of leadership emanating from the operation of complex, non-linear systems were identified. These were grouped into four main categories: 1) Emergent Organization, 2) Creating Context, 3) Leveraging Change, and 4) Supporting Mechanisms. Using these groupings, the challenges and tasks are summarized in the table attached as Appendix II.

The notion of emergent organization recognizes that it may be too difficult and ultimately unwise to try to control the operation and evolution of an organization through rigid strategies and structural hierarchies. Complex systems demand greater flexibility and astute leaders know and understand this because they understand their environment through continually scanning it. Through the practice of scanning, they help build the capability for adaptive learning in their organizations.

Adaptive learning is critical from a systems perspective. Its real value is realized when it provides the foundation for generative learning. The latter form occurs when the organization is not only able to adjust elements such as strategy and form based on feedback from the environment, but also to question the existing norms and standards which have shaped the strategy. The existence of generative learning signals that the organization has learned to learn – a condition necessary for innovation and change. In that regard, the leader plays a critical role in terms of creating the conditions, or ‘context’, which encourage the emergence of strategy and structure and the development of generative learning in the organization.
The non-linear nature of systems also means that small changes can sometimes have much more significant implications. In this regard, leaders must be able to pinpoint the tipping points, or those junctures at which another change may push a system into an entirely new state. They must be able to judge when and how to nudge a system towards a new equilibrium level, in other words, they must know how to effectively leverage change. This requires the capacity for generative learning so that they can read the environment and question assumptions about existing operating norms in order to best determine the leverage capacity of change. It should be noted that as important as the capacity for learning is, it does not guarantee that one will be able to use these concepts as ‘blunt’ tools to direct or manage change. The capacity to manage change – to the extent this is possible – may have more to do with recognizing what is within your bounds to control, what is not, and trying to equip people to live with the uncertainty of not being able to mechanically manage change. Learning organizations, however, may possess a culture that allows them to live more comfortably and effectively with this realization. The potential role for leadership in engendering such a culture is key.

In addition to these larger roles, there are mechanisms that leaders can employ which can facilitate successful organizational change. In this regard, it is the leader’s role to identify the need for alternate structures and supporting systems, and to create an environment that encourages the emergence of new forms of both, through a process of innovation. Redundancy and complexity can be guiding principles for the development of new structures and systems, and can be built into both. The leader’s role, in this regard, is to ensure that these are built into both structures and systems.
In short, the point of the previous discussion has been to suggest strongly that aspects of systems theory, particularly as they relate to the non-linear character of complex systems, have very definite implications for what leadership can and should be. The concluding chapter of this document will take this, as well as other propositions from previous chapters, and try to effectively present the rationale for further investigation of the role of leadership with respect to transformation and relative to other elements of organization.
VII) CONCLUSION

This thesis has attempted to develop a number of propositions regarding leadership and its relationship to organizational change. More specifically, this thesis has tried to identify the key dimensions or elements of leadership in order to understand the extent to which it may influence organizational change, and affect the influence of other elements of organization on change. These leadership dimensions are summarised in this chapter, along with their potential linkages to organizational performance and change. Through trying to discern the potential linkages between leadership and organizational change, a framework for further investigation has been established. The elements of this framework, along with questions for further research, are also identified. It should be recognized that this collection of elements is not necessarily exhaustive and that the relative influence of each element of the framework may vary in differing contexts. It is the explanation of these elements to which this chapter initially turns, prior to concluding with a reconfirmation of the key aspects of leadership and their suggested relationship to organizational change.

1. A Framework for Further Exploration

If the reader accepts that a sufficient correlation has been made between the role of leadership, as outlined, and the capacity to manage organizational change, it may be useful to identify some of the key questions that could form the basis for further research on the role of leadership. Case research would definitely involve research with hierarchical leaders of organizations, but would also involve feedback from other 'levels
of leadership’ in order to test the importance of distributed leadership. As well, it would likely include feedback from customers and stakeholders so as to determine their perceptions from an external perspective. The indicators, both quantitative and qualitative, that would be associated with this research would also have to be identified. That said, it is anticipated that this would be part of the establishment of a more precise research framework to be used at the time when case studies might be selected.

Based on the research and interview results, I would suggest that a research framework, at a minimum, might be organized around five possible areas of inquiry:

1. **Defining Change** – Understanding the leader and organization’s definition of what change is will be critical to understanding how they manage it, how much control they feel that they have over it, and their perception as to how it affects their organization.

2. **Defining Innovation** – Understanding the leader and organization’s definition of innovation will provide further insight into their definition of organizational performance and change. How the organization promotes and encourages innovation would also reinforce understanding of how they view change and their perception of control over it.

3. **Organization** – This area would focus on elements of organization and how leadership works with them to affect change. Under that guise, we would want to investigate and measure the extent to which the organization scans its environment, and how it does this. Moreover, the importance of mission and values to the organization and the influence of leadership on them should be explored. In addition, the organization’s planning process and the leader’s role
with respect to it should be assessed. Specific structures and systems that support
systems thinking should also be identified, as well as the leader’s role in defining
their deployment.

4. **Leadership** – Clearly the leader’s and subordinate’s definition of leadership
should be part of the inquiry. Any research would also want to identify and try to
measure the extent to which leadership is distributed in the organization. In
addition, perceptions of the leader and other members of the organization
regarding the key tasks of leadership and the measures of a leader’s success could
be identified.

5. **The Leader and Learning** – It will also be important to know how the leader and
organization view the relationship between organizational learning and
effectiveness. As part of this inquiry, the type(s) of learning occurring and how
they manifest themselves should be identified. This portion of the research
should also identify the strategy, structures, and systems that support learning in
the organization, as well as the leader’s role in determining them.

These broad areas of inquiry are not meant to be exhaustive. There may well be
other areas that emerge as further research is undertaken. The selection of cases for study
should include organizations from the three main sectors of activity: public, private, and
the third, or ‘not-for-profit’ sector. A mix of organizations, both those that have failed
and those that have endured for long periods, is another likely criterion for selection. It
bears repeating that while the ways in which these broad tasks of leadership unfold will
be specific to a given organization, this should not negate the objectives of further
research: to determine the validity and universality of this leadership profile, and to make a direct correlation between it and the long-term success of an organization.

2. Leadership and Systems Theory

As was indicated in the introductory chapter of this thesis, the purpose of this discussion was to try to establish a sufficient linkage between leadership and organizational change and performance, such that a case for further investigation would be seen as warranted. The essential first step towards building a framework for understanding the relationship between leadership and organizational change was to identify an appropriate lens through which organizational change could be viewed.

As acknowledged in Chapter II, systems theory was chosen as the frame of reference for viewing organizational performance and change. It appears a highly appropriate choice in that it recognizes the complexity of organizations, their environments and the interactions between them. Systems theory, as pointed out, also appears to offer an explanation for a variety of management challenges that occur in organizations. It recognizes that the complexity of interactions between the components of organization, including the transformational components of leadership, mission, strategy, culture, and structure, can dramatically influence organizational performance. While each of these elements may play a different hegemonic role in different contexts, all nevertheless can contribute to transformation in organizations. It is this recognition of the potential influence of each of the aforementioned elements on the management of change that provides the basis from which the influence and role of leadership has been singled out for further examination. Leadership, as was suggested, has dimensions to it,

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281 Shafritz and Ott, 254-255.
including the extent to which it is hierarchical and distributed. It can also, of necessity, be both transactional and transformational. By creating a framework for viewing and understanding the role of leadership, we may better understand how all dimensions of organization can work together to influence the capacity to manage change.

The general study of leadership has produced a number of suggested tenets that are often identified as the hallmarks of 'effective' leadership. These tenets include both the attributes and tasks, or roles of leadership. They, along with the dimensions of leadership, were outlined in detail in Chapter V. In terms of the role of leadership in transformation, the tasks and their related attributes identified in Chapter V can be better understood when placed against the tasks suggested for leaders and leader/managers from systems theory as identified in Chapter VI. As is suggested, the juxtaposition of the former and latter can be used to create a suggested profile of key leadership tasks to address the forces of change that create uncertainty and management challenges for organizations. These include the following:

1. **Establishing Mission/Vision/Values and Setting Strategic Framework** – As suggested, leadership has a key role to play in establishing and entrenching mission and, in particular, values in an organization. Even in dynamic systems, mission and values form the enduring character of the organization, and can profoundly influence and shape strategy, culture and structure. More specifically, they influence the setting of ‘parameters’ within which goals and tactics ultimately unfold. The senior leaders of an organization may establish goals, measures of success and guidelines for realizing those goals, but it becomes
the responsibility of ‘leaders’ throughout the organization to set the tactics
necessary for achieving them.

From a systems perspective, leaders must establish the ‘minimum specs’ or
‘context’ within which strategy and tactics can then emerge. The idea of
minimum specs is premised on the notion that leaders must be astute judges of
when and how to act, and avoid the role of being ‘grand designer’. It recognizes
that system and environmental complexity and dynamism make it difficult for
one, or a few people, to both plan and execute appropriate actions.

2. Scanning the Environment – This is a vital task for leaders, in that it is the basis
for adaptive and generative learning in the organization. Scanning the
environment is another task that is leadership-driven, but not necessarily
executed. In other words, the leader of an organization may scan the environment
on his or her own, but is also likely to rely on other leaders throughout the
organization to assist because the environmental influences may be too broad and
complex for one or a few individuals to assess. Scanning the environment also
requires ‘intelligence-in-action’, or the ability to take information and process it
for use, both reflectively and prospectively in planning. In that respect, scanning
can facilitate the identification of ‘tipping points’, and the assessment of when
and how to nudge the organization into, or pull it from, an existing state. For
example, government, based on understanding the policy environment for health
care, may try to introduce a change in governance of the system in order to
‘shake’ it up and create more profound systemic change. Scanning can also help
an organization deal more effectively with unintended consequences. Following
on the previous example, if a powerful stakeholder group, such as physicians, feel that their concerns were not adequately considered in the government’s decision and action, unintended negative consequences may result. Accurate, adequate scanning, combined with a culture committed to learning, may lessen the chance of generating unintended consequences. At a minimum, it may assist the organization in dealing with such consequences.

Scanning, in the context described, involves more than just mapping the environment. Through its contribution to learning, scanning assists the leader in not only understanding the environment, but in also understanding the organization so as to anticipate and deal effectively with whatever the environment may present. In short, scanning can effectively assist the leader and organization in determining what it needs to do to survive and thrive.

3. **Motivating/Communicating** – These are the necessary tasks for building and maintaining a learning organization, particularly where it has not previously existed. Through communication, the leader is able to build trust and to motivate.

Communication of the mission and values – both implicitly and explicitly – provides the platform from which the leader is able to motivate members of the organization. Earlier it was pointed out that transformational leadership hinges on the leader’s ability to motivate people. Through building a culture of open communication, the leader also lays the foundation for organizational learning and for engendering trust.

Trust is a necessary condition for effective adaptive learning. The success of any continuous improvement effort, such as the United States Army’s After
Action Review, is predicated on a trusting environment. Members of an organization cannot feel that their actions are only judged punitively. If they are, individual members of the organization may become risk averse and unable, or unwilling, to learn. Furthermore, they will become unwilling to seek or try new ideas – a state which ultimately threatens the capacity for innovation. The leader must establish trust so that members of the organization feel they can challenge the existing context. From a systems perspective, the organization is said to be locked into an existing state, unable or unwilling to engage in learning or to challenge the existing context. Over time, the system may not survive, as the generative learning that underlies innovation does not occur.

4. Leader as Learner/Teacher - Perhaps the most important role for the leader in helping an organization deal with change is that of teacher and learner. These roles must work in tandem as they can facilitate the double loop or ‘learning-to-learn’ ability associated with the autopoietic nature of organizations. Through demonstration of his or her commitment to learning, the leader may be able to reinforce the need for reflective and prospective - that is, adaptive and generative - learning to occur. The leader’s learning may be enhanced through scanning and understanding his or her environment and through constantly challenging the guiding framework for the organization.

The leader’s commitment to learning may also be demonstrated in the creation of formal learning vehicles for members of the organization. These may take the form of education and training programs. An equally important role, however, lay in the establishment of an information infrastructure to support the exchange
of information across the organization. This infrastructure is a cornerstone of any learning organization.

Once they are established as learners, only then can leaders be effective teachers. Leaders must demonstrate and model the benefits of learning in order to motivate those around them to actively engage in it. Through their role as teacher they can encourage the challenging of existing norms and guidelines that comes through acquiring, analysing and effectively using information. Leaders have a more direct role as teacher in providing opportunities both formal and informal learning for members of their organization. Although clearly a long-term task for any leader, leaders often encourage learning in order to shift culture – that is, the predominant attitudes and behaviours - in the organization. Conversely, they may also have to shift attitudes and behaviours in order to encourage learning. Although it seems something of a circular argument, this simply recognizes the complexity inherent in creation of a learning organization.

Perhaps the most important aspect of the leader’s work as a teacher is the development of other leaders. As suggested, the complexity of many organizations and their environments increases the complexity of navigating an organization through major discontinuous change. Consequently, the assistance of a number of leaders may be warranted to address change. In this way, the responsibility for innovation – that is, growth and development – and the management of change in the organization is shared, ideally among all members. In the language of creative destruction, these other leaders may assist the organization’s overall leader in questioning whether and when ‘today’s solution’
will become ‘tomorrow’s problem’. In more specific terms, distributed leadership may facilitate an organization’s ability to lever the effects of small changes in order to generate dramatic or transformational change. Leaders throughout the organization can scan the environment, interpret and exchange information. Through this process, it may be easier to launch a targeted approach, to discern what type of change is necessary, and when and where it might be most effective. In other words, they have a key role in identifying the potential tipping point of a system.

5. Supporting Structures – In addition to the tasks outlined, leaders must also create the enabling structures and systems to support learning. Any effort to address change - particularly within complex, non-linear systems - is more likely to be successful if an integrated approach is applied. An integrated approach to change implies the simultaneous use of systems, structures, and process to effect changes in strategy and culture. It recognizes that complexity in systems may warrant approaches that reach beyond simple linear solutions.

One of the key support systems for any learning organization, as indicated, should be information technology. And, as was pointed out in Chapter IV, the approach to using technology as an enabler may very much influence the effectiveness of the organization. So while the organization’s technical experts must discern which technical system to use, it seems the role of leadership to determine how technology is employed. Leaders can choose whether to simply ‘automate’ or to ‘informate’. The difference, to reiterate, can profoundly influence the type of organization created, as informating creates a system of
shared information, and hopefully, shared learning. In such an environment, leaders are able to develop effective knowledge management systems and business planning processes – both of which were recognized as key support structures for the learning organization. Automation, on the other hand, may simply reinforce the status quo by supplanting human capability with that of a machine. Automating, accordingly, may be inconsistent with the principles of distributed leadership.

Leaders may also use human resource systems, and more specifically role definitions, reward and recognition, attraction and retention systems to advance the objectives of the organization. They can inject new ideas into the organization through the use of attraction programs. They can also engender them from within the organization by motivating people through broader role definitions, compensation structures, learning programs, etc. In this way, leaders may be able to secure the human and intellectual capital, supported by the systems necessary to promote innovation and survival in the organization.

Leadership, as pointed out, may be manifested in a variety of different ways at different times. What this discussion has attempted to do is to suggest that leaders and leadership may have a very distinct and possibly independent role to play in affecting the performance of organizations, particularly in complex, non-linear systems. To that end, a number of broad tasks have been outlined – the specifics of which may look very different from one organization to another. Changes in the environment, for example, can influence the level of complexity and the specific tactics required to fulfil the larger tasks of leadership. Thus, while this discussion has suggested that leaders may affect
organization performance, their capacity to do so, as suggested, must be viewed on a situational basis.

In summary, this thesis has tried to suggest that a relationship exists between leadership and organizational change such that the former can positively affect the ability to cope with, or manage, the latter. Moreover, leadership may also affect other elements of organization, which, in turn, may affect their potential to influence how organizations cope with change. Apart from these ideas, one additional point bears repeating: that leadership is not panacea for managing organizational change. That said, perhaps, the most important contribution that leadership can make is in helping organizations deal more effectively with what many may perceive as the increasingly ‘uncertain’ nature of their world. In this regard, it has been suggested that some ways and means may be available to ‘guide’ leaders in dealing with uncertainty and change. While the notion of organizations becoming more flexible, adaptable and innovative has, in certain respects, become trite, it nevertheless remains the fundamental challenge for any organization and, for its leader.
INTERVIEW GUIDE


Date:

Name of Subject:

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Defining Change

1a) How do you define change in an organization (transformational/transactional, process or event)?
1b) Have you ever been involved in/led organizational transformation? If yes, what were the two or three most important elements for success? Are there things you would do differently?

Innovation

2a) How do you define innovation? (i.e., What does an innovative organization look like?)
2b) How do you encourage/promote innovation in your organization?
2c) What do you see, if at all, as the connection between 'change' and 'innovation'?

Organization

3a) Does your organization scan its environment regularly, and if so, how?
3b) How important are mission and values to the organization, and how are they institutionalized?
3c) How important is planning to the organization?
3d) How are strategies and plans developed? (e.g., do they 'emerge from different areas of the organization? Are they delivered from 'on high'?)
3e) How important is 'systems thinking' to your organization, and how does it influence strategy and structures?

Leadership

4a) How do you define leadership? (i.e., dimensions, transactional versus transformational)
4b) Is leadership decentralized in your organization? If so, how? Have structures, processes and systems been designed to support distributed leadership?
4c) What do you see as your role with respect to leadership development in the organization?
4d) In your opinion and experience, what are the key drivers, attributes and tasks associated with leadership?
4e) What do you see as the measures of success for a leader?

Leader and Learning

5a) How do you measure your organization’s overall effectiveness?
5b) How important is the capacity for organizational learning to effectiveness?
5c) How does organizational learning occur in your organization? (Adaptive, Generative or both?)
5d) Do strategy, structures and systems support learning in your organization?
5e) What do you see as your role with respect to organizational learning?

General

6a) Is there anything else that you would like to add, or any general comments?

Thank you.
APPENDIX II

LEADERSHIP ROLES FROM COMPLEX SYSTEM THEORY
<table>
<thead>
<tr>
<th>Systems Theory</th>
<th>Possible Leadership Roles</th>
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<tbody>
<tr>
<td><strong>Emergent Organization</strong></td>
<td></td>
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<tr>
<td>(Self-organizing tendencies in systems that, from equilibrium, prompt new forms of organizations to emerge)</td>
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<tr>
<td><strong>Creating Context</strong></td>
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<tr>
<td>(In complex systems, members of organizations must have a sense of the parameters or corridors within which to operate. These shapes strategy, tactics, and structure - allowing them to emerge through distributed leadership in the organization. Leadership provides the &quot;nudge&quot;)</td>
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<tr>
<td><strong>Leveraging Change</strong></td>
<td></td>
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<tr>
<td>(Complex systems are complex because of the nature of interactions and the fact that the change or disturbances to the system can leverage significantly larger effects than the original ones)</td>
<td></td>
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<tr>
<td><strong>Support Mechanisms</strong></td>
<td></td>
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<tr>
<td>(Ensuring infrastructure exists to support successful realization of the above outcomes)</td>
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</tbody>
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