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**A NEW PERSPECTIVE ON THE ORGANIZATIONAL CHANGE PROCESS:
DEVELOPING A MODEL OF REVOLUTIONARY CHANGE
AND
A MEASURE OF ORGANIZATIONAL SUPPORT
FOR REVOLUTIONARY CHANGE**

by

LESLIE T. SZAMOSI, B.Comm. (Honours), M.M.S.

A thesis submitted to
the Faculty of Graduate Studies
in partial fulfillment of
the requirements for the degree of
Doctor of Philosophy

Carleton University
Ottawa, Ontario
June 1999

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submitted by
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in partial fulfillment for the requirements for
the degree of Doctor of Philosophy

Director, School of Business

Thesis Supervisor

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Carleton University
June 1999

Dedicated to:

**Grandma,
Nagymama,
and
Nagypapa**

ABSTRACT

Despite growing interest in the management of change by both practitioners and researchers, there has been a dearth of critical, systematic, empirical research on the issue of revolutionary organizational change. The current literature is further limited by the fact that human factors have not yet found their way into models or theories of revolutionary change. To address these issues an intensive case study of an organization in the Canadian telecommunications industry was undertaken (BC TEL). This research represents an initial step towards the integration of the human aspect of change into a synthesized model of revolutionary change based on both quantitative and qualitative data.

First of all, a five-stage process model of revolutionary change, based on historical documents, was developed to represent how revolutionary change was intended to occur. This model differs from past process models in that it integrates a high degree of flexibility into the Planning and Initiation stages. Secondly, a model of revolutionary change based on in-depth interviews with executives and employees was developed representing how revolutionary change was perceived by those involved in the process. A perceptual gap was found to have developed between executives and employees regarding their views of revolutionary change. These perceptual differences draw into question the applicability of past research which had tended to view change solely from an organizational perspective. Thirdly, behavioural measures of organizational support and non-support of revolutionary change were developed and found to provide a key link between revolutionary change initiatives and the people affected by it (i.e., employees). The survey indicated that when the perceptual gap between executives and employees was smaller there was greater perceived support of revolutionary change, the speed of revolutionary change was perceived as faster, and organizational and employee outcomes were more positive.

It is proposed that revolutionary change can be best represented as a combination of dialectic and teleological theories of change occurring simultaneously. It is further proposed that revolutionary change may affect different parts of an organization at different times suggesting successive waves of punctuated equilibrium where one part of an organization is more stable while other parts are involved in revolutionary change.

ACKNOWLEDGEMENTS

As I come to the end of this epic adventure there are so many people to thank for their love and support and that have been with me throughout my entire university career. I would like to begin by thanking my mother Lorna, father Gabor, and sister Gillian. From day one they have been behind me and encouraged me to do my best. The recent addition to our family of my brother-in-law Chris and my nephew Graham have continued to inspire me. Turning on the computer each morning and seeing Graham's grinning face always brought a smile to my face. My Grandmother, my Aunt Margaret, my Uncle Arthur, my cousin Scott, and Catherine patiently listened to all the trials and tribulations of what I was going through and kept me encouraged, grounded, and focused on what I needed to do to finish. To Ellaneni and Tonibacsi thank-you for your never ending support.

Six years ago I had the incredible fortune to fall in love with a wonderful woman while we both studied in the MMS. Katerina has continually inspired and encouraged me to keep going. How she has managed to put up with me throughout these years I will never know, but I am the luckiest person in the world for it. I look forward to the future we will create together on our way to Ithaca.

Words cannot begin to describe the impact Dr. Linda Duxbury has had on both this thesis and my life. She has pushed me further than I ever thought possible. Just when I thought I could go no further she found a way to inspire me and keep me thinking in different ways. This document took on a life of its own and without Linda's sacrifices it would not be the document it is today. I would also like to thank Dr. Lorraine Dyke, Dr. Siva Pal, and Dr. Richard Van Loon for being a part of my committee and for providing me with insight during this process. I would also like to thank Dr. Thomas Cawsey for his work as my external examiner and for being so encouraging and supportive.

By entering the doctoral program I have had the good fortune to get to know Steven Murphy and his wife Angela and Yves Decady and his family. As incredible as it feels to be done, the last four years would have meant nothing if not for the friendship we share. To Nick, Irinela, Anatole, and Emile Papadopoulos thank-you for sticking by me and being there for me through thick and thin. To everyone in the School of Business, particularly Louise, Carole, Greg, and Jean, thanks for six more wonderful years. My heartfelt thanks to Bert and Norma Coughlin who became my adopted parents and guardians. The laughs we shared and the fun we had helped me to remember the importance of taking time to enjoy life. The love and encouragement of Rob MacDonald, and his family Brenda, Kyle, and Caleigh, Jim and Carol Lorbetskie, Mike Holmes, and James and Tanja Hanson (and Graham and Sidney) have helped to remind me just how lucky I am to have such close friends. Thanks for always being there. Although distance has kept us apart I have felt you with me over this entire time.

I would like to thank all the employees, past and present, of BC TEL who were such an integral part of this research. In particular my thanks to Paul Smith, Jean Fornari, Susan Griffiths, and Vicki Ion-McKenzie. Everyone at BC TEL has been so encouraging throughout. Your support and belief in this research helped to make it what it is.

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CHAPTER ONE: INTRODUCTION

The Canadian telecommunication industry is being completely transformed (i.e., undergoing revolutionary change) due to a combination of deregulation (i.e., removal of government regulations limiting competition) and technological, legislative, and competitive forces. Prior to 1979, the C.R.T.C. (Canadian Radio-Telecommunications Commission) only permitted customer ownership of radiotelephone equipment and the connection of paging terminals to the telephone network (BC TEL, 1997). In 1979, the C.R.T.C. began to introduce competition to the telephone industry starting with terminal equipment. In 1992 the C.R.T.C. allowed competitive access in long distance services. In January 1998, close to full competition in the Canadian telephone industry arrived with the introduction of competition in local telephone service.

BC TEL was one of the monopoly companies directly affected by the C.R.T.C. changes that occurred over this time frame. The company is majority owned by G.T.E. Corporation from the U.S. and has been a major force in the telephone industry in British Columbia and Canada since 1881¹. In 1997 BC TEL was the second largest telecommunications services provider in Canada (next to Bell Canada) with a full-time staff of just over 13,000 employees (79% are part of the Telecommunication Workers Union) and revenues of approximately \$2.7 billion (BC TEL, 1997). Given the changes put forth by the C.R.T.C., BC TEL has been forced to change the way it operates in order to compete in the deregulated Canadian telecommunications industry.

¹ In February 1999, G.T.E. relinquished controlling ownership of BC TEL in order to facilitate the merging of BC TEL with TELUS of Alberta.

Other industries both in North America and around the world will be going (or are going) through similar types of revolutionary change (e.g., universities, hydroelectric companies, crown corporations). Similarly, organizations that are currently in competitive environments are now being strongly challenged by foreign competition and are being forced into 'ultra' competitive environments where they must change dramatically in order to survive (e.g., the banking industry). Notwithstanding the valiant attempts of organizations to undergo major transformations, leading practitioners report that only 20% of revolutionary change in Fortune 1000 companies is considered successful by those undertaking it (Strebel, 1996). This dismal success rate suggests that organizations are not implementing revolutionary change properly and that current theories of revolutionary change need to be reevaluated.

Between 1983 and 1993 nearly 40% of companies 'fell' off the Fortune 500 list; it has been found that the inability to change quickly enough was the prime cause of this (Peters, 1990). Given the ever-increasing need for organizations to successfully transform themselves, there has been growing interest in the management of revolutionary change by both practitioners and researchers.

Despite heightened interest in revolutionary organizational change, there has been a lack of critical and systematic research on the issue and a lack of studies offering an empirically based, holistic view of the change process. For example, while reengineering discusses the process of change, it minimizes the impact of social processes and strategies. While theoreticians try to classify change and understand why change occurs,

they provide little help for organizations that want to better manage the change process. Further, in spite of the multitude of conceptual discussions on the importance of employees in organizational change, little has been done to integrate employee-centred and empirically based change theories and measures into a synthesized model of change. This is surprising since both applied (e.g., Hammer and Champy, 1993) and theoretical (e.g., Van de Ven and Poole, 1995) research suggests that the “human element” is a critical success factor for revolutionary organizational change.

1.1 OBJECTIVES

The goal of this dissertation is to expand the realm of change research through an in-depth case study of an organization (BC TEL) undertaking a revolutionary change. As will be presented in this research, no clear, empirically testable, definition of revolutionary change has, to date, been put forth in the literature. This has caused a lot of confusion amongst practitioners and academics as to what exactly revolutionary change is. The term revolutionary change will be used throughout this research to describe a process that is, at a minimum, non-incremental (i.e., more than simply minor organizational changes).

The opportunity to do an in-depth study of a key organization in the telecommunications industry presents an opportunity to examine the process of revolutionary organizational change. There are three main objectives to this research.

The first objective of this research is to better understand the revolutionary change process and develop a comprehensive model of revolutionary organizational change (i.e.,

one that combines both employee and organizational perspectives on revolutionary change).⁻ This objective is met in several ways. First of all, a historical analysis of organizational publications is undertaken in order to understand how BC TEL planned to undertake revolutionary change. A process model of revolutionary change is developed based solely on the analysis of these documents. This analysis allows for a baseline to be established regarding how BC TEL planned to change. Secondly, interviews with both executives and employees are undertaken in order to determine how BC TEL actually undertook revolutionary change. Based on this in-depth analysis a model of revolutionary change is developed. This analysis provides for a deeper understanding of how change actually occurred and allows for comparison against how change was planned to occur.

The second objective of this research is to develop, and test, behaviourally based measures of organizational support, and non-support, for revolutionary change (i.e., an identification of organizational actions or inactions, which employees perceive support or hinder change efforts) and assess whether these “support” and “non-support” measures, as operationalized, depend on such things as: 1) gender; 2) job type; 3) department; 4) respondent age; or, 5) years of service at BC TEL. The development of these measures allows for a better understanding of how an organization can best support employees through revolutionary organizational change and may also aid in evaluating readiness for revolutionary organizational change.

The third objective of this research is to assess the impact of the measures of organizational support, and non-support, for revolutionary change that are developed on various organizational outcomes (organizational commitment, job satisfaction, and managerial support) and employee outcomes (stress, burnout, and perceived organizational support). By better understanding the impact of “support” and “non-support” of revolutionary change on organizational and employee-based outcomes, revolutionary change initiatives can be better planned and implemented. As well, such links may provide a foundation upon which to better understand the impact of revolutionary change on both employees and organizations. Such a perspective will be used to augment the model developed with respect to the first objective.

Together these objectives will allow for critical aspects of the change process to be brought together as suggested by the literature (e.g., culture, communication, process of change) as well as review: what the organization planned to do, what were they perceived to have done by both executives and employees, and how employees can be best supported through the change process. Past research had tended to focus only on an executive viewpoint of change. This research will allow us to view change from both an employee and executive perspective to see if they are the same or different. The model of revolutionary change will represent an initial step towards the integration of the human aspect of change into a synthesized model of revolutionary change.

1.2 OUTLINE

This research begins with an evaluation of the organizational change literature (Chapter Two) aimed at gaining a better understanding of organizational change and includes a

look at classic change theories, models of organizational change, reengineering and its various components, and the social aspects of change. Chapter three outlines the objectives of the research. Chapter four discusses the methodology used to address the objectives. Chapter five analyzes revolutionary change at BC TEL utilizing corporate publications. Chapter six analyzes revolutionary change at BC TEL utilizing interviews with executives and employees at BC TEL. Chapter seven details the development of a measure of organizational support of revolutionary change and a measure of non-support of revolutionary change and their links to various outcome measures. Chapter eight analyzes data that was collected to provide greater generalizability to the interview data. Chapter nine integrates the preceding four chapters into a synthesized model of revolutionary change. This research concludes with a discussion of the limitations of the research and suggestions for future research.

CHAPTER TWO: LITERATURE REVIEW

This chapter begins with a definition and discussion of the construct of 'change'. General theories of change are discussed next followed by a review of various models of organizational change and literature which talks about a reconceptualization of change. The final section of the literature review deals with the social aspect of change including resistance to change, organizational communication of change, organizational culture and change, and organizational support of change. Together, these areas of the literature will help to summarize the research conducted to date on organizational change and lay the foundation for this research and the development of an integrated model of revolutionary change. As well, the literature review will help situate the research undertaken within the body of the organizational change literature that currently exists.

2.1 CHANGE: THE CONSTRUCT

Change is a part of life. Change has intrigued, scared, excited, and mystified us for many centuries and continues to challenge individuals from all walks of life. In recent years, however, the term 'change' has also become synonymous with upheaval and chaos (Pritchett, 1996). Within this context, it is becoming increasingly more important for companies to understand how change occurs in order to be able to better manage it and cope with it.

This review of the change literature begins with a definition of the construct 'change' including the units and mode of change. This is followed by a review of general theories of change, classical models of organizational change and change theories, and finally

reengineering (a.k.a.: change in the 1990's). Such an analysis will aid in developing a clearer understanding of organizational change.

2.1.1 DEFINING CHANGE

Change has been defined in a variety of ways in the literature. Following an exhaustive review of this literature, Van de Ven and Poole (1995: 512) define change as "... an empirical observation of a difference in quality or state over time". There are two key elements to this definition. First of all, according to Van de Ven and Poole (1995) change cannot be said to occur unless a change between states has been observed. Secondly, change cannot be viewed independently of time. It is an implicit assumption that change takes place over a period of time (Dahrendorf, 1969; Hernes, 1976).

One of the biggest difficulties in consolidating the organizational change literature has been the lack of consistency in the use of terminology. As will be shown, authors have used different terms to describe the change mode (or speed of change). These same terms have, in-turn, been used to differentiate the various theories of change. This has created confusion.

It is also important to recognize that change need not necessarily be viewed as a progression from a lower, simpler, state to a higher, more complex one (frequently referred to in the literature as positive change) (Van de Ven and Poole, 1995). Rather, change may involve a highly complex entity changing into a simpler one (Gersick, 1991).

2.1.2 DIFFERENTIATING CHANGE THEORIES

Change theories span a number of disciplines ranging from child development to evolutionary biology to socio-economic development (Van de Ven and Poole, 1995). Theories of change cannot be referred to without also referring to, among other disciplines, biology, psychology, and theories of knowledge (Burnes, 1992). As such, the variation in the sources of change theories has stimulated novel ways for explaining it (Van de Ven and Poole, 1995). In general, change theories have typically not enriched each other, but often left open the opportunity to decipher and interpret their applicability (Gioia and Pitre, 1990).

In order to properly differentiate and explain theories of change it is necessary to understand the *units of change* (macro and micro levels) and the *modes of change* (speed of change ranging from incremental to radical) (Dahrendorf, 1969; Hernes, 1976). Units and modes of change, which are summarized below, are then used to classify the different change theories. In this research, the term 'radical' is used to describe the mode of change (speed) while 'revolutionary' is used to distinguish the type of theory being examined in this analysis from other theories of change.

2.1.2.1 UNITS OF CHANGE

The units of change (i.e., macro or micro) refers to the properties of individual motives and collective structures (Dahrendorf, 1969; Hernes, 1976). Micro and macro assessments of change affect the very manner in which change has been analyzed. A central problem in discussions of change involves the lack of differentiation between the units of change. This difference is important because the consequences of change at a

micro level are very different from those at a macro level (Dahrendorf, 1969; Hernes, 1976).

The micro (or individual) school is based on the notion that individuals are the building blocks for all change (Burnes, 1992). This school of thought views organizational change as the sum of individual changes and is divided into behaviourist and Gestalt perspectives. Behaviourists view change in terms of individual reaction to the environment where change is perceived as an inevitable result of gaining new information (Burnes, 1992). The Gestalt field is based on the notion that individual behaviour is the product of a complex give-and-take relationship with the environment and ultimately individuals choose whether or not to change (Van de Ven and Poole, 1995).

The macro unit of change involves explaining change from a group perspective. The two major approaches used to explain macro change involve group dynamics and open systems models. Group dynamics models suggest that change must be arrived at through teams, or groups, and not individuals (Burnes, 1992). Despite its limitations (namely devaluing the importance of individuals in the change process), Lewin (1958), one of the pioneers of this school of thought believed that, because people work in groups, individual behaviour must be seen, modified, or changed in light of prevailing group practices and norms. Lewin postulates that group behaviour is comprised of an intricate set of symbolic interactions and as such change should be focused on influencing group norms, attitudes, and values.

The open systems approach to change perceives organizations as entities comprised of interconnected sub-systems under the assumption that change in one sub-system will affect another sub-system (Van de Ven and Poole, 1995). Change is believed to occur when a sub-system component enters into a state of disequilibrium (i.e., change is stimulated in the sub-system from either inside or outside the organization). Over time, disequilibrium is hypothesized to affect all sub-systems leading to macro organizational change (Gould, 1989). This theory's weakness is its inability to identify the original change or even to distinguish whether the original stimulants for macro change involved individuals, groups, or both (Van de Ven and Poole, 1995).

2.1.2.2 CHANGE MODES

Theories of change can also be distinguished in terms of how change events are described (i.e., change mode) (Van de Ven and Poole, 1995). This differentiation refers to the speed at which change takes place. Change can be considered to occur very gradually (i.e., incremental change) or very quickly (i.e., radical change), or somewhere in-between (Simon, 1979; Burnes, 1992).

Organizations may have to manage through periods of incremental as well as radical change transformation (e.g., Tushman *et al.*, 1986; Reger *et al.*, 1994; Van de Ven and Poole, 1995). These authors postulate that organizations may undergo incremental change during periods of relative stability (i.e., evolutionary and life cycle change type change) and radical changes when massive, fundamental change is called for (teleological, dialectic, and revolutionary type change) (e.g., Nadler and Tushman, 1995; Van de Ven and Poole, 1995). It has also been proposed that a series of 'tectonic' shifts

or 'punctuated equilibrium' may be the most appropriate way to explain organizational change (i.e., a combination of both incremental and radical change) (e.g., Greiner, 1972; Tushman and Romanelli, 1985; Gersick, 1991; Reger *et al.*, 1994).

2.1.3 SUMMARY OF "CHANGE: THE CONSTRUCT"

Change is a complex and dynamic process affected by a multitude of forces. Change has been deemed to occur when a difference between states has been empirically observed (i.e., how an entity was observed initially must be different from how it is observed now) over a period of time.

The theories of change can be placed along a continuum ranging from incremental to radical change and including change to individuals (micro change) or groups (macro change). With a clearer understand of what change is and how it is conceptualized, we now turn to the development and explanation of the various general theories of change.

2.2 GENERAL THEORIES OF CHANGE²

There is no shortage of theories of change. In their review, Van de Ven and Poole (1995) do an exceptional job of categorizing change theories into four groupings: evolutionary, life cycle, teleological, and dialectic. Their research, which this review will draw upon, is one of the most comprehensive to date given its inter-disciplinary focus (over 200 change articles reviewed). In this section evolutionary, life cycle, teleological, and

² The review of General Theories of Change draws on research undertaken by the author and S.A. Murphy as part of a Working Paper entitled "Toward a Framework of Organizational Change".

dialectic change theories will be explored as well as the less well documented theory of revolutionary change.

2.2.1 EVOLUTIONARY CHANGE THEORIES

Evolutionary theories attempt to explain change as a recurrent, cumulative, and probabilistic progression of variation, selection, and retention of entities (Van de Ven and Poole, 1995) and are primarily based on the work of Charles Darwin. Darwin's model of evolution has heavily influenced thinking about the change process (Gersick, 1991). Darwin's (1936) Theory of Evolution emphasizes a gradual, yet continuous, evolutionary process of change within species, while his Theory of Natural Selection postulates that species need to adapt and change themselves to shifting environments if they are to survive. Darwin believed that, over time, species might adapt by assuming physical characteristics conducive to the changing environment. In this light, change can be viewed as continuous and very gradual. Evolutionary theories are premised upon the notion of competitive survival and posit that change can occur without being intentionally driven (i.e., change is outside the control of the changee) (Van de Ven and Poole, 1995).

Evolutionary theories of change have proved quite useful in many fields for explaining gradual, step-by-step change processes (Stewart, 1991). Van de Ven and Poole (1995) point to other pioneers of evolutionary change theories including Lamarck (1774-1829) and Mendel (1822-1884) whose developments include Saltationism and Mendelian genetics. These theorists explain evolutionary change in terms of a continuous cycle involving variation, selection, and retention. The change of physical features (e.g., as found in human evolution) is the most visible example of evolutionary change.

Individual intellect, emotions, and behaviours, however, may also evolve in slow steps during the course of a lifetime.

In management applications, evolutionary theories are often used to describe global changes in organizational populations (e.g., Carroll and Hannan, 1989). Evolutionary theory lends credibility to the many management theories that explain change from an incremental perspective. Included in the list of management theories based on an evolutionary premise are strategic decision-making models (Singh and Lumsden, 1990; Burgelman, 1991), and social-psychological processes of organizational functioning (Weick, 1979; Gersick, 1991). Gersick (1991) argues that the evolutionary concept of change has become so pervasive that it is used to explain virtually every gradual process. Van de Ven and Poole (1995) argue that this is not an appropriate formulation as true evolutionary change should require more than one human life cycle to observe.

The drawback of evolutionary theories is their inability to describe fast paced change phenomena. The major strength of these theories lies in their ability to describe the development of entities over long periods of time (e.g., human evolution, the shifting of continental plates). In order for these theories to be useful in analyzing change, data must be available from a previous time period. This raises the inevitable question: how large a lapse in time is needed before evolutionary change can be observed?

2.2.2 LIFE CYCLE CHANGE THEORIES

Utilizing a life cycle perspective, change can be considered a natural, linear sequence involving the birth, growth, development, decline, and death of an entity (see Figure 1).

This perspective of change is deeply rooted in human and biological development theories and according to Van de Ven and Poole (1995), the pioneers of this theoretical approach include Comte (1798-1857), Spencer (1820-1903), and Piaget (1896-1980). Life cycle theory views change as imminent and natural, and beyond the control of the changing entity (i.e., change just happens). From this perspective, the environment may influence the change, but the change itself is imminent and cannot be stopped unless the entity itself is destroyed.

FIGURE 1: Life Cycle Theory of Change

Van de Ven and Poole (1995) argue that, next to teleology, the life cycle approach to development is the most common explanation of change. A possible reason for the relatively high use of this approach to explain change is the fact that organizations are simply collections of human beings and, as such, members may be predisposed to relate their own being's form of change with organizational changes.

As discussed by Van de Ven and Poole (1995), life cycle theories include developmentalism (Nisbet, 1970), biogenesis (Featherman, 1986), ontogenesis (Baltes *et al.*, 1986), child development (Piaget, 1975), human development (Levinson, 1978), moral development (Kohlberg, 1969), and organizational development (Nisbet, 1970; Kimberly and Miles, 1980). The common thread among these approaches is the belief that an entity passes through definable stages of growth and development with little or no

conscious effort. As such, the life cycle view of change has a distinguishable beginning, middle, and end with each stage a precursor of succeeding stages that contribute a piece to the end product. For example, each stage in human life contributes to the person one becomes at death.

Organizations themselves have been described as living entities (Daft, 1992). As such, organizational researchers may also be predisposed to conceptualize change in such a way as to parallel organizational development with human development (e.g., Nisbet, 1970). In conceptualizing organizations in this manner, there exists a danger in viewing non-biological entities in a biological manner. That is, researchers may be simplifying or complicating the analysis of change by forcing a life cycle approach on products, organizations, and industries. By conceptualizing change in this way, large-scale (macro) change in organizations may be largely outside the control of the organization itself.

2.2.3 TELEOLOGICAL THEORIES

Teleological change is based in the works of Mead (1863-1931), Weber (1864-1920), and Simon (1916-) and is a philosophical doctrine that views goals as the causal reason for change (Van de Ven and Poole, 1995). In conceptualizing teleological change, Van de Ven and Poole (1995: 516) assert "... it is assumed that the entity is purposeful and adaptive; by itself or in interaction with others, the entity constructs an envisioned end state, takes action to reach it and monitors the progress". In other words, it is the envisioned end state, which can be derived from either inside or outside the entity, that drives the entire change process. Teleological theories of change maintain that: (1) entities proceed towards goals (or end states); and, (2) goal seeking, by its nature,

stimulates change (Van de Ven and Poole, 1995). Long term development and change is, therefore, viewed as a repetitive sequence of setting and evaluating goals based on what is learned by the entity.

Learning plays a pivotal role in the teleological view of change. For example, Golembiewski's (1972) Laboratory Theory of Change (LTC) is based on setting individual goals for change (i.e., micro unit of change). As such, it can be strongly linked with teleological schools of thought. The LTC is based on the notion that as we acquire more information (i.e., learn) we are better able to reach and formulate goals. In Golembiewski's view, learning includes 'learning' to think in different ways, and implies a movement from stability to change, from predictability to creativity, and from coercion to self-direction. From an organizational perspective (macro unit of change), Van de Ven and Poole (1995) assert that the teleological approach underlies many theories of change including functionalism (Merton, 1968), decision-making (March and Simon, 1958), adaptive learning (March and Olsen, 1976), and most models of strategic planning and goal setting (Chakravarthy and Lorange, 1991).

Brunsson (1982) states that the problem with teleological theories is that they cannot specify how an entity will achieve its goals. At best, they can list the possible paths an entity can take, and then rely on rational decision making or action planning for theories of prediction. Teleological theory is also constrained by the fact that in teleological terms, change cannot occur without a 'goal-setter'. Such theories are also constrained by availability of resources and the organization's environment (Gibson, 1988).

Chakravarthy and Lorange (1991) note that teleological theories that incorporate equifinality (i.e., the notion that there exists several equally effective ways to achieve a goal) stress that how one moves toward a goal is not an important part of the change process. Rather, they contend that the very fact that there is movement toward a goal induces change. They also suggest that once an entity attains its goal it cannot be assumed to stay in equilibrium.

2.2.4 DIALECTIC CHANGE THEORIES

Dialectic approaches to change are based on the premise that conflict between two or more entities produces change. Such theories owe credit to pioneers including Hegel (1770-1831) and Freud (1856-1939) (Van de Ven and Poole, 1995). This view of change is based on the notion that various forces compete with each other for dominance and control (i.e., two or more entities must engage one another in order for dialectical change to occur) (Van de Ven and Poole, 1995). From these conflicts, stability and change are described and explained with reference to the balance of power between entities. Change occurs when one entity has achieved sufficient power to challenge the status of another (Van de Ven and Poole, 1995). For example, a leader of a wolf pack may rule for years until challenged by a dominant male. Should this challenger have sufficient strength to dominate the leader, change will occur. Thus, the challenging wolf becomes the leader of the pack.

Organizational changes have also been described using this model. Opposing sides that create conflict may be internal (e.g., conflicting goals or groups or individuals) or external to the organizational entity (e.g., pursuing goals that collide with the direction of

other organizations) (Van de Ven and Poole, 1995). Within an organizational setting, shifts in power are often the catalysts for change. Organizational leaders, for example, may only be effective so long as they can hold the respect of their subordinates (Kotter, 1995). Once respect is lost or begins to erode, a new leader may emerge.

Dialectic change in an organization can result in a win-win, win-lose, or lose-lose outcome (Neal and Northcraft, 1991). This view is different from that found in the bargaining and conflict management literature which focuses on creating a win-win solution to conflict: one where both parties can live with the result (Van de Ven and Poole, 1995). For example, with the case of two 'equal' departments that are struggling for the responsibility of promoting employees, the likely result is that only one of those departments will be satisfied with the outcome. Similarly, two sides dysfunctionally competing for power in an organization may alert upper management to the problems of their department and result in power being removed from both. Regardless of the change outcome, dialectic theory provides a valuable tool for assessing conflict-based change in organizational settings.

Dialectic theories are limited by their focus on conflict and multiple entities. Change cannot be explained using these theories unless two or more entities exist and are engaged in conflict. Perhaps the most appropriate use of dialectic theories would be to describe a shift in the balance of power between entities.

2.2.5 REVOLUTIONARY CHANGE THEORIES

Revolutionary change theories are based on the notion of fundamental change that: a) it forcefully interrupts the status quo, b) it happens quickly and abruptly, c) it is fundamental and all encompassing, and d) it brings about something that is diametrically different than what used to be (e.g., Greiner, 1972; Miller, 1982; Johnson, 1987; Gersick, 1991). As Gersick (1991: 12) posits, revolutionary change transpires in compact periods of “qualitative, metamorphic change”.

Marx (1818-1883) can be considered the pioneer of the revolutionary change paradigm. In the classic example of Marxian theory, the working class (proletariat) will not change their dependent status until they gain sufficient power (through education, mobilization and violence) to overthrow the land-owning bourgeoisie. According to Marx change can only be achieved through a violent interruption of the status quo and there can never be change without “violence”.

Revolutionary theories of change, including those classified as punctuated equilibrium, have permeated the management literature (Tushman and Romanelli, 1985; Gould, 1989; Gersick, 1991). These authors posit that revolutionary change should be explained in terms of periods of incremental change which are interspersed with short, abrupt periods of radical change (e.g., Tushman and Romanelli, 1985; Gould, 1989; and Gersick, 1991). These abrupt periods, the authors argue, are where revolutionary change occurs. When evaluating the history of an entity, punctuated equilibrium theorists argue that most of the development and change can be traced back to these abrupt (or ‘punctuated’) periods of

disequilibrium. Such theories point to 'revolutions' that set the stage for the future of the organization as the key to understanding change (Sastry, 1997).

Van de Ven and Poole (1995) in their seminal review of the change literature acknowledge the existence of revolutionary change but do not feel that it describes a discrete or unique type of change. Rather, they posit that revolutionary change, as described as punctuated equilibrium, is a combination of evolutionary and dialectic change theories (i.e., a "dual motor theory" which they define as a combination of two change theories). In other words Van de Ven and Poole (1995) see that revolutionary change is evolutionary in the sense that revolutionary periods evolve from longer periods of equilibrium, and dialectic in the sense that revolutionary changes are often (but not always) accompanied by conflict. They also classified change based on radical conflict (e.g., Marxism) as a dialectic theory because of its ties to conflict and Greiner's (1972) model of revolutionary change as a combination of life cycle and evolutionary theory.

The lack of empirical confirmation of the typology created by Van de Ven and Poole (1995) leaves open the possibility of revolutionary change being distinct. As Van de Ven and Poole (1995) acknowledge, ultimately the experience of researchers with the classification will determine its overall usefulness. Murphy and Szamosi (1996) argue that to combine incremental and radical paradigms (i.e., evolutionary and dialectic): (1) serves to confuse the other change paradigms; and (2) does not preserve the distinctiveness of revolutionary change. To integrate these theories seems counter-productive, confusing, and, perhaps, even mistaken. Revolutionary theories can be a

powerful means to describe and understand fundamental organizational change. This view is supported by the fact that many authors in both the science and management literatures have explicitly differentiated between evolutionary and revolutionary change due to the fact that they represent two extremes of change (e.g., Greiner, 1972; Bigelow, 1980; Gould, 1989; Meyer *et al.*, 1992; Jarvenpaa and Stoddard, 1998).

The need to better understand revolutionary change is particularly crucial today as dramatic alterations are underway in the economic, technological, psychological, social, scientific, and medical realms that surround our lives (Gersick, 1991). As Dunphy and Stace (1993: 905) state "...turbulent times demand different responses in varied circumstance". There appears to be sufficient evidence to argue that more research needs to be undertaken, and revolutionary change better understood, before simply integrating it with other general theories of change as a means of explaining it. One of the objectives of this research is to determine if revolutionary change is a distinct theory of change as proposed by practitioners (e.g., Gould, 1989; Meyer *et al.*, 1992) or if it is a combination of change theories as proposed by theorists (e.g., Van de Ven and Poole, 1995).

2.2.5.1 REVOLUTIONARY CHANGE: THE CONFUSION

One of the difficulties in conceptualizing revolutionary organizational change has been the inconsistent terminology used to identify it (i.e., different terminology used to describe the same phenomena). This lack of vigor with respect to terminology has led to overall confusion in this area of the literature.

Readers of the change literature may be considering different phenomena when researchers are really talking about the same thing using different labels. For example, the terms ‘radical’ and ‘revolutionary’ have both been used by authors to describe essentially the same phenomena: periods of change rooted in substantial turmoil where an entity undertakes a fundamental change. While authors such as Greenwood and Hinings (1996) and Strebel (1996) use the term “radical change” to describe this phenomena authors such as Greiner (1972) and Reger *et al.* (1994) use the term “revolutionary change” to describe this same phenomena. Table 1 identifies a cross-section of the terminology used in this body of literature to describe the same phenomena.

TABLE 1: Terminology Used to Differentiate Organizational Change

	Non-Fundamental Change (evolutionary, life cycle)	Fundamental Change (dialectic, teleological)
Greiner, 1972	Evolutionary	Revolutionary
Tushman & Romanelli, 1985	Incremental	Radical
Dunphy & Stace, 1993	Fine Tuning	Transformation
Meyer <i>et al.</i> , 1993	First Order	Second Order
Reger <i>et al.</i> , 1994	Incremental	Revolutionary
Nadler & Tushman, 1995	Incremental	Discontinuous
Greenwood & Hinings, 1996	Convergent	Radical

To avoid such confusion, in this research the term revolutionary change will be used in this study to describe periods of change rooted in substantial turmoil where an entity undertakes a fundamental change (i.e., the change is, at a minimum, non-incremental). The terms ‘incremental’ and ‘radical’ will be used to describe the mode of change (i.e., the speed of change) as used by Van de Ven and Poole (1995). This conceptualization is in line with the terminology used by various researchers (e.g., Greiner, 1972; Bigelow, 1980; Gersick, 1991; Kanter *et al.*, 1992) and bridges into the work by Van de Ven and Poole (1995). Evolutionary and life cycle theories are considered to be incremental

forms of change. Teleological and dialectic change theories are considered to be examples of a radical change where change is believed to develop more quickly and significantly alter the entity, often due to conflict or fundamental changes in the environment (Gersick, 1991; Van de Ven and Poole, 1995).

Given that revolutionary change appears to forcefully interrupt the status quo, occurs quickly and abruptly, is fundamental and all encompassing, and brings about something that is diametrically different than what used to be, these criteria will be utilized as a 'check-list' of sorts to assist in identifying whether BC TEL represents such a case. This formulation is necessary given the lack of a fundamental definition of revolutionary change.

2.2.6 SUMMARY OF: "GENERAL THEORIES OF CHANGE"

Each of the general theories of change discussed, including revolutionary change, can be categorized using the following criteria: a) what stimulates the change (i.e., what marks the beginning of the change), b) the role of the entity (i.e., that which is being changed), c) the length of time over which the change takes place, and d) its applicability within an organizational setting (see Table 2). The description of these criteria are based on both the practitioner and academic literature.

TABLE 2: Summary of Theories of Change

Theory of Change	What Stimulates Change	Role of Entity	Length of Time
Evolutionary	Long Periods of Time	Passive	Very Long Term
Life Cycle	Natural Progression of Life	Some Interaction with Environment	Long Term
Teleology	Setting of Goals	Achievement of Goals	Short Term
Dialectic	Conflict	Engage in Conflict	Short Term
Revolutionary	Massive, Sweeping Shifts in the Environment	Fundamental Transformation	Very Short Term

The stimulus symbolizes that which marks the beginning of the change. The passage of long periods of time has been hypothesized to cause evolutionary change to occur while what might be classified as the 'aging' process has been seen to provoke life cycle change. The setting of goals between (or inside) entities has been seen to stimulate teleological change while conflict between (or inside) entities has been hypothesized as stimulating dialectic change. Revolutionary change is believed to occur due to dramatic environmental shifts (e.g., industry structure, technological innovation, macroeconomic trends and crisis) (Nadler and Shaw, 1995).

The role of the entity in change can range from passivity in evolutionary theories (change is systematically done to the entity) to outright rebellion in revolutionary change. The environment may influence life cycle changes but the change itself is viewed as certain. In teleological change the end goal, or state, is seen to drive the change while dialectic change is believed to occur when two or more entities engage in conflict.

Each change paradigm also differs with respect to the length of time over which change is seen as occurring. Evolutionary change takes a very long time to occur while

revolutionary change (on the other end of the spectrum) is seen to occur quickly. Life cycle changes are believed to take place over a shorter time span than evolutionary changes while teleological and dialectic change theory are seen to occur in the short term, but not as quickly in comparison to revolutionary change.

The basis for understanding the development of the four basic theories of change (i.e., evolutionary, life cycle, dialectic, and teleological change) has drawn heavily on the work of Van de Ven and Poole (1995). Their inter-disciplinary evaluation of the construct of change does exceptional job of categorizing change theories. The premise of their research and their classification typology, however, especially as it relates to revolutionary change, is suspect.

Van de Ven and Poole chose “abstract and general definitions” in order to open the field of change to a wide range of theories. In doing so, the classification of these theories into the four basic categories becomes difficult given the problems in understanding what specific theories of change researchers had in mind when they developed their individual theories of change. Given the inherent complexity of change Van de Ven and Poole (1995) argue that it is possible for more than one change theory to be used to describe a process of change (i.e., change may be a combination of two, three, or four typologies). In attempting to provide examples for each of the possible combinations of the basic theories of change (16 in all), the authors make some very debatable determinations, especially as they relate to revolutionary change.

As discussed earlier, Van de Ven and Poole (1995) describe Tushman and Romanelli's (1985) punctuated equilibrium theory as a combination of teleological and evolutionary change. The authors use a combination of life cycle and dialectic change to describe Greiner's (1972) model of organizational change which is essentially the forerunner of punctuated equilibrium theory (i.e., both theories describe change as a series of fundamental changes which interrupt the status quo). Despite the fact that Greiner (1972) was describing the life cycle of organizational change, its fundamental principle can be found in punctuated equilibrium theory.

Similarly, Van de Ven and Poole (1995) classify the "father" of the revolutionary change paradigm (Marx) into dialectic change. Such change also appears to very much be rooted in the punctuated equilibrium paradigm where long periods of equilibrium (i.e., suppression of the proletariat) is interrupted by radical change (disequilibrium), that, in turn, sets the stage for the next period of equilibrium. Thus, given these discrepancies, Van de Ven and Poole's (1995) classification must be brought into question.

With a better understanding of the general theories underlying change, attention is now turned to understanding how authors have represented change which takes place in an organizational setting (i.e., how the organizational change process itself is modeled).

2.3 MODELS OF ORGANIZATIONAL CHANGE: 1951 TO 1994

As detailed earlier, many disciplines including the physical and behavioral sciences have studied the change process. The interdisciplinary nature of the change construct makes tracing its origins and defining its core components difficult (Burnes, 1992). These

variances aside, a number of management scholars have attempted to model the process of change within an organizational setting.

Models of organizational change can be divided into two main types: (1) process based descriptions (e.g., Barnett and Carroll, 1995), and (2) activity based explanations (e.g., Huse and Cummings, 1985). Process models, as the name suggests, focus more on the procedures involved in change rather than on the specific organizational development activities involved in the change. Activity based models, on the other hand, focus more on how organizational change occurs and organizational development activities (Huse and Cummings, 1985). More effort has been directed towards defining the stages (steps) of organizational change than investigating the actual decision making processes associated with change perhaps because the process change takes is more visible (i.e., periods of conflict and resistance) (Hage, 1980).

In order to gain an overview of the work done in this research area, ten (10) change models from the years 1951 through 1994 were evaluated. This section of the review summarizes the organizational models developed by: Lewin (1951); Lippitt *et al.* (1958); Shepard (1967); French (1969); Hage and Aiken (1970); Milio (1971); Zaltman *et al.* (1973); Hinings and Greenwood (1983); Bullock and Batten (1985); and Connor and Lake (1994). These models were selected for review because of their prominence in the organizational change literature.

Lewin (1951), Lippitt *et al.* (1958), French (1969), Bullock and Batten (1985), and Connor and Lake (1994) were primarily interested in explaining planned change from a general perspective. On the other hand authors such as Shepard (1967), Milio (1967), and Zaltman *et al.* (1973) were primarily interested in the innovation process and Hage and Aiken (1970) and Hinings and Greenwood (1983) were more concerned with social change. It should be noted that Lewin (1951) developed, perhaps, the most frequently referenced model of planned organizational change. The three step model which includes Unfreezing (reducing present behavioral forces), Moving (shifting behaviour to a new level), and Refreezing (stabilizing behaviours at a new state of equilibrium) is still effectively implemented in planned change today (Goodstein and Burke, 1991) and is often sighted as a frame of reference upon which to base change.

A synthesis of the ten models of change reviewed was created by the author in order to provide a framework from which to discuss areas of overlap and disagreement among these ten models (see Figure 2). According to this conceptualization, organizational change is seen as consisting of four phases: (1) Diagnosis / Event; (2) Analysis / Planning; (3) Initiation; and (4) Conclusion or Continuation. Descriptions of each of the phases are provided below.

FIGURE 2: Synthesis of Models of Organizational Change from 1951 to 1994

2.3.1 OVERLAP BETWEEN THE MODELS

Each of the ten models of organizational change reviewed in this section incorporate phases which describe the following three ideas: (1) the diagnosis of the need for change or a particular event which stimulates the change, (2) planning and/or analysis to determine how the change will be implemented, and (3) the initiation of the change. It should be noted that while these three ideas are present in each of the models studied the terminology used to describe the phases, and the decomposition of the phases (i.e., number of sub-steps or stages used to describe the single phase documented here) varies from model to model. The ideas behind the names and steps used by the various authors are, however, very consistent.

Each model begins with the idea that either some form of diagnosis of the need for change and/or a critical event initiates the change process. This diagnosis can come from the perception of a problem by key individuals (Shepard, 1967; French, 1969) or a

destabilizing event that causes the organization to re-examine the way in which it is behaving (Milio, 1971; Connor and Lake, 1994).

Following the diagnosis phase, the authors hypothesize the existence of an analysis or planning phase. This phase is conceptualized in a number of different ways including working towards securing the resources necessary to change (i.e., capital funds, champions of change etc.) (Milio, 1971) or conducting a full analysis of the situation and planning for the events that will have to take place in order for the change to occur (Lippitt *et al.*, 1958; Bullock and Batten, 1985).

Following the analysis phase, initiation of the change process itself is postulated to take place. This phase often includes implementing strategies and tactics to change the organization (Hage and Aiken, 1970; Hinings and Greenwood, 1983; Connor and Lake, 1994). Resistance to change, which is discussed in detail later in this review, is most likely to be seen during this phase (Hage and Aiken, 1970). It should be noted that, for all the models considered in this analysis, this phase is the least developed. French (1969) offers a possible reason why this may have occurred by noting that within this phase it is difficult to be specific about the various actions which need to be taken because they may vary depending on organizational culture, values, and norms.

2.3.2 AREAS OF DISAGREEMENT BETWEEN THE MODELS

A review of these ten models suggests that, while there is a commonality in conceptualization between the first three phases of the models (i.e., diagnosis, analysis, and initiation), there is no consensus with respect to how change 'ends'. The year in

which the model was developed (i.e., between 1951 and 1994) appears to be the factor that differentiates how this final phase is conceived and presented. Models developed before 1983 (i.e., Lewin, 1951; Lippitt *et al.*, 1958; Shepard, 1967; French, 1969; Hage and Aiken, 1970; Milio, 1971; Zaltman *et al.*, 1973) conclude with a phase that symbolizes the “conclusion” of the change process (e.g., terminate, institutionalize, refreeze). On the other hand, models developed after 1983 (i.e., Hinings and Greenwood, 1983; Bullock and Batten, 1985; and Connor and Lake, 1994) do not conceptualize an ‘end’ to change as such but instead envision that the change process “continues”.

This analysis suggests that in the past fifteen years researchers have changed their view of organizational change from a one-time exercise with a fixed start and completion to one where the specific change is continually reviewed and monitored. In other words, it would appear that change is no longer seen as a means to an end state but rather as an ongoing process of development with no clear end point.

2.3.3 WHAT THE MODELS ARE LACKING

When comparing these ten models, it was felt that all models were lacking: (1) a stage through which the organization prepares itself for change (i.e., developing readiness to change) and (2) a stage which describes how organizations prepare for the next change initiative. The continuation stage in the post-1983 models, for example, refers specifically to carrying on and sustaining the original change effort. Authors such as Kanter (1983) and Nadler and Shaw (1995), however, stress the need to develop an overall climate of organizational change and point towards the need to continually prepare for sustaining organizational change.

The models identified also lack connection to the general theories of change discussed earlier. Each of the ten models fails to identify which general theories of change they are most applicable to or are being modeled to explain. It is nearly impossible to classify these models of change into the categories shown in Table 1 as the respective authors did not specify the stimulus for change, the role of the organization in change, or the length of time over which change was estimated to occur.

2.3.4 OTHER MODELS OF ORGANIZATIONAL CHANGE

In reviewing the ten models discussed above, literature on decision-making models, public choice models of change, and chaos theory were also reviewed. Each of these is discussed briefly below given their potential relevance to the model to be developed in this research.

The pre-1983 “synthesis model” discussed above follows a similar format to decision making models put forth by both Simon (1960) and Mintzberg *et al.* (1976). Simon (1960) conceptualizes the following three phases for decision-making: i) intelligence activity: (i.e., searching for conditions that require decision-making); ii) design activity (i.e., analyzing and developing potential courses of action); and iii) choice activity (i.e., selecting a course of action). Mintzberg *et al.* (1976) also conceptualizes a three phase model which includes: i) identification (i.e., recognition of a problem or opportunity arising from a situational diagnosis); ii) development (i.e., search for solutions and designing of potential resolutions to the problem); and iii) selection (i.e., the choice of a solution is made through judgement of the decision maker, analysis of the alternatives, and bargaining with those that will be affected by the decision). Both Simon and

Mintzberg integrate feedback loops into their respective models. Both models involve a dynamic process with both strategic and behavioural implications for an organization (Luthans, 1995). Neither model, however, integrates a “continuation” phase as conceptualized in the post-1983 models of organizational change.

Public choice models have been described as the economic study of non-market based decision making and involve the application of economic tools to politics (Aucoin, 1979; Mueller, 1979; Lovrich and Neiman, 1994). Public choice models of change are based on the premise that one’s selection of various alternatives affects others than him/herself; “the decision is being made for a public, of which he/she forms a part” (Buchanan, 1972: 14). For example, public choice models have attempted to balance decision-making between the various needs of society and the individual (Arrow, 1974). Public choice models posit that the behaviour of an organization may depend heavily on organizational history (Downs, 1967; Arrow, 1974). Downs (1967: 272) hypothesizes that “organizations and individuals will adjust themselves to any change in their environment more slowly, the more profound the change in their structure or behaviour necessary to make the adjustment”. Studies of private sector organizations appear to rarely use public choice models. As Thomas (1996) argues, given the dissimilarities between private and public organizations developing models of change that apply in both environments would be extremely difficult. As the company under study is moving from a monopoly situation to a competitive one, the use of public choice models, and the need to balance public needs, may help to explain certain decisions and criteria in the change process (Buchanan and Tullock, 1972).

Chaos theory is rooted in nonlinear dynamic systems from the math and science disciplines (Tsoukas, 1998). Chaos theory and accompanying models of change are loosely based on the premise that change may be random or chaotic (Thiéart and Forgues, 1995; Cheng and Van de Ven, 1996; Warren *et al.*, 1998). The notion of chaos theory is just now beginning to branch into organizational theory and has found application in innovation and learning (Cheng and Van de Ven, 1996). Thiéart and Forgues (1995) propose that at one time or another an organization will be in a state of chaos and when this occurs, the impact of an incremental change can be predicted in the short-term but not the long-term. At this point no articles attempting to predict organizational change using chaos theory have been found; only propositions regarding organizational change have been made. It is important, however, to acknowledge the possible impact of chaos theory in future models of organizational change given the vast number of internal and external variables at work in revolutionary change,

2.3.5 SUMMARY OF: “MODELS OF ORGANIZATIONAL CHANGE”

The models reviewed in this section provide a framework upon which to base and compare future models of revolutionary organizational change. It is interesting to note the commonality in the first three phases of Figure 2. Despite the different terminology used, it appears that researchers who have worked in this area of the past five decades have had a relatively common view of all but the final phase of the change process. With respect to this final phase of the change process, analysis of the models suggests that there has been a conceptual ‘awakening’ in the area with more recent researchers now conceptualizing change as a never ending process which must be ingrained within the organization fabric (e.g., Davenport, 1993; Manganelli and Klein, 1994). This shift in the

conceptualization of the change process (pinpointed to the year 1983) closely approximates the time when the discipline of organizational development and change management began to grow as demonstrated by the increase in publications in this area in both the academic and practitioner fields.

It is also important to note that there does not appear to be a model of organizational change that has been developed to explicitly explain revolutionary organizational change. Each of these ten models was put forth as a model of change without indication of what type of change was being modeled. Thus, it could be argued that each of the general theories of change represented by Van de Ven and Poole (1995) could be applicable to any, or all, of the theories of organizational change reviewed.

This literature also suffers from inconsistent terminology being used to identify the stages or steps involved in the process change (i.e., different terminology used to describe the same phenomena). The model presented in Figure 2 helps to try and consolidate the terminology used by the various authors.

2.4 RECONCEPTUALIZING ORGANIZATIONAL CHANGE

This section of the literature review will deal with recent conceptualizations of organizational change. This section begins with an examination of an organizational change typology that attempts to explain how change occurs. The concept of reengineering, including a discussion of incremental organizational change themes is then provided. Conclusions are drawn at the end of the section.

2.4.1 TYPOLOGY OF ORGANIZATIONAL CHANGE

Prahalad and Hamel (1990) postulated that organizations in the 1990's would be judged on how they exploited their core competencies (i.e., overall direction and/or expertise within an organization that differentiates it from competitors). As organizations reinvent themselves with increasing vigor, effective change management has been conceptualized as a form or type of core competence (Kanter, 1983; Nadler and Shaw, 1995).

Organizations who include change management as a core competence along with the more traditional competencies (e.g., technological advancement, quick development times, and customer service) may be better able to adapt quickly and effectively to ever-changing conditions. In Nadler and Shaw's (1995) view, acquiring change management as a core competence is also key to increasing quality and customer value, decreasing the costs of internal coordination, enhancing competitive innovation, reducing market-response time, motivating effective member contributions, creating scales without mass, and managing uncertainty at a faster rate.

According to Goodstein and Burke (1991) the majority of organizational changes today are motivated by (or are reactions to) external factors. This has also been found to be true in bureaucratically controlled organizations such as government (Downs, 1967; Ingstrup, 1995). Nadler and Tushman (1990, 1995) argue that significant changes occur in the organizational environment as a response to destabilizing events (similar to the Diagnosis/Event phase in Figure 2) and that organizational change can be viewed in terms of its *continuity* (discontinuous or incremental) and *timing* (reactive or anticipatory) (see Table 3).

TABLE 3: Organizational Change Typology
Nadler and Tushman (1995)

		CONTINUITY	
		INCREMENTAL	DISCONTINUOUS
TIMING	ANTICIPATORY	Tuning	Reorientation (i.e., frame bending)
	REACTIVE	Adaptation	Re-Creation (i.e., frame breaking)

In terms of the specific typology put forth, Nadler and Tushman (1990, 1995) refer to *tuning* as minor modifications to specific organizational components due to anticipated future events, while *adaptation* is similar to tuning except that it involves a reaction to current events. Tuning and adaptation are analogous to the incremental change modes. *Reorientation*, viewed as the most common type of change, is referred to as organizational frame bending (i.e., the framework of the organization is changed by modifying or reshaping the existing structure). *Re-creation*, also known as organizational frame breaking (i.e., the existing organizational frame is deliberately broken, discarded, and created anew), is conceptualized as the rebirth of the organization. Re-creation and reorientation (i.e., discontinuous) are viewed by Nadler and Tushman (1990, 1995) as forms of revolutionary change.

Hammer and Champy (1993) conceptualize fundamental organizational change as representing the extreme end of the re-creation typology. They posit that the only way to change organizations is in the fundamental rethinking of purpose competencies (i.e., those historical factors that were ingrained in a corporate structure or philosophy and allowed businesses to survive and prosper in the past). They argue that, due to the

dramatic external factors affecting organizations today, the original principles of business no longer apply and must be completely overhauled.

While the rapid increase in the speed of change has encouraged many authors to concentrate on the re-creation typology of change (e.g., Davenport, 1993; Hammer and Champy, 1993; Lowenthal, 1994), a gap has emerged between change methodologies and the underlying theory development. This research attempts to address this gap by developing theory to explain this view of change. This theory then may assist in helping organizations with respect to the design of effective revolutionary change techniques. The next section will provide relevant information on reengineering, the most talked about “re-creation” methodology.

2.4.2 REENGINEERING

The most widely cited ‘definition’ of reengineering comes from Hammer and Champy (1993: 32) who state reengineering is:

... the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.

Reengineering has also been defined as:

... the rapid and radical redesign of strategic, value-added business processes -- and the systems, policies, and organizational structures that support them -- to optimize the workflows and productivity in an organization. (Manganelli and Klein, 1994: 7-8).

The fundamental rethinking and redesign of operating processes and organizational structure, focused on the organization's core competencies, to achieve dramatic improvements in organizational performance. (Lowenthal, 1994: 25).

Reengineering is a means of creating new methods of accomplishing tasks and is intended to uncover the root cause of inefficiencies and problems (Hammer and Champy, 1993; Champy, 1995). It begins from 'scratch' (a blank sheet) and is intended to revive an organization's current steady state into a new way of operating that is more conducive to the prevailing operating environment. The common themes and ideas, which run through the reengineering concept, include the ideas of fundamental and radical change, redesigning of processes, and improving of performance.

The 'wand' of reengineering is touching, or has touched, such diverse groups as universities (Penrod and Dolence, 1992), public utility companies (Demarie and Keats, 1995), and beverage manufacturers (Conklin, 1994). There have been many documented cases of the savings realized from such change initiatives (e.g., Stewart, 1993). Hammer and Champy (1993) state that between 50 and 70% of reengineering efforts have not achieved the dramatic results forecasted. Hammer and Stanton (1995) take issue with the critics of these figures in a follow-up publication by stating that there truly is no inherent success or failure rate for reengineering. Rather, they state that failure is caused by personnel who simply do not know what they are doing, or do not understand what they are expected to be doing.

Reengineering, appears to fall within the category of revolutionary change discussed earlier (see Table 3). Most researchers and practitioners, however, have moved directly towards a methodology to outline the steps to follow during such change rather than developing or testing a theoretical foundation to explain it (e.g., Hammer and Champy, 1993; Lowenthal, 1994; Manganelli and Klein, 1994). The next section will review reengineering methodologies posited by various authors with the aim of addressing such questions as: What methodologies are used to reengineer a company? How does reengineering differ from past organizational change theories?

2.4.2.1 METHODOLOGIES TO REENGINEER AN ORGANIZATION

Many authors have discussed, at length, the process of reengineering, why it needs to be undertaken, its advantages and disadvantages, and how it can be done (e.g., Davenport, 1993; Hammer and Champy, 1993; Hunt, 1993; Johansson *et al.*, 1993; Morris and Brandon, 1993; Tichy and Sherman, 1993; Tomasko, 1993; Adair and Murray, 1994; Cross *et al.*, 1994; Graham and LeBaron, 1994; Lowenthal, 1994; Manganelli and Klein, 1994; Nayak and Keteeringham, 1994). Despite the abundance of reengineering literature few authors have presented a step-by-step methodology of the entire reengineering process. Those that have include Davenport (1993), Graham and LeBaron (1994), Lowenthal (1994), and Manganelli and Klein (1994).

Each of these authors differed, however, with respect to how they viewed the overall process thereby making a synthesis of these models (i.e., similar to the synthesis of organizational change models presented in Figure 2) nearly impossible to construct. For example, Davenport (1993) utilizes technology as the enabler of change while Graham

and LeBaron (1994) apply a team-based approach to organizational change. Lowenthal (1994) employs a socio-technical approach where action planning and employee knowledge is paramount while Manganelli and Klein (1994) concentrate on process based inefficiencies. In reviewing these methodologies, one is left with the feeling of being handed a 'prescription' for dealing with revolutionary change – a prescription that has virtually no theoretical foundation or supporting empirical evidence. Given that far less than 50% of revolutionary change is considered successful (Strebel, 1996), an argument can be made that we must develop solid theories before jumping into practice.

One is also struck by the fact that while the methodologies reviewed devote much effort toward defining the critical stages of reengineering, they do a poor job of integrating the 'human' aspect of change. Overall within this literature, little attention is paid to the effect of reengineering on human resource improvements. Any mention of the impact of change on employees in this literature appears to be an afterthought (e.g., Lowenthal, 1994; Manganelli and Klein, 1994). As will be demonstrated later in this review (see Section 2.5) this is a major oversight in this body of literature.

A discussion of reengineering would not be complete without comparing it to other change strategies. The following section reviews how reengineering (a radical change strategy) differs from a number of the better known incremental change strategies.

2.4.3 REENGINEERING VERSUS INCREMENTAL CHANGE PROGRAMS

According to Nadler and Tushman (1995), incremental change is found when an organization undertakes a process of fine tuning or minor adjustments to its existing

structures or processes. Manganelli and Klein (1994) provide a framework which can be used to compare many of the major incremental change techniques that reengineering has been compared to, or has been associated with (see Table 4).

TABLE 4: Reengineering Versus Incremental Programs
Manganelli and Klein (1994)

	REENGINEERING	DOWNSIZING	RESTRUCTURING	TQM
Assumptions Questioned	Fundamental	Staffing	Reporting Relationships	Customer Wants and Needs
Scope of Change	Radical	Staffing, Job Responsibilities	Organization	Bottom-Up
Orientation	Processes	Functional	Functional	Processes
Improvement Goals	Dramatic	Incremental	Incremental	Incremental

Table 4 includes many of the more popular organizational change initiatives such as *downsizing* (workforce reduction), *restructuring* (changes to the organization's reporting structure), and *total quality management* or TQM (strategy to deliver quality products to customers). Each of these change programs differs from reengineering in terms of the assumptions questioned, the scope of change (i.e., how or what facets of the organization will be affected by change), the orientation of the change, and the nature of the improvement goals sought (Manganelli and Klein, 1994).

Reengineering differs from these programs in that the goals of the change are radical, not incremental, and the nature of the change is revolutionary. Reengineering seeks diverse improvement goals, concurrently, while other programs focus on fewer, more specific goals. In other words, reengineering questions the fundamental assumptions of the business unit.

Compared to reengineering, downsizing looks primarily at functional areas within the organization and how jobs can be combined, made redundant, or eliminated. While many organizations view downsizing as a way to become more efficient, the literature does not support this. Tomasko (1993), for example, reports on a four year study conducted by the University of Michigan on downsizing which found that white-collar productivity showed little significant improvement and, in most American companies, administrative costs were still above those of their strongest global competitors.

Differentiating restructuring from downsizing is difficult. As Keidel (1994) states, delayering and downsizing have become synonymous with restructuring in organizations. With regards to the assumptions questioned, downsizing tends to focus on the number of staff while restructuring focuses on the reporting relationships of staff. With regard to the scope of change downsizing affects staffing and job responsibilities while restructuring focuses on the overall organization.

TQM has been compared to reengineering because it's span is organization wide and it seeks breakthroughs and continuous improvement (Galbraith, 1995). Luthans (1995) distinguishes between TQM and reengineering by pointing out that many TQM approaches are designed to increase efficiency by streamlining current operations whereas reengineering involves the total redesign of operations by analyzing jobs and how overall work can be done more effectively. As Cross *et al.* (1994) point out, TQM typically starts with a few problem-solving teams and pilot projects. 'Champions' are

found and the process expanded throughout the company. Such projects have limited cross-functional involvement whereas reengineering, by definition, crosses functions.

Finally, it should be noted that within the reengineering literature automation technology has been viewed as an agent of change that can lead to each of the change programs identified in Table 4. The continual development of new forms of automation has allowed for the reengineering of many facets of organizational processes and the flattening of hierarchies (Davenport, 1993). Drucker (1988) goes as far as to state that the best example of an automated organization is one with no middle at all.

2.4.4 SUMMARY OF: "RECONCEPTUALIZING ORGANIZATIONAL CHANGE"

Reengineering can be a difficult change program to undertake as demonstrated by the poor rates of success. Risks can come from either not attempting the changes necessary or from actually trying to make the changes themselves (Clemons, 1994). This review of the reengineering literature reveals two major criticisms of this view of change.

First of all, reengineering does not adequately address the human resource aspects of change (Pfeffer, 1994). Employees are generally viewed as passive in the reengineering change process despite the fact that they are the ones who understand the systems in place and have been trained to function within the underlying structure of the organization. A review of this literature has found that the human element often becomes an afterthought of reengineered change.

Secondly, reengineering can also be criticized for the fact that it lacks a strong theoretical foundation. The failure of the majority of reengineering efforts points to the need to better understand this form of change (Manganelli and Klein, 1994). An increased understanding of revolutionary change should enable us to develop better reengineering and other organizational change methodologies.

The literature identifies situations where an organization requires a fresh start, not an extension of the existing parameters (Haveman, 1992; Kanter *et al.*, 1992). As Mitroff *et al.* (1994:11) state “We need radically new kinds of organizations to meet the extreme challenges of today’s world and tomorrow’s”. Thus, research of revolutionary organizational change is of particular relevance to organizations that operate in today’s global economy and need to be able to manage and engage in revolutionary change (Tushman and O’Reilly, 1996).

This research is unique in that it involves taking an empirical approach to classifying revolutionary change and will attempt to address these deficiencies by doing an in-depth case study of an organization which is undergoing revolutionary organizational change.

2.5 SOCIAL ASPECTS OF CHANGE

Resistance to change and a variety of organizational factors (especially communication, culture, and a supportive work environment) have been found to impact the organizational change process. This section will briefly summarize the literature in these areas as a means of addressing the social (or human) side of change.

2.5.1 RESISTANCE TO CHANGE

There is nothing quite as certain as resistance to change (Hultman, 1979). In fact, resistance to change is often viewed as one of the biggest barriers to change (Smith, 1993; Pritchett, 1996). Argyris (1985) believes that changes in organizational routines threaten individuals. These feelings of threat are, in turn, perceived to lead to negative and defensive behaviours. Other researchers go on to argue that these behaviours are the most common cause of the failure of even the most sound, and properly conceived, organizational change strategies (e.g., Reger *et al.*, 1994; Hammer and Stanton, 1995).

Resistance to change is one area in the current organizational change literature where the influence of employees has been reviewed (e.g., Nutt, 1986; Hammer and Champy, 1993; Lowenthal, 1994). Although there are a number of individual influences on organizational change, many are subsumed within the resistance to change literature (Nutt, 1986).

2.5.1.1 RESISTANCE TO CHANGE DEFINED AND CONCEPTUALIZED

Hultman (1979) defines resistance to change as a state-of-mind reflecting an unwillingness (or indifference) to change that arises from anxieties, reservations, and trepidation over proposed (or actual) changes. Doubt, fear, and anxiety are associated with the process of change and its projected (or anticipated) outcomes thereby motivating individuals to resist (Richardson and Denton, 1996).

Kilmann and Covin (1988) state that resistance occurs in the initial phases of any organizational change. They divide resistance into a first stage called *shock*

(physiological shock, whereby people shut down, need emotional support, and are less productive) and a second stage called *defensive retreat* (where people try to hold onto, or maintain, the old ways). Other types of resistance identified in the literature include *sabotage* (LaNuez and Jermier, 1994), *pressure* through shareholder voting (Kouzes and Posner, 1993), and *gestures* and *delay tactics* (Bardach, 1979). Studies have shown that participation in change (i.e., being directly or indirectly involved in the process) may decrease resistance to change (e.g., Coch and French, 1948; Rogers and Rothlisberger, 1952; Umstot, 1984; Sonnenfeld, 1985; Porras and Hoffer, 1986; Morris, 1992; Duck, 1993; Laabs, 1996; Stamps, 1996). Research has found, however, that nearly two-thirds of employees typically do not choose to participate in change programs when presented with such an opportunity (Neumann, 1989).

Not only is resistance to change natural, but its predictability is a function of positive (or negative) perceptions of change (Conner, 1993; Coghlan, 1994). This view of resistance strengthens Lewin's (1951) claim that resisting forces must be minimized before organizational change is implemented and a new equilibrium established. LaMarsh (1995) states that opposition to change, when it is well managed, can maintain a healthy tension between the old ways and the new vision and can help monitor and improve the overall change process.

Despite the lack of a cohesive theory of organizational resistance to change (Fitzgerald, 1988), the various reasons for resistance to change can be segmented into individual and organizational categories (see Table 5) (Watson, 1969; Zaltman and Duncan, 1977;

Hultman, 1979; Kotter and Schlesinger, 1979; Bigelow, 1980; Klein, 1984; Kanter, 1985; Kanter *et al.*, 1992; Connor, 1993; Matejka, 1993; O'Toole, 1995; Mamman, 1996). The individual factors (i.e., homeostasis, values, beliefs, cognitive effects, and emotional effects) will be presented as part of this section on resistance to change. Given their impact on this research, the organizational factors will be discussed separately.

TABLE 5: Sample of Reasons for Resistance to Change

INDIVIDUAL	ORGANIZATIONAL
homeostasis	motivation
values	communication
beliefs	leadership
cognitive factors	culture
emotional factors	

2.5.1.2 INDIVIDUAL REASONS FOR RESISTANCE TO CHANGE

Within the context of resistance to change, psychological make-up refers to the effect of the change on the cognitive and emotional well-being of employees (Klein, 1966; Watson, 1969; Porras and Hoffer, 1986; Greenburg and Safran, 1987; Bunker and DeLisle, 1991; Rosenthal, 1996; Rowe, 1996). The resistance to change literature has primarily focused on how individuals resist change as opposed to the cognitive and emotional effects of resistance to change on individuals. Despite this deficiency, the psychology literature provides a foundation upon which to build a deeper understanding of resistance to change.

The conceptualization of resistance in the field of psychology is credited to the work of Freud (1913) who found that clients adopted a defensive posture as a meaningful strategy to hold onto what they knew and avoid the proposed (i.e., homeostasis). The traditional

view of resistance is that it is a necessary defensive strategy to protect one's values and beliefs (Klein, 1966; Menaker, 1991; Rosenthal, 1996; Rowe, 1996). From a clinical perspective, resistance is viewed as a form of communication. It is interpreted as the building of a defensive structure in order to maintain equilibrium in the face of change (Rosenthal, 1996; Strean, 1996). Watson (1969) states that any force, which contributes to stability in personality, or in social systems, can be analyzed in terms of its impact on resistance to change.

2.5.1.2.1 Cognitive Factors

Cognition theory helps us understand why some individuals accept change while others may resist (Coghlan, 1994). Cognition is the product of variances in perceptual differences based on disposition (or genetics), socialization, and environmental influences (Rosenthal, 1996; Strean, 1996). Dispositional characteristics and socialization experiences may be quite different among individuals despite similar environmental conditions (Strean, 1996). The cognitive effects of change are unique to each individual and an individual's cognitive structuring (i.e., mental map of the situation presented) is critical for successful change (Porras and Hoffer, 1986).

Researchers have noted that the fundamental objective of an individual involved in change is the defense of self-esteem, competence, and autonomy (e.g., Coghlan, 1994; Rosenthal, 1996; Strean, 1996). This suggests that change, when it is perceived to threaten one's values, will be resisted (Schafer, 1983). Jellison (1993) theorizes that it is only when employees feel there is something genuinely at stake that they may begin to alter their behaviour. Mohrman *et al.* (1989) suggest that the depth of the change process

itself (i.e., how great an effect the change will have on the individual) may dictate the level to which it will be resisted or accepted. Fears that power will be eroded from the technical and political structure by removing it from individuals or departments may lead to resistance (Westley, 1990; Tichy and Sherman, 1993). This belief is similar to that of Judson (1993) who takes a more rounded view of change and argues that change is influenced by each individual affected, the organizational setting, and the nature of the change.

2.5.1.2.2 Emotional Factors

Emotional factors can be considered manifestations of feelings derived from stimuli (Greenburg and Rhodes, 1991). For example, Smith (1993) theorizes that resistance rises from the anxieties and apprehension regarding risk and uncertainty that are derived from organizational change (i.e., the stimuli). In times of sweeping, radical, change a person's emotions, sanity, and/or sense of security, are called into question, (Mohrman *et al.*, 1989). As such, resistance to change is based on a central human conflict between cognitive learning and emotional security. Organizational change efforts have commonly ignored these human processes (Diamond, 1995).

What is considered resistance to change is more likely an attempt to maintain emotional stability (Klein, 1966). Individuals must be provided with a means of working out the psychodynamics of closing-off what has become a way of life and taking up new beginnings (Bridges, 1980; Tichy and Devanna, 1986). By conceptualizing organizational change events in this manner the emotions involving the past can be 'buried' and left behind.

2.5.2 ORGANIZATIONAL FACTORS

There are a large number of organizationally based factors that may be linked to change and the aforementioned individual factors subsumed within resistance to change. For example, the literatures of *motivation* (Deci and Ryan, 1987; Duck, 1993; Judson, 1993), *learning* (Argyris and Schön, 1978; Senge, 1990; Robbins, 1993), *bureaucracy* (Peters and Waterman, 1982; DeCelles, 1995), and *organizational history* (Hultman, 1979; Klein, 1984; Kanter, 1985) span across massive bodies of literature. The literature suggests that four of these areas may be germane to the topic of revolutionary change. The topics to be discussed in this review (i.e., those deemed to be more pertinent to the topic of revolutionary change) include: organizational communication, organizational culture, leadership, and a supportive work environment. Each will be discussed in turn below.

2.5.2.1 COMMUNICATION AND ORGANIZATIONAL CHANGE

One of the problems with the communication of organizational change literature is that change is discussed from a generic viewpoint (i.e., any type of change). The researcher could find few studies that explored communication during revolutionary change. Relevant literature on communication and “generic” change is reviewed below.

Communication of organizational change has been found to be inexorably linked to successful organizational change; the lack of communication during the change process has been tied to resistance to change (e.g., Hall *et al.*, 1993; Shaw and Maletz, 1995). In fact, inappropriate communication has been identified as one of the key factors that can lead to the failure of change initiatives (Porras and Hoffer, 1986; Duck, 1993; Hall *et al.*:

1993; Stanton, Hammer, and Power, 1993; Shaw and Maletz, 1995). The efficient sharing of information among work group members, as well as the communication skills of managers or supervisors, may lead to high levels of organizational efficiency, increased performance, and more effective change implementation (Snyder and Morris, 1984). Employees have been found to exhibit patterns of resistance to change when they do not fully understand the implications of organizational change or perceive that change may cost them more than they will gain (i.e., there has been inadequate communication of change information) (Kotter and Schlesinger, 1979).

Ford and Ford (1995) state that organizational change is created, sustained, and managed through clear communication. Similarly, Marks and Shaw (1995) note that communicating effectively during change is critical to successful change. Research has also shown that to ensure effective communication during times of change, organizations need to have well-managed communication programs in place (Sinetar, 1988). In this regard, Gonring (1991) found supervisors to an important conduit in communicating such information. Roberts and O'Reilly (1974), concluded that working for a powerful supervisor is associated with increased trust, a desire for communication, and increased information accuracy. This being said, LaMarsh (1995) makes the point that communication does not, and will not, ever provide a guarantee that people will change.

Morris (1992) documented the critical need of both managers and employees to clearly know where organizational change is going and what it means to them. Other researchers, however, suggest that it can be difficult to change behaviours armed only

with information (Falbe and Yukl, 1992; Fishbein, 1995; Legare, 1995). Inaccurate or negative rumours have been identified by some researchers as the most common reasons for problems with the organizational change process (Smeltzer, 1991; Krackhardt and Hanson, 1993). These authors go on to point out that rumours can mean the difference between successful change implementation and failure. This research suggests that control over formal communication channels is critical if an organization does not want to rely on the more dubious informal channels where communication may have extreme negative effects on such a situation (Beigel, 1973).

To make the transfer of change information more effective Larkin and Larkin (1994) suggest an approach based on what is known as the *Pelz Effect*. Pelz (1952) found that when supervisors had upward influence and could affect, or were a part of, decision making exercises, communication with subordinates would be enhanced. Accordingly, Larkin and Larkin (1994) suggest that organizations which are undergoing change: (1) cut middle management out of the communication of change process, (2) have communication go directly between upper management and supervisors of front-line employees, and (3) utilize traditional methodologies to inform middle management of change (e.g., hierarchical, trickle-down).

With the information available to those who can transmit it most effectively, Morris (1995) suggests that it requires full and complete disclosure on as personal a level as possible. Yates and Orlikowski (1992) found that effective managers choose richer media to convey equivocal or ambiguous messages and leaner media to convey

unequivocal messages. Bush and Frohman (1991), Larkin and Larkin (1994), and Richardson and Denton (1996) strongly recommend the use of 'rich' communication methods (e.g., face-to-face) during change. Unfortunately however, often only 'lean' channels of communication are utilized to reach those who are affected by the change.

2.5.2.2 CULTURE AND ORGANIZATIONAL CHANGE

The speed of change today is, perhaps, more critical than any other time in history (Nadler and Tushman, 1995). The challenge for organizations will be to instill a culture where change is seen as continuous and not viewed as a threat. The topic of organizational culture will be included in this research in order to better understand what role it has played in the revolutionary change process and how it has been adapted (or not) throughout the change process. Relevant literature on culture and "generic" change is reviewed below.

Organizational culture cannot be conclusively defined from the literature but, in general, refers to shared norms, beliefs, attitudes, dominant values, guidelines, and philosophy, within an organization (e.g., Trice and Beyer, 1984; Schein, 1985; Smircich, 1985; Luthans, 1995). Organizational culture can be manifested through stories, myths, and symbols (e.g., Pettigrew, 1979; Barley, 1983) and has been found to affect organizational change by, among others, DuBrin (1974), McGill (1977), Kanter (1983), Tichy (1983), Feldman (1986), and Schneider *et al.* (1996). Powerful cultural forces within an organization can limit change solutions (Stace, 1996).

Gersick (1995: 14) describes “deep structure” as the set of choices a system has made of (1) the basic parts into which its units will be organized and (2) the basic activity patterns that will maintain its existence. Tushman and Romanelli (1985) posit that deep structure in organizations may be described by among other things: core beliefs and values, products and market timing, the distribution of power, and organizational structure. In certain situations an organization’s deep structure (Fitzgerald, 1988; Gersick, 1995) impedes change from occurring (i.e., during periods of equilibrium). During disequilibrium, on the other hand, the deep structure is reconfigured. The literature points to traditions, reciprocal trust, and communication as the key links between organizational culture and organizational change working within the deep structure. Each is explored below.

Cultural traditions and organizational history influences attitudes toward the organization and serves as ‘proof’ of management’s true attitudes (Fulmer, 1974; McGill, 1977; Bigelow, 1980). Cultural change often involves rethinking mindsets such as ‘jobs for life’ and other embedded cultural beliefs that inhibit organizational growth and development (Tichy, 1983). As Champy (1995: 9) states, “. . . ‘now’ has no traditions, no precedents, no time-tested formulas. Now has never been seen before.”

Kanter (1983) identified organizations as being either *integrative* (embracing change) with a willingness to move beyond conventional wisdom or *segmentalist* (anti-change, resistant) with a focus on compartmentalizing actions, events, and problems and keeping each ‘piece’ isolated from others. In a segmentalist organization the barriers to change

may be deeply ingrained within the organizational structure and culture. If change is viewed as a negative consequence of a series of events and the willingness to change is not ingrained within the organizational culture, it will be more difficult to bring about the necessary corrections and changes in behaviour (Feldman, 1984).

During the current fixation on organizational change, and in particular reengineering and downsizing, it appears that 'trust' (a dimension of culture) between organizations and their members has been the biggest casualty (Fulmer, 1974; DeCelles, 1995). Organizational change can be stymied when the bonds of trust have been broken within an organization (Jellison, 1993; Smith, 1993). Corporate culture can only change when people are confident in what is happening, where things are going, and what the future holds (Richardson and Denton, 1996). Communication, as discussed earlier, is not possible when people do not see and/or assume the same things or share the same values (Rogers and Rothlisberger, 1952). As such, long-standing corporate culture can be a major barrier to transition and communication may become one of the key means for overcoming this barrier (DuBrin, 1974; Davidson, 1993; Strebel, 1996).

2.5.2.3 LEADERSHIP AND ORGANIZATIONAL CHANGE

Leadership can be defined as a process through which a person possesses the ability to influence the values, actions, and attitudes of others (Baron, 1983; Luthans, 1995). There are a number of authors who argue that the research on leadership has remained elusive, become stagnant, and failed to model important things that occur in the 'real' world (e.g., Meindl *et al.*, 1985; Calas and Smirich, 1988; Pauchant, 1991; Gemmill and Oakley, 1992). This being said, the concept of leadership has been found to be an important

factor in affecting organizational change efforts by a number of researchers (e.g., Spector, 1989; Morris, 1992; Memmott, 1993; Romanelli and Tushman, 1994; Brower and Abolafia, 1995; Strebel, 1996). Effective change leadership may be enhanced through proper communication (Legare, 1995; Strebel, 1996), resistance to change may be lessened (Bunker and DeLisle, 1991, Coghlan, 1994), and culture change may be affected (Kanter, 1983; Feldman, 1984).

It has been found that revolutionary change is positively influenced by environmental conditions and CEO (leader) succession (Romanelli and Tushman, 1994). Romanelli and Tushman (1994) found that when environmental conditions are changing and the CEO has been replaced, organizations are significantly more likely to undergo revolutionary change. It has also been found that organizations that went through revolutionary change without changing the CEO performed better over the long-term than those that changed the CEO (Virany *et al.*, 1992).

While leadership style has found to have a profound effect on how an organization functions and changes, the literature indicates that there is no one particular leadership style that works best in situations of revolutionary change (e.g., Nadler and Tushman, 1990; Dunphy and Stace, 1993). Farkas and Wetlaufer (1996) found only five distinct approaches could describe how CEO's lead. Although it has been believed that charismatic leaders with a strong vision are required for successful organizational change, research suggests that this style may not be enough to sustain revolutionary organizational change (Nadler and Tushman, 1990). Other research (Scott and Jaffe,

1995) suggests that successful organizational change leaders need to have a vision for the organization, be strong communicators, have honesty and integrity, and be able to react to situations as they arise.

Leadership during organizational change must possess the ability to adapt to new conditions quickly and learn from successes and failures (Nadler and Tushman, 1990). Several studies suggest that leaders who proceed directly to imposing new arrangements and systems without gaining the support of people, and creating exchange, fail to generate employee commitment. Such a failure was in turn linked to increased resistance to change (Morris, 1992; Duck, 1993). Other studies report that, in some cases, leaders may be a barrier to overall organizational change (Mermott, 1993; Brower and Abolafia, 1995).

Strebel (1996) suggests that organizations resist change because leaders and followers view organizational change differently. In general, top level executives view change as a way to strengthen the business and potentially advance their careers while employees (including middle management) see change as disruptive, intrusive, and upsetting the balance or status quo (Strebel, 1996). Organizations tend to appropriate blame to individuals when change fails (e.g., Frances, 1995; Hammer and Stanton, 1995). Such sentiment may exacerbate differences between leaders and employees.

2.5.2.4 SUPPORTIVE WORK ENVIRONMENT

The work environment has been found to influence an employee's response to change (Roberts and O'Reilly, 1974; Nystrom, 1990; Morris, 1992; Judson, 1993; Larkin and

Larkin, 1994; Pfeffer, 1994; Furukawa, 1996). In reviewing the available literature, however, little research could be found linking organizational change and the work environment. As Tomasko (1993) contends, change today places too much attention on new technology at the expense of the human side of change. The next section examines the research on work environments and organizational change.

2.5.2.4.1 Supportive Work Environment and Organizational Change

Research on the construct of support appears in the psychological, sociological, and organizational literatures. Substantial consistency has been found at the organizational and supervisor level regarding the effects of support on employees and the overall work environment.

Organizational and supervisor support have generally been measured as independent constructs. Supervisor support has been measured through perceived support (Kottke and Sharafinski, 1988; Jones-Johnson and Johnson, 1990), communications content (Beehr, *et al.*, 1990), and social support (Beehr, *et al.*, 1990). Organizational support has been measured through organizational commitment (Mowday *et al.*, 1982; Shore and Wayne, 1993) and perceived organizational support (Eisenberger *et al.*, 1986). Literature on these constructs is reviewed below.

Organizational and supervisor support has been found to effect: **work stress** (Ford and Bagot, 1978; House *et al.*, 1980; House, 1981; Cohen and Wills, 1985; Donovan, 1987; Jayaratne *et al.*, 1988; Himle *et al.*, 1989; Cummins, 1990; Johnson and Johnson, 1992; Babin and Boles, 1996), **job satisfaction** (Himle *et al.*, 1989; Poulin, 1995; Babin and

Boles, 1996), **job performance** (Graen *et al.* 1982; Jackson and Schuler, 1983; Wayne and Ferris, 1990; Butcher, 1994; Orpen, 1994; Babin and Boles, 1996), **work and family balance** (Goff *et al.*, 1990; Galinsky and Stein, 1990), **absenteeism** (Jackson and Schuler, 1983; Eisenberger *et al.*, 1986; Malka, 1989), **job burnout** (Maslach, 1981, Jayaratne *et al.*, 1983; Jackson and Schuler, 1983; Savicki and Cooley, 1987; Himle *et al.*, 1989), **distributive justice** (Johnson and Johnson, 1991), and **organizational commitment** (Gouldner, 1960; Levinson, 1965; Kanter, 1968; Roberts and O'Reilly, 1974; Salancik, 1977; Rhodes and Steers, 1978; Scholl, 1981; Mowday *et al.*, 1982; Meyer and Allen, 1984; Eisenberger *et al.*, 1986; Kottke and Sharafinski, 1988; Shore and Wayne, 1993; Settoon *et al.*, 1996). Some of the most common concerns of today's organizations (e.g., low satisfaction, burnout, low commitment) appear to be mitigated by a supportive work environment.

While organizational support and supervisor support are commonly conceptualized as two different constructs, distinguishing the effects of support from the organization from those attributed to supervisors may be difficult (Kottke and Sharafinski, 1988). While it is recognized that support from one's immediate manager is likely important to the change process (if an employer provides support to an employee), the focus in this research is at an organizational unit of analysis. As such, emphasis in this research will be given to measures of organizational support.

2.5.2.4.2 Organizational Commitment

Organizational commitment is defined as an exhibition by an organizational members of a strong desire to stay with an organization, a willingness to exert high levels of effort on

behalf of the organization, and an acceptance of the values and goals of the organization (Mowday *et al.*, 1982). Wayne *et al.* (1997: 107) suggest that “in exchange for organizational support, employees become affectively committed to their organizations and less likely to leave, but in exchange for high-quality relationships with their superiors, they perform well”. The perception of an ‘inviting’ or positive environment may lead to desirable outcomes, such as organizational commitment which is one of the key factors influenced by support (Meyer and Allan, 1991; Luthans, 1995).

Research suggests that positive actions by the organization and/or its representatives (i.e., supervisors) leads to the development of higher quality exchange relationships and more successful change (e.g., Konovsky and Pugh, 1994; Settoon *et al.*, 1996). This appears to be especially true in the change process. Rhodes and Steers (1978), for example, suggest that when employees participate in decision-making (e.g., how an organization is to change) and feel supported by the organizational change process, commitment increases.

2.5.2.4.3 Perceived Organizational Support (POS)

Perceived organizational support refers specifically to exchanges between employees and the organization (Wayne *et al.*, 1997). Organizational commitment is formulated by employees through POS (i.e., in a global sense, anything that indicates a concern for employee well-being) and is best understood in terms of social-exchange theory (Eisenberger *et al.*, 1986). Settoon *et al.* (1996) found that POS is more a global reaction associated with organizational commitment. Eisenberger *et al.* (1986) found that employees form beliefs concerning the extent to which an organization values their contribution. It is therefore posited that employees who perceive high support are more

likely to 'repay' (or exchange) the organization, such things as desirable work related behaviours (Coghlan, 1994).

Eisenberger *et al.*'s (1990) research found a positive relationship between POS and job attendance and performance, attachment, outcome expectancies, and 'constructiveness' of suggestions for assisting the organization, including innovation. Further, a number of human resource practices were mediated through POS (e.g., investments in employees such as education, and organizational recognition including rewards) (Guzzo *et al.*, 1994; Shore and Shore, 1995). According to Shore and Wayne (1993), these relationships can create feelings of obligation and citizenship behaviour. When linked to earlier discussions, commitment may be enhanced through perceived organizational support and proper communication (Legare, 1995; Strebel, 1996) and resistance to change may be minimized (Bunker and DeLisle, 1991, Coghlan, 1994).

2.5.3 SUMMARY OF: "SOCIAL ASPECTS OF CHANGE"

The importance of the social, or human, aspects of organizational change cannot be overstated. Researchers have linked organizational change to psychological, cognitive, and emotional effects on individuals (e.g., Porras and Hoffer, 1986; Rosenthal, 1996; Streat, 1996). The models and methodologies of organizational change discussed earlier rarely attempt to integrate these constructs (Schneider *et al.*, 1996). At best, there is a sideline mention that employee 'buy-in' is important (e.g., Shepard, 1967; Davenport, 1993). It would appear from this review that there is a strong need for researchers to address the social aspects of change in a model of organizational change (one objective of this research).

Successful change requires the creation of an overall organizational climate that minimizes resistant behaviour and encourages acceptance and support while balancing the needs of employees and the organization (e.g., Coch and French, 1948; Laabs, 1996). Together, the organizational culture and communication of change have been found to be key ideas with respect to reducing resistance to change (e.g., DuBrin, 1974; Duck, 1993; Shaw and Maletz, 1995). As Frances (1995) notes, what is needed is an effective model to reduce resistance to change through the effective use of communication while simultaneously working with the organizational culture.

There appears to be a gap in the empirical literature with respect to studying how organizations can support change initiatives specifically. The literature on resistance to change has demonstrated the value of having employees as a part of the process. As Hutchinson and Garstka (1996: 1363) state, "There are specific practices and policies that organizations can implement that will cause employees to feel valued by the organization, and once employees feel valued by the organization, they are more likely to be committed to the organization's goals". As noted earlier, an important organizational goal is successful change (Kanter *et al.*, 1992; Pfeffer, 1994; Nadler and Shaw, 1995). This review of the literature indicates that there is a need to better understand how employees can be supported to achieve this goal.

Himle *et al.* (1989: 30) raise the following important question: "Given the importance of a supportive environment, where should agencies (organizations) concentrate their efforts to alleviate psychological stress?" The available literature would suggest that supporting

change from an employee centred focus could alleviate many of the current stresses associated with revolutionary change (e.g., Porras and Hoffer, 1986; Greenburg and Safran, 1987; Bunker and DeLisle, 1991; Rosenthal, 1996). This research proposes to explore how this could best be accomplished.

2.6 SUMMARY OF LITERATURE REVIEW

Despite growing interest in the revolutionary organizational change by both practitioners and researchers, there has been a lack of research on the issue of revolutionary organizational change and a lack of studies offering an empirically based view of this form of change. This literature review has shown that there is no real empirical model of revolutionary change. Most writings in this area either report on a subset of the organizational change process or deal conceptually with most facets of the organizational change process but provide no supporting data to confirm their ideas. The social or human aspect of change has largely been ignored in the organizational change literature. The human factors, which may influence or effect change, have not yet found their way into models or theories of change. The development of an empirically based, holistic model of revolutionary change which integrates the human (or behavioural) aspects of change will fill a large void in the literature and begin the critical integration of these literatures.

CHAPTER THREE: RESEARCH QUESTIONS AND OBJECTIVES

The above review of the literature reveals a need to better understand revolutionary organizational change. In particular, research needs to be done to: (1) help resolve the controversy over whether revolutionary change should be considered a separate theory of change (e.g., Tushman and Romanelli, 1985; Van de Ven and Poole, 1995; Gersick, 1991); (2) help organizations manage revolutionary change by understanding it at an organizational level; and, (3) determine how human factors affect the revolutionary change process.

Given these limitations in the literature, the objectives of this research are to:

1. Determine if revolutionary change should be considered a separate theory of change.
2. Better understand the *revolutionary change process* at the organizational level and begin the development of a *model of revolutionary change* that includes employee and organizational perspectives.
3. Develop behaviourally based *measures* of organizational support for change (i.e., an assessment of organizational actions, or inactions, which employees perceive support, or hinder, change efforts);
4. Assess the role of organizational support for revolutionary change on *organizational outcomes* (organizational commitment, job satisfaction, and managerial support) and *employee outcomes* (stress, burnout, and perceived organizational support).

To meet these objectives, the following research questions are addressed in this research:

1. Is there a unique theory of revolutionary organizational change? If so, how does it differ from past organizational change theory and thinking?
2. Is there a consistent organizational view of the revolutionary organizational change process or does the view vary by organizational level (i.e., do executives view revolutionary change differently than non-executives)?
3. From an employee perspective, what has the organization done that has been supportive (or non-supportive) of its revolutionary organizational change efforts? Do views of support (or non-support) vary by department, job category, gender, age, or years of service (e.g., do women define support of revolutionary change differently than men)?
4. How does organizational support, and non-support, of revolutionary change impact organizational and employee outcomes?

Literature supporting these research questions had been reviewed in the preceding chapters. With respect to Question 3, a major shortcoming in the organizational change literature is that it does not examine how context criteria (e.g., gender, job type, and age) affect either organizational change in general, or revolutionary change specifically. The one exception to this can be found in the resistance to change literature where researchers have indicated that gender, job type, and age may have an impact on employee resistance to organizational change (e.g., Pollman and Johnson, 1974; Gudykunst and Kim, 1984; Morris, 1995; Furukawa, 1996; Mamman, 1996).

In a related research area (i.e., the supportive work environment literature) *gender* (e.g., Jayaratne *et al.*, 1983; Galinsky *et al.*, 1986; Hughes and Galinsky, 1988; Wiley and Eskilson, 1988; Ashton and Fuehrer, 1993; Poulin, 1995; Amason, 1997), *job type* (Beehr *et al.*, 1990; Poulin, 1995; Babin and Boles, 1996), and *age* (Johnson and Johnson, 1994; Poulin, 1995) have been found to be associated with the type of support desired or

sought. This research will help to address the gap regarding contextual variables by analyzing these variables as they relate to organizational support for revolutionary change.

CHAPTER FOUR: METHODOLOGY

A case study of an organization in the Canadian telecom industry (BC TEL) was done in order to examine the issues put forward in the previous section. Before talking about the specific methodology used in this research, it is necessary to: (1) review why a case study approach is applicable; and (2) justify why BC TEL is a good example of an organization undergoing revolutionary change.

4.1 CASE STUDY APPROACH

Greenwood and Hinings (1995) suggest that real time case studies are necessary to further research the concept of revolutionary change. They justify this conclusion by pointing out that many aspects of change are difficult to measure and highly sensitive to context (e.g., leadership, power). As Greenwood and Hinings (1995: 1047) state,

It is improbable that a single, simple line of causation will explain the occurrence of (revolutionary) change. Instead, different combinations of interactions between precipitating and enabling dynamics are possible

A number of other authors support the use of a case study approach to the study of revolutionary change by pointing out that not less than 3 years is required to gain insight into how changes are proceeding (e.g., Nadler and Tushman, 1989; Huber and Van de Ven, 1995). As Emory and Cooper (1991) indicate, case studies place more emphasis on a full contextual analysis of events and their interrelation. Revolutionary changes are most likely the product of processes that are oscillatory and iterative (i.e., combinations of interactions between various dynamics are possible) and thus may not be observable using a survey methodology.

In order to better understand revolutionary change, including its components and their interaction, a case study methodology appears appropriate in this case. It would allow for a direct interaction with the key players of the process and allow for connections to be drawn between contextual variables that have been discussed in the literature.

4.1.1 WHY BC TEL?

Before undertaking the research to address the research objectives, it was important to establish why BC TEL represents an applicable case study of revolutionary change.

As discussed earlier, Greiner (1972) differentiated revolutionary change in terms of the size of an organization and its age suggesting that larger, older organizations, in high growth industries have more stages of revolutionary change. In the case of BC TEL, it is over 100 years old, has \$2.7 billion in annual revenues, has approximately 13,000 employees, and is a key player in the Canadian telecommunications industry which has grown dramatically over the last five years. Using Greiner's (1972) criteria, BC TEL appears to represent a suitable organization for a case study of revolutionary change.

Further to Greiner's criteria, it was important to note that BC TEL was being forced to move from a monopolistic environment to a competitive one (i.e., had no choice). Reger *et al.* (1994) postulate that when environmental conditions are considered to be in a crisis state, revolutionary change is the most applicable change process. BC TEL can be considered to be in a crisis state as it has been forced, by C.R.T.C. regulators, to change from a company with no competition to one which has to compete with companies like AT&T (who have \$71 billion in annual revenue) for survival. This change in

environmental conditions, in and of itself, indicates that the company had to undergo some radical form of change in order to survive.

Other classification systems from the literature also support this assumption. BC TEL's change may be classified as 'discontinuous' using Nadler and Tushman's (1995) typology as outlined in Table 3. It is unclear at this point, however, whether this discontinuous change is anticipatory or reactive in nature. BC TEL may also be considered to be in a situation of punctuated equilibrium (i.e., part of a continuing series evolutionary and revolutionary changes within the company) (Tushman and Romanelli, 1985; Gould, 1989; Gersick, 1991). Finally, as both dialectic and teleological forms of change are considered 'radical' (Van de Ven and Poole, 1995), however, there exists the possibility that change at BC TEL may be considered in one of these categories.

BC TEL's situation does appear to fit a description of revolutionary change and it does not appear to fit other forms of change. The change from a monopoly to a competitive company has taken place over a relatively short period of time compared to the age of the company and thus cannot be considered evolutionary (Greiner, 1972). BC TEL does not appear to be solely a case of independent life cycle change because the movement to a competitive marketplace was not a natural progression for the company given the length of time it spent in a monopoly environment.

4.1.2 AGREEMENT BETWEEN THE RESEARCHER, BC TEL, AND ITS UNION

It is critical to the future of BC TEL and the Telecommunication Workers Union (T.W.U.) that the change from a monopoly to a competitive company is successful and

that both parties learn from what has taken place. Because of this, BC TEL was willing to cooperate in this research initiative. Before approaching any BC TEL employees, approval from BC TEL and the T.W.U. was secured. Each group was promised a copy of the final document when published, apprised of the questions to be asked, and provided with verbal guarantees of participant anonymity. Further, BC TEL agreed to allow employees to be interviewed on company time. It was agreed that the researcher be allowed to approach any BC TEL employee, union or non-union. The only stipulations put forth by both groups, and agreed to by the researcher, were that potential respondents be informed that involvement in the research was strictly voluntary and that respondents who agreed to participate would not be obligated to answer all questions posed to them.

4.2 RESEARCH METHODOLOGY

In order to achieve the objectives outlined in Chapter 3, a research technique called 'methodological triangulation' (hereafter referred to as triangulation) was utilized in this study. Triangulation has been described as the use of two or more methodologies to study a single phenomenon (Denzin, 1989). It is used as a means of convergent validity (Fielding and Fielding, 1986) and has been used sparingly in the management literature (e.g., Jick, 1979). In this research, qualitative and quantitative analysis was undertaken to conduct a case study of revolutionary organizational change. The combination of both qualitative and quantitative analysis can provide a fuller picture of the phenomena under study (Fielding and Fielding, 1986).

The methodology utilized in undertaking a case study of BC TEL involved three independent research phases. The first phase involved a historical analysis of

revolutionary change utilizing organizational publications (i.e., qualitative analysis). Phase two included a series of one-on-one interviews to understand the complete revolutionary organizational change process from an upper management, and 'general' employee perspective (i.e., qualitative analysis). The third phase involved the application of the "act frequency" approach to develop and test a behaviourally based measure of organizational support for revolutionary change (i.e., quantitative data). Data collected in Phases I, II, and III of this research formed the basis for addressing the research objectives and questions outlined in chapter three and were synthesized into a harmonized model of revolutionary organizational change.

The methodologies followed during each of these phases of the research are described below.

PHASE I: DOCUMENT ANALYSIS

The use of secondary data for research can be an important source of information and content to analyze a situation (Emory and Cooper, 1991). Such information can also provide researchers with the ability to crosscheck against primary information sources (in this case the interviews and surveys undertaken) and provide the context with which to interpret survey and interview data. Gersick (1995) points to the rewards of using documentary archives to study revolutionary change.

Prior to this research being conducted, corporate documents provided the only historical link regarding how the revolutionary organizational change process was sketched out and how the company envisioned it would proceed. This information helped to provide

indicators of what the researcher should study and pay attention to in the interviews conducted in Phase II. The documents also provided the opportunity to compare the original views of the change process (i.e., what the company planned to do) with what actually occurred (i.e., the actual process used).

4.3 DOCUMENTS TO BE EXAMINED

BC TEL provided access to company plans and documents that outlined aspects of the change process. Strategic plans and reports provided the foundation for the analysis undertaken. The researcher also secured corporate annual reports and independent studies conducted for BC TEL. The documents reviewed as part of this research included: i) the strategic plans developed by high level executive teams that were used to guide the company into a competitive environment (1990/1991), ii) corporate and departmental year-end reports that indicated the changing environment within, and outside, the company (1976-1997), and iii) research undertaken by the company from 1992 through 1996 that helped to trace the change process and employee attitudes (i.e., organizational climate surveys, work and family studies, and supportive management research). The process of analysis for these documents is described below.

4.4 ANALYSIS OF HISTORICAL DATA

When organizations go through a major change, the documents left behind may provide key links to what transpired (Emory and Cooper, 1991). The historical information analyzed in this research provides a further level of detail that would have otherwise been unattainable through interviews and surveys. The analysis methods suggested by Shaw (1967) and Stevens (1967) were used to guide integration of the historical information

into the interview data (e.g., Is the data reliable? Into what historical time periods should the data be grouped? How will the data be recorded? etc.).

Annual reports from 1976 to 1997 were secured. BC TEL was able to provide some copies of past annual reports but older copies were unavailable through the company. The remaining annual reports were found at the C.R.T.C. library in Hull, Quebec. The researcher reviewed the contents of each report looking for indications of organizational change initiatives, the types of changes being undertaken, and discussions of competition within the telephone industry. The focus of each annual report and the key ideas were recorded and summarized for further evaluation.

Organizational strategic reports were also made available to the researcher. These reports helped to illustrate the models of change the company proposed to apply. These models were used to formulate the basis for defining revolutionary organizational change at BC TEL. Since these models were developed directly by the company and agreed to by upper management, they were used "as is" in this research.

The independent research was reviewed to locate key information on employee well-being and to determine the organizational climate within the company. This information was used for descriptive purposes in explaining changes within the employee population through the period of revolutionary change.

Together, the models proposed by the company, the summary of the annual reports and independent research provided a comprehensive overview of change at BC TEL which could be compared to Phases II and III of the research as well as to past models of organizational change. This methodology is limited due to the fact that the organizational documents reviewed may provide only the information the organization wished to be disseminated regarding its change process (i.e., it is biased). This limitation, however, is mitigated through the interviews conducted in Phase II.

PHASE II: INTERVIEWS WITH EMPLOYEES AND EXECUTIVES

Although the body of research on organizational change is well established, research, which traces changes, experienced by organizations undergoing monumental shifts in the way they conduct business (e.g., moving from monopolistic environments to competitive ones) is not as well documented. In order to better comprehend and understand the nuances of such a change, it was necessary to talk with the key players involved in the process as well as those having to undergo the change. Interviews provide the opportunity to gather in-depth and detailed information about a complex subject and probe with additional questions (Emory and Cooper, 1991).

There are many reasons why interviewing represents an effective means for analyzing the change process at BC TEL. First of all, no one knows *a priori* what happened at BC TEL or what will happen regarding the changes undertaken. Thus far there has been no analysis of the change process undertaken. Secondly, no one has looked in-depth at this type of change before. Interviews therefore represent an appropriate tool for such exploratory research. Thirdly, given that the change process is complex, with many

variables playing a potential role, interviews provide the flexibility necessary to help ensure complex information was not lost. Finally, the results of the interviews provide perceptions of what actually happened and can be compared to what was planned to happen (i.e., found through the historical analysis in Phase I). The interviews may be limited by the fact that respondents may have wished to be viewed in a positive light and may have biased their responses or that the interviewer coached or led the respondents. It is believed that the precautions taken by the interviewer (i.e., confidentiality of responses, respondents talking to a researcher outside the organization etc.) and his experience in interviewing helped to limit such problems.

4.5 SAMPLE SELECTION

Three conditions for a successful personal interview include: a) the availability of the information from the respondent, b) an understanding by the respondent of her/his role in that being studied, and c) adequate motivation by the respondent to cooperate (Emory and Cooper, 1991). Each of these conditions helped to guide the interviewing process and selection of respondents.

It was determined that equal representation from both the executive and employee populations, as well as from across different departments, was necessary in order to provide a balanced overview of revolutionary organizational change at BC TEL. As well, it was decided that members of the Board of Directors be approached to gain their insight into the revolutionary change process. For the executive sample, attempts were made to interview the C.E.O. and President and all Senior Executives and Vice-Presidents. The balance of this sample was drawn from the Director and General

Manager levels of the company utilizing the latest company directory. The general employee sample was drawn from corporate computer records listing all paid employees (full and part-time). The Board of Directors sample was chosen using lists from past annual reports.

A total of 53 interviews were conducted for this phase of the research. Twenty-five respondents from each of the executive and general employee populations were interviewed as well as three members (past and present) from the Board of Directors (i.e., 47.2% of respondents come from each of the executive and employee ranks while 5.3% came from the Board of Directors).

4.6 INTERVIEW FRAMEWORK

All the interview questions posed were grounded in the change theory as identified in the literature reviewed earlier. Prior to each interview respondents were informed that the 'change' to be discussed had to do specifically with BC TEL changing from a monopoly to a competitive company. The interview itself was divided into six (6) sections (see Appendix A). Section A reviewed the background of the person being interviewed. Section B attempted to put the context of change into a historical perspective. Section C reviewed the process of change at both an organizational and a departmental level. Section D was intended to determine how the organizational culture had been affected by the changes. Section E reviewed communication during the change process both from an organizational and a departmental perspective. Section F provided respondents with a chance to look back at the change process and to provide a uniquely 'personal'

perspective to the change. Each section of the interview, including questions, rationale, and references (where applicable) are outlined below.

4.6.1 SECTION A: BACKGROUND INFORMATION

The questions in Section A (see Table 6) were included in the interview to determine how representative the sample was of BC TEL's employees as well as provide the demographic background of the interviewees. Data from this section aided in interpretation of the data.

TABLE 6: Background Information

QUESTIONS	RATIONALE
How long have you worked for BC TEL?	Determine if organizational tenure affects perceptions of change.
What are your key responsibilities?	Determine if organizational responsibility affects perceptions of change. Background to aid in interpretation
What departments have you worked with, or been assigned to, at BC TEL?	Determine if departmental affiliation affects perceptions of change.

4.6.2 SECTION B: CHANGE (HISTORICAL PERSPECTIVE)

The questions in Section B (see Table 7) were designed to provide a historical perspective of the change process at BC TEL. According to the literature, in order to properly document and trace the change process it is important to try and pinpoint when change began to occur and identify what events precipitated the change (Van de Ven and Poole, 1995). Questions in this section of the interview attempted to determine when changes began to occur, what the perceived goal of the changes was, and what the nature of organizational change at BC TEL was before, and during, the movement from a

monopoly to a competitive company. This information helped in defining and framing the model of change.

TABLE 7: Historical Perspective of Change

QUESTIONS	RATIONALE	REFERENCES
When did changes begin occurring in the way BC TEL ran its core businesses? What types of changes occurred at this time?	The literature states that is important to know when change started in order to measure change; this question attempted to pinpoint the time this change initiative began.	Baron (1986) Van de Ven & Poole (1995)
I have heard that the goal of change at BC TEL was to increase competitiveness. Would you agree or disagree with this? Was this goal achieved? Why / Why Not?	The literature states that most changes today occur in order to become more competitive and survive. These questions sought to determine if this was the case at BC TEL and whether there were any other motivating factors.	Dahrendorf (1969) Hernes (1976) Nadler & Shaw (1990, 1995)
Was (or is) there anything else that motivated change besides competitiveness?		
What events inspired change at BC TEL?	The literature points to the importance of identifying key events that prompt change to occur. These questions sought to identify events that inspired the changes at BC TEL, the impact of the C.R.T.C. on change, and whether there may have been other factors that pushed the changes ahead. This information also helps in classifying the type of change that occurred.	Dahrendorf (1969) Hernes (1976)
Would these changes have occurred without the C.R.T.C. ruling?		

4.6.3 SECTION C: PROCESS OF CHANGE

This section of the interview looked at the actual process of change at BC TEL. Questions in this section (see Table 8) attempted to identify what the stages (or steps) of change were at BC TEL in order to better understand the change process and to see if it could be interpreted as revolutionary. In the literature, both process models of change and reengineering methodologies document 'steps' or 'stages' of change. As the literature points to the importance of the final impact of change on stakeholders, this section also sought to establish whether the interview respondents perceived that the changes have had the desired effects (i.e., competitive advantage) and what influence stakeholders (e.g., managers, customers, G.T.E.) have had in the change process at BC

TEL. As per the request of BC TEL respondents were not asked whether employees had input into the change process as it was believed that asking such questions might upset employees who did not have input into the change process, but had wanted to.

TABLE 8: The Process of Change at BC TEL

QUESTIONS	RATIONALE	REFERENCES
Who decided on changes at the corporate level?	The literature states there must be an identifiable person or group who was ultimately responsible for the changes or what will happen.	Spector (1989)
Who decided on changes at the departmental level?		
Was there a series of steps used to guide the corporate change process?	These questions were used to help determine the process of change and begin development of the model.	Hage (1980)
Was there a series of steps used to guide the departmental change process?		
Did these steps change at any time?		
Were the objectives of the corporate change program measured (how?)	Based on the assumption in the literature that in order for change to occur there has to be measurable movement, these questions were intended to determine how the objectives of change (e.g., competitiveness) were measured.	Van de Ven & Poole (1995)
Were the objectives of the departmental change program measured (how?)		
Have the changes translated into competitive advantage in the marketplace?	The literature states that through the change process organizations have to become more competitive if they are to survive. These questions sought to determine where BC TEL stands in this regard and what has been done to instill the skills required in employees.	Nadler & Tushman (1995)
What has been done to instill competitive skills and attitudes in employees?		
Did managers, customers, and/or G.T.E. have input into the corporate change process?	The literature states that for successful change, anyone with a stake in the change process should have input into the decisions made. These questions were meant to determine the input of key stakeholders into the change process (managers, employees, customers, the union, and G.T.E.).	Umstot (1984)
Did managers, and/or G.T.E. have input into the departmental change process?		Duck (1993)
Was feedback provided to these groups?		Laabs (1996)
Were any areas of BC TEL considered 'sacred' or untouchable?	This question sought to determine the perceived fairness of the change process. If change is seen to affect some more than others problems may occur. It is theorized that there should be no 'sacred cows' or 'untouchables' in the change process.	Hammer & Champy (1993)

4.6.4 SECTION D: CULTURE (ENTREPRENEURIAL ATTITUDE)

Research indicates that it is important to gain insight into an organization's culture, and how it has been adapted (or not) through the change process (Kanter, 1983; Richardson

and Denton, 1996). The questions in Section D (see Table 9) were intended to provide insight into the culture at BC TEL as well as the impact of resistance on the change process (i.e., culture may increase or decrease resistance to change). The first set of questions in this part of the interview sought to determine how respondents viewed BC TEL's culture when the interviews took place and to identify whether this view is different from that held one and two years prior to the interviews (i.e., at different points during the change process). Since culture may have an impact on overall resistance to change (Fulmer, 1974; Jellison, 1993; Smith, 1993; DeCelles, 1995), the second set of questions with respect to culture attempted to determine if: 1) resistance to change occurred at either the senior management and/or Board of Director's level, 2) what forms of resistance occurred, and 3) how resistance (if it was present) was overcome.

TABLE 9: Culture at BC TEL

QUESTIONS	RATIONALE	REFERENCES
How would you describe the organizational culture at BC TEL today? 1 and 2 years ago?	The literature states that in order to have meaningful and measurable change, the organizational culture must be changed as well. These questions sought to determine how the culture or attitude of employees at BC TEL has changed due to the changes undertaken.	Kanter (1983) Feldman (1984) Gersick (1995) Schneider <i>et al.</i> (1996)
Has BC TEL decreased the levels of bureaucracy? (In what ways?)	The literature points towards delayering and empowerment as keys to an effective corporate culture. This question sought to determine where BC TEL stands in this regard	Tomasko (1993) Hammer & Champy (1995)
Was there resistance to change from senior management? What forms did it take? How was it overcome?	The literature states that resistance can occur from anywhere within the organization. These questions sought to determine whether resistance to change was perceived from either senior management or the board of directors. These groups represent major voices within the change process.	Hultman (1979) Smith (1993)
Was there resistance to change from the board of directors? What forms did it take? How was it overcome?		Reger <i>et al.</i> (1994)

As per the request of BC TEL, respondents were not asked whether there was resistance to change at the employee level or within the T.W.U. It was believed that asking such

questions might have placed respondents in a compromising position. While it was agreed that these questions would not be asked, assumptions can be made regarding employee resistance to change from other data.

4.6.5 SECTION E: COMMUNICATIONS

Communication is believed to be central to successful change and change management (Larkin and Larkin, 1994; Shaw and Maletz, 1995). The questions in this section (see Table 10) set out to determine who was responsible for communicating change information, how change information was communicated, and whether the effectiveness of communication during change was measured.

TABLE 10: Communication of Change at BC TEL

QUESTIONS	RATIONALE	REFERENCES
Who was in charge of communicating corporate change information? Who was in charge of communicating departmental change information?	The literature stresses the importance of having a key individual(s) in charge of communicating change information. These questions sought to determine who this was at BC TEL.	Shaw & Maletz (1995)
What were the main methods used to communicate corporate change information? What were the main methods used to communicate departmental change information?	The literature points to a number of methods that can be used to communicate change information. These questions sought to identify what methods were used to communicate at BC TEL.	Bush & Frohman (1991) Larkin & Larkin (1994)
Was the effectiveness of corporate communication of change measured? (How?) Was the effectiveness of departmental communication of change measured? (How?)	The literature indicates the importance of measuring the effectiveness of communication, especially during times of change and uncertainty. This question sought to determine how it was measured during the change process.	Argyris (1994) Roberts & O'Reilly (1994)
Did employees have access to everything they needed to know about change in order to do their jobs?	The literature states that employees should have access to all information regarding change during the change process. These questions sought to determine if this was the case at BC TEL.	Burnes (1992) Marks & Shaw (1995)

4.6.6 SECTION F: CONCLUSION AND WRAP-UP

The questions in the final section of the interview (see Table 11) attempted to place change, and its implications, into a personal perspective. As more and more organizations may undertake revolutionary change, those who have gone through such a process can provide a unique perspective of what to expect. This section attempted to determine the 'tough' realities of change as perceived by those being interviewed, to determine where BC TEL currently stands in its change efforts, and provide advice for those who may have to undergo similar types of change. These questions also helped to address the impact of change on the employees (i.e., the human aspect of change).

TABLE 11: Conclusion and Wrap-Up

QUESTIONS	RATIONALE	REFERENCES
What would you say are the tough realities of change?	Having been exposed to revolutionary change, interviewees will have had an opportunity to experience the true realities of such change. These questions sought to determine what these realities are.	
What would you like to see BC TEL do the next time it undertakes a similar change initiative?		
Have you changed your own behaviour to adapt to the changes at BC TEL? (How?)	The literature states that individual change, in response to organizational change, can be difficult. This question was intended to put the change process into a personal perspective (i.e., see how employees feel they have changed because of changes at BC TEL).	Greenburg & Rhodes (1991)
If we placed the context of change at BC TEL in terms of a sporting event, where is the company in relation to the competition	Organizational change has been loosely referred to as a 'game' no one can afford to lose. These questions attempted to address where things stand vis-à-vis the competition and where along in the 'game' BC TEL is.	Tomasko (1993) Hammer & Champy (1995)
What <u>ONE</u> piece of advice would you give to a peer regarding change?	In many situations, people pay attention to what their peers have to say regarding events. This question sought to identify a knowledge 'gem' the interviewee has about change that they would share with a peer.	Boster <i>et al.</i> (1995)

*Part way through the interviews, it was found that respondents had issues they wanted the company to address. This question was added to the interview script half way through the interview sample to ensure this information was formally documented.

4.7 INTERVIEWING PROTOCOLS

The researcher, who has a great deal of experience conducting group and personal interviews, was charged with the task of conducting the interviews. A tape recorder was used as the primary data collection vehicle. During four interviews respondents did not agree to be tape recorded so pen and paper recording took place. As suggested by, among others, Dijkstra and van der Zouwen (1982) and Fowler and Mangione (1990) respondents were briefed as to the nature of the discussion, the goals of the researcher in completing the project, and guaranteed anonymity as part of the process.

Every effort was made to eliminate interviewer bias. It should be noted that at no time during the interviews were respondents prompted for specific answers or given any lists to choose from (i.e., no leading questions, no prompting for specific answers, and no answering for the respondent). In other words, the views expressed in this analysis come directly from those who were interviewed. Following each interview, respondents were further briefed on the goals of the researcher. This was done at the end of the interview so as not to bias responses.

Interviews were primarily conducted during the summer of 1997 (some in 1996). Respondents were initially contacted by mail and/or telephone to seek their voluntary involvement in the study and briefed as to the nature of the research. A general letter from Mr. Paul Smith (Senior Vice-President, Human Resources Consulting Services, BC TEL) was sent to prospective interviewees outlining the research and corporate support for this initiative.

Interviews were conducted in person except in situations where respondents were located in remote regions that were not easily accessible. In such situations (approximately 20% of the cases) phone interviews were conducted with direct tape recording from the telephone. At the beginning of all interviews, respondents were asked whether or not they agreed to be recorded. Pen and paper recording was used in situations where agreement was not given. Interviews lasted approximately 1½ to 2 hours and were conducted in secluded environments where confidentiality could be better maintained.

4.8 ANALYSIS OF INTERVIEW DATA

Each of the 53 interviews was reviewed and analyzed by the researcher using content analysis which is the measurement of the semantic content (i.e., the “what”) aspect of the information (Emory and Cooper, 1991). For each question, the researcher identified the answers given by the respondent. Each of these responses was given a numeric code. In order to provide a standardized analysis mechanism, a codebook was established which aided in grouping the responses for each question. This information was then transferred to SPSS-X where the frequencies of responses could be more readily determined.

During the analysis stage, it was decided that the respondents from the Board of Directors should be grouped into the total sample category. This ensured that the between group analysis was representative of those working within the company on a daily basis. Board members were found to be comfortable discussing change at BC TEL at a macro level.

The exploratory nature of the study, coupled with the comparability between upper management and ‘general’ employee responses, dictated that much of the analysis be

descriptive in nature (i.e., percentage response per category). Many questions were based on an initial “yes” or “no” response supplemented by follow-up questions (i.e., for “yes/no” questions, if a respondent answered “yes” to a question they were asked a follow-up question and if a respondent answered “no” the follow-up questions were omitted). In all cases, the percentages reported in all tables are based on 100%.

The following procedure was followed to determine when the view expressed by executives differed from those given by employees. First, two sub-samples were created: an executive sub-sample and an employee sub-sample. Second, frequency responses were calculated for each sub-sample for each of the interview questions given in Appendix A. Third, chi-squared statistics were used to compare the responses given by executives to those given by employees.

The chi-squared analysis indicated that when the difference in frequencies of response exceeded 15%, the chi-squared statistic was significant at an alpha of .05. This finding has the following ramifications throughout the discussion section of this study. Only those between-group differences that equal or exceed 15% are discussed in this research (i.e., only differences that are statistically significant and substantive are discussed). This criterion assisted in framing the overall analysis of responses and placing quantitative restrictions on qualitative data analysis.

PHASE III: MEASURING ORGANIZATIONAL SUPPORT FOR CHANGE

The objectives of this Phase of the research included: developing behaviourally based measures of organizational support and non-support for revolutionary change, testing the

measures for both validity and reliability, and utilizing the measures to evaluate the consequences of supportive/non-supportive behaviours.

The act frequency approach (A.F.A.) was utilized to develop a comprehensive behavioural measure of organizational support for revolutionary change. The A.F.A. is attributed to the work of Buss and Craik (1980, 1981, 1983a, 1983b) and was presented as a new methodology for studying personality traits. Since their work, articles by Block (1989), Moser (1989), and Vollmer (1993) have critiqued the assumptions and claims of the A.F.A.; however, the A.F.A. continues to be accepted and utilized in trait development research (Piedmont, 1989; Cooper *et al.*, 1990; Allen, 1993; Wojciszke *et al.*, 1993; Romero *et al.*, 1994; Bhar, 1995; Kruger and Amelang, 1995). Cooper *et al.* (1990) state that the A.F.A. helps in dealing with the absence of measures for certain dispositions and the lack of alternate measures for comparison (in their study, self-promotion). Both of these conditions apply in this study.

The following discussion includes a brief description of the A.F.A., an overview of its main assumptions and criticisms, and a discussion of how it is employed in this research to develop a behavioural measure of organizational support and non-support for revolutionary organizational change.

4.9 DESCRIPTION OF THE A.F.A.

The A.F.A. posits that, for a given disposition (in this research organizational support and non-support for revolutionary change), the set of behaviours nominated as representing that disposition, constitute a means for estimating the set of behaviours to be displayed in

the future (Jaccard, 1974). The A.F.A. views dispositions as “the tendency of individuals to behave in a certain way” (Buss and Craik, 1980: 379) and “summary statements about behaviour up to the present” (Buss and Craik, 1984). Dispositions are not intended to be either causal or explanatory and are not predictions although the implications are that the individual’s character is continuing the same (Buss and Craik, 1984).

The act frequency procedure consists of two main stages: ‘act nominations’, and ‘prototypicality ratings’. Act nominations involve subjects nominating behaviours in order to create a preliminary list of behaviours that is as exhaustive as possible. When the preliminary list is complete, redundancies, vague statements, non-act statements, and frequency statements are eliminated from further testing (Buss and Craik, 1983a). The second stage of the A.F.A. involves respondents rating each of the behaviours from the revised list in Stage I for prototypicality (i.e., the degree to which a particular behaviour represents the disposition being tested) on a seven point Likert scale. These ratings are then analyzed (for each behaviour) in order to determine respondent consensus.

It should be noted that in this study the ‘individual’ under study is an organization, BC TEL. The research literature can be used to justify the application of the A.F.A. in this decision. First of all, as mentioned earlier, organizations have been likened to living organisms such as humans (e.g., Argyris and Schön, 1978; Peters and Waterman, 1982; Robbins, 1993; DeCelles, 1995). Secondly, the policies and procedures found within an organization, in addition to organizational culture as described earlier, could be viewed as dispositions (i.e., the tendency to behave in a certain way).

Dispositional categories have two important features, namely, they do not have specific boundaries and not all acts within a dispositional category possess equal status (Buss and Craik, 1983b). The focus is on specifying the frequency of acts (summaries of past behaviours that assist in predicting future behaviours) within determined categories over a given period of time (Buss and Craik, 1980, 1981, 1983a, 1983b). Block (1989: 234) proposes the following to describe this proposition:

“Mary is dominant” is said to mean that, over a specified interval (e.g., three months), Mary has exhibited many dominant acts and therefore can be expected to exhibit many dominant acts in the future.

The main assumptions of the A.F.A. are that the domains under study contain multiple acts, respondents understand what acts form the domain, and that domain measures are better if raters assess the extent to which that which is being rated represent “multiple concrete acts drawn from the core of a domain” (Cooper *et al.*, 1990: 396).

4.9.1 CRITICISMS OF THE A.F.A.

A number of criticisms have been levied at the A.F.A. but most are applicable only as it relates to the measuring of personality. As this application of the A.F.A. involves behaviour measurement, and in this case the behaviours of an organization, only those criticisms relevant to this application of the methodology are discussed. An in-depth critique of the A.F.A. can be found in Dyke (1990).

It has been argued that the A.F.A. does not take into account the situation in which an act occurs (Block, 1989). Block (1989) argues that acts which are situation specific, or that

have multiple conditions, are technically useless. In this study this criticism should not be of major concern because subjects will be asked to rate the degree to which a given act is supportive (non-supportive) of revolutionary organizational change based on their specific situation. To further limit this criticism, acts will be constructed as simply as possible so as to limit the number of conditions in each act as much as possible.

Block (1989) also argues that subject recollection of acts may be inaccurate. It has been, however, argued that traditional measures may also be subject to such recall bias (Dyke, 1990). Buss and Craik (1984) state that self-reports of acts may be appropriate because it has been found in previous studies that observer and self-reports converge (Buss, 1984). In this study, if acts are determined to be 'inaccurate', subjects will most likely not agree that the act is 'prototypical' of support (or non-support) of revolutionary organizational change and it will be eliminated from further testing.

As Block (1989) correctly asserts, Buss and Craik (1983a) were somewhat ambitious regarding the claims they made regarding the A.F.A. For example, they mistakenly claim that act indices imply a true zero (0) point and are therefore applicable to ratio measurement. Block (1989) and Dyke (1990) both note that to meet this condition would require measurement of the entire universe of content, which, in this type of research, is not feasible. Such a criticism of the A.F.A., while valid, does not detract from the value of the measures to be developed using this method.

Finally, Block (1989) criticizes the A.F.A. for providing appreciably less value than traditional procedures used to develop personality inventory scales. Dyke (1990) refutes many of Block's (1989) arguments and points out several benefits of the A.F.A. over traditional scale construction methodologies. Dyke (1990) argues that the A.F.A. use of an empirical process in item construction makes an important contribution to scale development. As well, Dyke (1990) points out that in terms of editing the pool of items created in Stage I of the A.F.A., more traditional methods edit redundancies during selection while the A.F.A. first generates a large number of items and then edits out redundancies and thus is more likely to result in a more thorough sampling of the domain under study. This study edited out such redundancies in the 'act nomination' stage.

In applying the A.F.A. to the study of organizational support (and non-support) for revolutionary change, it is critical that we acknowledge the limitations of the methodology and understand its assumptions. Overall, the application of the A.F.A. appears to be valid and generalizable to this research. Application of the A.F.A. to this type of study is supported in the work by Eisenberger *et al.* (1986) who found that employees form global beliefs concerning the extent to which the organization values and cares for them (i.e., can identify forms of organizational support). Thus, applying the A.F.A. as a methodology to understand the supportive and non-supportive behaviours of an organization undergoing revolutionary organizational change appears plausible.

4.10 USE OF THE A.F.A. IN THIS STUDY

The development and testing of measures of organizational support, and non-support, of revolutionary change in this study involved three distinct stages. The first two stages

(identification and prototypicality) correspond with the A.F.A. described above. The third stage involves testing the reliability and validity of each of the measures developed.

The A.F.A., as applied in this research is consistent with that developed by Buss and Craik (1980, 1981, 1983a, 1983b) and consists of the following steps:

- STAGE I:** Interviews to identify behaviours that are supportive/non-supportive of revolutionary organizational change ('act nomination'). This involves the following steps:
- Identification of behaviours through the interview process
 - Eliminate redundancies;
 - Compile a list of unique behaviours to test in Stage II.
- STAGE II:** Questionnaire to identify the most important supportive and non-supportive acts of revolutionary organizational change ('prototypicality rating'). This involves the following steps:
- Eliminate non-important behaviours;
 - Develop measure of organizational support and non-support of revolutionary change to test in Stage III.
- STAGE III:** Questionnaire to test validity and reliability of measures of organizational support and non-support of revolutionary change. This involves the following steps:
- Test reliability and validity of both measures;
 - Test relation of measures to organizational and individual outcomes.

Details on each of these stages are given below.

4.10.1 STAGE I: 'ACT NOMINATION' (INTERVIEWS)

Stage I consisted of identifying the domain of acts representing organizational support/non-support of change (i.e., 'act nomination'). The goal of this Stage was to identify a list of supportive and non-supportive behaviours related specifically to revolutionary organizational change.

In order to identify the domain of acts, telephone and in-person interviews were conducted using a stratified random sample (along department lines) of employees from throughout BC TEL. Each employee was informed of the confidentiality of his or her responses and then asked the following:

BC TEL has undergone a number of changes over the past few years as it moves from a monopoly to a competitive company. I am interested in finding out how supportive and non-supportive BC TEL has been of these change initiatives. I will be asking you two questions. Simply respond with any thoughts that come to mind after I have read the question. I am interested in ALL your feelings towards the questions. I will not prompt you for any particular answers but I may ask you to clarify your response if required. Do you have any concerns before I ask the first question?

- 1. What has BC TEL done that HAS been supportive of its change efforts?*
- 2. What has BC TEL done that HAS NOT been supportive of its change efforts?*

These questions were used to determine the domain of acts representing organizational support and non-support for revolutionary organizational change. Using the notion of saturation put forth by Glauser and Struass (1967), and utilized by Barley (1983), the domain of acts was considered cataloged when respondents could no longer evoke any new elements considered to be supportive or non-supportive of revolutionary organizational change.

At the end of each interview, respondents were asked whom they believed to be primarily responsible for the change process occurring at BC TEL. This question was included to ensure that those individuals perceived to be responsible for the change process were interviewed in Phase II of this research. The interviews in this Stage of the A.F.A. lasted between 10 and 30 minutes and averaged around 20 minutes.

Following these interviews, a list of supportive and non-supportive behaviours was compiled. Statements that were vague, or redundant, were rephrased or discarded. Every attempt was made to compile a final list of behaviours that was clear and concise. Two long-time employees at BC TEL who were not interviewed, and a researcher experienced with the use of the A.F.A., evaluated the final lists for clarity and accuracy. The interviews generated 30 unique supportive and 34 unique non-supportive behaviours (see Appendix B) which were then used in the Stage II questionnaire.

4.10.1.1 ANALYSIS OF STAGE I DATA

The analysis portion of the data collected in Stage II involved the elimination of redundancies and the compilation of the list of unique behaviours. No further analysis was done on this qualitative data.

4.10.2 STAGE II: IDENTIFICATION OF PROTOTYPICAL ACTS (CONSENSUS)

Stage II of the A.F.A. involved identifying the prototypical acts from the domain of acts nominated in Stage I. A stratified random sample (along departmental lines) of BC TEL employees was chosen to receive the Stage II questionnaire. The questionnaire was delivered to respondents through BC TEL's internal mail system. Respondents returned the questionnaire to the researcher in an envelope marked 'confidential'.

The complete ten-page questionnaire used in this stage of the research appears in Appendix B. The questionnaire included the acts nominated in Stage I of the A.F.A. as well as questions on demographic information (i.e., gender, age, job type, years of service) which were used to ensure sample demographics approximated population

demographics at BC TEL. Respondents were asked to rate the 37 supportive acts and 34 non-supportive acts from Stage I using a 7-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”. The form of the questioning for rating each of the supportive and non-supportive behaviours was as follows:

BC TEL supports change within the organization by:	Strongly Disagree			Neutral			Strongly Agree
		2	3		5	6	
Showing a willingness to hire from the outside	1			4			7
BC TEL does not support change within the organization when it:	Strongly Disagree			Neutral			Strongly Agree
		2	3		5	6	
Allows certain departments to protect themselves from change	1			4			7

A respondent who “disagreed” with a statement would choose 1, 2, or 3 depending on the strength of their disagreement. A respondent who chose 4 would indicate neither agreement nor disagreement, whereas a 5, 6, or 7 would indicate various levels of agreement.

In addressing Block’s (1989) concern that not all behaviours are equally important, a mechanism for identifying a minimal set of behaviours was required in order to take the measure forward to the next research step. A high degree of consensus as to whether a behaviour was considered supportive or non-supportive was sought.

The means and variance for each of the sets of behaviours (support and non-support of revolutionary organizational change) were examined. It was decided to use a mean score of 5.00 or greater as a critical cut-off for each set of behaviours. Those behaviours with

mean scores greater than 5.00 were deemed to be more representative of the measure than those below 5.00. While this cut-off point may seem arbitrary, it was chosen for two reasons: (1) a cut-off of 5.00 ensured that a majority of respondents scored 5, 6, or 7 on a behaviour indicating varying levels of agreement that it characterizes a supportive or non-supportive behaviour; and (2) a visual analysis of the ranked means indicated that behaviours which were scored 5.00 or greater on the 7 point scale tended to cluster together (i.e., there appeared to be a logical breakpoint that could be used to separate behaviours).

Of the 37 unique supportive and 34 unique non-supportive behaviours tested in Stage II, 9 supportive and 12 non-supportive behaviours had means greater than 5. These acts were included in the measures of organizational support and non-support of revolutionary organizational change to be tested in Stage III of this research.

4.10.2.1 ANALYSIS OF STAGE II DATA

The analysis of the data collected during this Stage allowed for the identification of critical behaviours through the determination of consensus. Mean scores for each supportive, and non-supportive behaviour, were calculated to assess respondent perceptions of the critical behaviours. A total of nine supportive behaviours and 12 non-supportive behaviours were found to be critical.

The two groups of critical behaviours (supportive and non-supportive) were then subject to principal factor analysis (PFA) in order to classify them into themes. Tabachnik and Fidell (1989) state that when there are no hypotheses about the variables prior to data

collection, factor analysis is an appropriate strategy. Factor Analysis has been used by researchers (e.g., Eisenberger *et al.*, 1986; Shore and Wayne, 1993) when developing measures of support and is used to uncover how behaviours relate to each other in this study.

Prior to running factor analysis each behaviour was tested for normality using probability plots as suggested by Tabachnik and Fidell (1989). The Kaiser Criterion of inclusion was used for variable retention (i.e., factors with eigenvalues greater than one were retained). Factor loadings of less than .50 were excluded from further analysis thereby providing for greater reliability (Stevens, 1992). Following Stevens' (1992) recommendation, varimax rotation of the component variables was utilized. Using varimax rotation, each variable tends to load high on a smaller number of factors and lower on the remaining thus making interpretation of the resulting factors easier to understand.

T-Tests and Oneway ANOVA testing was used to examine between group differences with respect to gender, job type, departmental affiliation, age, and years of service for the individual behaviours. Before testing was undertaken, adjustments had to be made in four of the groupings due to inadequate sample sizes.

For departmental affiliation, there were not enough respondents from each department sampled to do testing for differences. In order to address this issue, the different departments were classified into staff and line categories. The staff category included Human Resources, Corporate Services, Treasury, Marketing, Law and Regulatory Affairs,

and Corporate Communications. The line category included Sales and Customer Service, Operations, and Emerging Businesses. For the analysis based on job type, respondents were divided into two groups: those who indicated they primarily had managerial responsibilities and those who did not.

For the analysis testing based on age, the initial ten categories were reduced to four (i.e., under 30 years of age, 31 to 40, 41 to 50, and 51 and older) to generate close to equal sample sizes in each category and for parsimony. For the analysis based on years of service, the initial eight categories were reduced to five (i.e., less than 5 years of service, 6 to 10, 11 to 20, 21 to 30 and over 30) for the same reasons as identified for the testing based on age.

For all group differences testing, alpha was set at .05 with appropriate adjustments made using the Bonferroni technique. Stevens (1992) suggests using a more lenient alpha to enhance power but also advises treating differences on individual scales with more caution. The Bonferroni technique helps to assure the overall Type I error rate for the set of univariate tests will be less than 5%. Thus, the overall alpha level for multiple comparisons was set at .006 ($.05 / 9$) for supportive behaviours and .004 ($.05/12$) for non-supportive behaviours.

4.10.3 STAGE III: MEASUREMENT OF THE PROTOTYPICAL ACTS (ASSESSMENT)

The objectives of Stage III were to assess the predictive ability, as well as the validity and reliability, of the measures of support and non-support for revolutionary organizational change developed in Stages I and II. A stratified random sample (based on department and job type) of BC TEL employees was chosen to receive the Stage III questionnaire.

Due to a scheduling conflict, the questionnaire was administered at a time when the company was testing a new corporate climate survey. As such, approximately 20% of BC TEL's employees were excluded from the sample frame including all employees within the Human Resources department. Members of this department with access to electronic messaging were asked to volunteer for this research. A total of 10 out of approximately 100 individuals volunteered and 7 usable questionnaires were returned. Questionnaires were delivered to respondents through BC TEL's internal mail system. All respondents returned the questionnaire to the researcher in an envelope marked 'confidential'.

The Stage III questionnaire was ten pages long and divided into three sections (the complete Stage III questionnaire appears in Appendix C). Section A of the questionnaire asked respondents to provide background and demographic information including: the department worked in, job type, gender, age, and years of service. These questions were asked in order to be able to test for group differences in perceived organizational support and non-support of revolutionary change.

Section B was related to a respondent's job and experiences at BC TEL. The 9-item measure of organizational support of revolutionary change and the 12-item measure of non-support of revolutionary change identified in Stage II were included in this Section. With regard to the measures of support and non-support for revolutionary organizational change, respondents were asked to what extent they agreed or disagreed that the organization displayed the 9 supportive behaviours and the 12 non-supportive behaviours

identified in Stage I and Stage II. Respondents were asked to rate their agreement, or disagreement, on a 5-point Likert scale ranging from “1 = Strongly Disagree” to “5 = Strongly Agree” as utilized by Buss and Craik (1980, 1983a, 1983b) and Dyke (1990).

The form of the questioning was as follows:

In my experience, BC TEL supported change within the organization by:	Strongly Disagree		Neutral		Strongly Agree
Pressuring the CRTC for open competition	1	2	3	4	5
In my experience, BC TEL did not support change within the organization when it:	Strongly Disagree		Neutral		Strongly Agree
Did not eliminate the bureaucracy	1	2	3	4	5

Section B also included scales which measured organizational outcomes (i.e., perceived organizational support, organizational commitment, and supportive management) and individual outcomes (i.e., overall stress, burnout, and job satisfaction) of interest. Outcome measures can be found in Appendix D. These measures were included in the survey to allow for testing of the validity of the measure and to determine how “support” and “non-support” for change is associated with outcomes of interest to the company and its employees. A discussion of this section of the questionnaire is provided below in Section 4.10.3.1.

Section C asked respondents specific questions regarding revolutionary change at BC TEL. The questions were based on the interviews conducted in Phase II of this research (see earlier discussion). A discussion of this section of the questionnaire is provided in Section 4.11.

4.10.3.1 OUTCOME MEASURES

The measures of organizational and individual outcomes used in this research have been used extensively in the organizational behaviour literature and represent some of the most commonly used measures of support both at an organizational and supervisory level. The rationale for the inclusion of each of the organizational and individual outcome measures included in this research is summarized below.

4.10.3.1.1 Perceived Organizational Support

As discussed earlier, P.O.S. refers to anything that employees perceive reflects a concern for employee well-being. P.O.S. is best understood in terms of social-exchange theory (Eisenberger *et al.*, 1986) as it refers specifically to exchanges between employees and the organization (Wayne *et al.*, 1997). The measure of P.O.S. developed by Eisenberger *et al.* (1986) was used in this study and has been recently been used by Wayne *et al.* (1997) in the support research. While P.O.S. relates to employee well-being and what the organization does to show it is concerned for employees in general, the measure of organizational support specifically relates to what the organization does that supports change and is not directly related to employee well-being.

Respondents were asked to rate their agreement, or disagreement, regarding the supportiveness of BC TEL on a 5-point Likert scale ranging from “1 = Strongly Disagree” to “5 = Strongly Agree”. Previous studies have indicated high internal consistency for this measure ranging from .74 to .89.

4.10.3.1.2 Organizational Commitment

Organizational commitment refers to an employee's loyalty to an organization and it is expressed through ongoing concern for the organization and its continued success (Northcraft and Neale, 1990). The organizational commitment scale used in this study was developed by Mowday *et al.* (1982) and asks respondents to indicate the extent of their identification and involvement with the organization. Respondents were asked to rate their agreement, or disagreement, regarding their commitment to BC TEL on a 5-point Likert scale ranging from "1 = Strongly Disagree" to "5 = Strongly Agree". Previous studies have indicated internal consistency for this measure ranging from .82 to .93.

4.10.3.1.3 Supportive Manager

A supportive manager refers to a manager (supervisor) who exhibits behaviours which are deemed to be supportive by those who report to them (Hughes and Galinsky, 1988). Examples of these behaviours may include showing approval when something is well done, providing information when needed, or being warm and friendly when someone has problems (Himle *et al.*, 1989). The research on supportive management has been tied to organizational support (Konovsky and Pugh, 1994; Settoon *et al.*, 1996). The supportive manager scale used in this research was developed by Duxbury and Higgins (1996) for use at BC TEL and asks respondents to what extent they agree or disagree that their manager behaved in a supportive or non-supportive manner. The measure of organizational support differs from that of a supportive managers in that it specifically relates to what the organization, likely through its managers, can do to support change.

Respondents were asked to rate their agreement, or disagreement, regarding the supportiveness of their supervisor at BC TEL on a 5-point Likert scale ranging from “1 = Strongly Disagree” to “5 = Strongly Agree”. Previous studies have indicated internal consistency for this measure ranging from .75 to .90.

4.10.3.1.4 Job Satisfaction

Job satisfaction refers to the general attitudes that an employee has toward his/her job (Baron, 1986). The change literature has identified that job satisfaction may be strongly impacted by change programs (e.g., Hunt, 1993; Tichy and Sherman, 1993). The measurement of job satisfaction developed by Quinn and Shepard, (1974) was utilized in this research. Respondents were asked to rate their job satisfaction at BC TEL on a 5-point Likert scale ranging from “1 = Very Dissatisfied” to “5 = Very Satisfied”. Previous studies have indicated internal consistency for this measure ranging from .75 to .85.

4.10.3.1.5 Perceived Stress

Perceived stress was designed to measure the extent to which one's current life situation is unpredictable, uncontrollable, and burdensome (Cohen *et al.*, 1983). The change literature has identified that perceived stress might negatively impact change programs (Tichy and Sherman, 1993). Cohen *et al.* (1983) developed the measure utilized in this research. Respondents were asked to rate the extent to which they had experienced certain situations or feelings on a 5-point Likert scale ranging from “0 = Never” to “5 = Always”. Previous studies have indicated internal consistency for this measure ranging from .84 to .90.

4.10.3.1.6 Burnout

Burnout has been viewed as related to prolonged stress (e.g., Luthans, 1995). Burnout is typically characterized as including emotional exhaustion, depersonalization, and diminished personal accomplishment (Maslach, 1981). Due to company concerns regarding the length of the survey instrument only two global items from the Maslach Burnout Inventory were used in this research to measure burnout (Maslach, 1981). Respondents were asked to rate the extent to which they “felt “burned out” from their job” and “felt fatigued when they got up in the morning and had to face another day on the job” on a 5-point Likert scale ranging from “0 = Never” to “5 = Always”. Since only two items from the inventory were used in this research, no internal consistency measure is available.

4.10.3.2 ANALYSIS OF STAGE III DATA

Stage III of this phase of the research involved the overall assessment of the measures of organizational support for revolutionary change and organizational non-support of revolutionary change as identified in Stage II of this analysis. Supportiveness of revolutionary change was determined by analyzing responses to both the supportive and non-supportive behaviours. Mean scores for each supportive, and non-supportive behaviour, were calculated to assess respondent’s perceptions of how frequently BC TEL displayed the given behaviours. The overall mean scores were then calculated (i.e., summed average of all behaviours) to help determine BC TEL’s overall support and non-support of revolutionary change.

PFA was undertaken as in the Stage II analysis (i.e., each behaviour was tested for normality using probability plots, factor loadings of less than .50 were excluded from further analysis thereby providing for greater reliability, varimax rotation was used, and factors with eigenvalues greater than one were retained). T-Tests and Oneway ANOVA testing was used to examine between group differences with respect to gender, job type, departmental affiliation, age, and years of service for both the individual behaviours and the factors identified in the PFA.

Due to inadequate sample sizes, similar adjustments to those made in Stage II were made on the basis of departmental affiliation (line versus staff categories), job type (managers versus non-managers), age (under 21 were grouped into the 21-29 old year category to create an under 29 year old category while those over 60 were grouped into the 50-59 year old category to create an over 50 year old category), and years of service (less than 1 year of service were grouped into the 1 to 5 years of service category to create a less than 5 years of experience category).

As undertaken in Stage II, for all group differences testing, alpha was set at .05 with adjustments made using Bonferroni. The overall alpha level for multiple comparisons was set at .006 (.05/9) for supportive behaviours and .004 (.05/12) for non-supportive behaviours. Testing of the factor groupings identified in the PFA was also subject to the Bonferroni adjustment (see results section for a discussion of the alpha level used with the factors).

Reliability testing was undertaken using the Cronbach's Alpha statistic to determine the internal consistency of the measures of organizational support and non-support of revolutionary organizational change as well as for the organizational and individual outcomes tested. The Cronbach Alpha was calculated for each measure and for the composite factors identified in the P.F.A. that make up the measures.

In this study both content and construct validity are tested. Content validity refers to the extent to which the supportive and non-supportive measures of support of revolutionary change represent a supportive (non-supportive) organization. The item generation procedure in the A.F.A. enhanced the validity of the measure. The advantages of the A.F.A. with respect to validity are in the act nomination process (Stage I). Construct validity was tested using the Pearson Correlation Co-efficient to determine if the measures of organizational support and non-support of revolutionary change were associated with the previously tested organizational and individual outcome measures included in this research. Construct validity will also be tested using correlation matrices to reveal the strength of the association between the pairs of composite factors.

4.11 OTHER SURVEY DATA

During the interviews conducted in Phase II of this research, respondents provided a wealth of information regarding revolutionary organizational change at BC TEL. The small interview sample size, however, limited the generalizability and utility of these findings. To increase the generalizability of these findings, questions developed from the interview data were included in the Stage III questionnaire.

These questions were developed as follows. First, the researcher reviewed all questions and responses from the interviews. Those questions that appeared to be the most critical in the analysis of revolutionary organizational change and could provide clarity to such a discussion were reworded using a forced choice format. For each of the questions asked, respondent's choices were limited to the most common responses provided by interview respondents from Phase II. The questions asked can be found in Section C of the questionnaire in Appendix C.

The first set of questions was related to the *history of change* at BC TEL. Respondents were asked to indicate the year they believed change began. Respondents were then asked to identify which of the following events prompted change to begin: the creation of BC TEL Mobility, a greater focus on the bottom line, the creation of B.T.E., the telecom industry opening to competition, the availability of new telephone technology, increased focus on open internal communications, increased focus on customer service, or the beginning of restructuring. Finally, respondents were asked to identify what force motivated change to begin from among: new competitors in the marketplace, the need to control revenues and costs, the C.R.T.C., the fact that leaders wanted change, new business opportunities, changing customers needs, or changing employee needs.

The second set of questions was related to *organizational culture and change*. Respondents were asked to identify the culture before revolutionary change and "now". Respondents were presented with sets of words used to describe eight distinct

descriptions of the culture at BC TEL. These eight culture distinctions are discussed in Section 6.3.

The third set of questions was related the *process of change*. Respondents were asked whether or not they believed there was a master plan to guide change. Respondents were then asked to indicate those people they believed had input into the change process from among: themselves, their manager, all executives, G.T.E., shareholders, and customers. Respondents were then presented with a series of five descriptive statements which corresponded to descriptions of evolutionary, life cycle, teleological, dialectic, and revolutionary change and asked to indicate which best described change at BC TEL. Respondents were also asked to indicate the speed of change at BC TEL with response categories ranging from slow to fast. Finally, respondents were asked to indicate whether or not they believed the top of the organization drove change and whether or not BC TEL was at a competitive advantage due to the changes made.

The fourth set of questions was related to *communication and change*. Respondents were asked to indicate which information source provided the most relevant information regarding change from among: StraighTalk (news service accessed by telephone), voicemail, memos and bulletins, videoconferences, intranet, the grapevine, face-to-face meetings, and the T.W.U. Transmitter (union publication). Respondents were then asked to indicate an individual or group that provided the most relevant information regarding change from among: their manager, their co-workers, senior executives, the Corporate Communications Department, the local media, and the union.

In the final section, respondents were asked to rate (using a 5-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”) how well those in charge of change at BC TEL had done in changing the organization. Respondents were also asked to indicate the top three initiatives they would like BC TEL to do the next time it undertakes a similar change initiative.

4.11.1 ANALYSIS OF OTHER SURVEY DATA

Apart from Question 26, respondents were asked to choose a single description that best represented a particular aspect of revolutionary change at BC TEL. The use of nominal scales limited analysis to frequencies and percentage response per category. For Question 26 (an interval scale), frequencies, percentage response per category, and means were calculated. The frequencies and means (where applicable) for each of these additional questions was calculated, evaluated, and compared to the interview data.

As in the interview section of the research, between group testing was undertaken on the basis of job type, gender, and department. In order to undertake this testing, the sample was divided according to the criteria being tested (e.g., job type divided into executive and employee groups). Frequency responses were then calculated for each sub-sample. The chi-square statistic was used to determine when between group differences existed for a particular question (e.g., how is the culture best described). It was decided that when the chi-square statistic was significant at an alpha of .05 between group differences existed for a particular question. In such situations, a second series of chi-square testing was undertaken to determine on which variables within a particular question differences occurred (i.e., the culture is best described as competitive). When the alpha for an

individual variable within a question was less than .05 a between group difference was deemed to have occurred.

4.12 SUMMARY OF "METHODOLOGY"

In order to meet the objectives of this research, the triangulation methodology was broken into three distinct phases: a review of historical documents utilizing content analysis; interviews with executives and employees utilizing descriptive statistics; development of a measure of support for revolutionary change utilizing the Act-Frequency. The combination of these three research phases provides a holistic look of revolutionary organizational change at BC TEL.

Each of the research phases is now discussed in turn in individual chapters with a final chapter integrating the preceding three phases into a consolidated model of revolutionary organizational change.

CHAPTER Five: Phase I – Historical View of Change At BC TEL

This chapter consists of three parts. The first part will provide a brief overview of BC TEL and competition in the Canadian telephone industry. The second part will review and discuss corporate documents related to change and propose a model of revolutionary change. The third part will compare the process of revolutionary organizational change at BC TEL to theories of change, process models of change, and reengineering.

5.1 An Overview of BC TEL

This case study deals with what is known today as BC TEL. The organization began in 1891 when it was incorporated as the Vernon and Nelson Telephone Company (V.N.T.C.). In 1903 the V.N.T.C. was given permission to extend its operations to all corners of the province of British Columbia and by 1904 had purchased a number of smaller telephone companies throughout the province. In 1904 V.N.T.C. changed its name to the British Columbia Telephone Company, Limited. In 1916 the Western Canada Telephone Company was incorporated as a federal company and in 1919 changed its name to the British Columbia Telephone Company (without the Limited). In 1923 the assets of the provincial British Columbia Telephone Company, Limited were transferred to the new federal company. The name “BC TEL” will be used from this point on in the discussion even though it did not become the company’s ‘legal’ operating name until 1993.

In 1927, a company called “Gary Interests”, from Kansas in the United States, invested in BC TEL through the Anglo-Canadian Telephone Company of Montreal. This investment was sought as a means towards funding the construction of the Trans-Canada Telephone

System. In 1955 General Telephone and Electric (G.T.E.) purchased Anglo-Canadian Telephone Company shares from "Gary Interests". As of December 1998, BC TEL and QuébecTel were the only foreign owned Canadian telephone companies. G.T.E. owns 100% of QuébecTel and 51% of BC TEL.

BC TEL was a founding member of the Trans-Canada Telephone System (1931) which became Telecom Canada (1983) and is now known as the Stentor Alliance (1992). Members of the Stentor Alliance currently include BC TEL (B.C.), TELUS (Alberta), SaskTel (Saskatchewan), MTS (Manitoba), Bell Canada (Ontario and Quebec), NewTel (Newfoundland), NBTel (New Brunswick), Island Telecom (PEI), MT&T (Maritimes), NorthwesTel (Northwest Territories), and QuébecTel (remote regions of Quebec). Within Canada, Teleglobe Canada acts as the wholesale supplier of international telephone traffic while the Stentor Alliance acts as the retail supplier.

Today, BC TEL is a large, publicly traded, telephone utility headquartered in Vancouver (B.C.) and a major force in the telephone industry in both British Columbia and Canada. In 1997 BC TEL had a full-time staff of approximately 13,500 employees, revenues of approximately \$2.7 billion, and was the second largest telecommunications services provider in Canada next to Bell Canada (BC TEL, 1997). BC TEL is unionized with the Telecommunication Workers Union (T.W.U.) representing approximately 80% of employees. Besides offering traditional local and long distance services, BC TEL also offers personal wireless services, high-speed data connections, internet services, and computer support systems through a network of six subsidiary companies.

5.1.1 OVERVIEW OF COMPETITION IN THE TELECOMMUNICATIONS INDUSTRY

The Canadian Radio-Television Telecommunications Commission (C.R.T.C.) is an independent federal agency whose mandate is to:

... supervise and regulate Canada's broadcasting and telecommunications systems, balancing the interests of consumers, the creative community and distribution industries in implementing the public policy objectives established by Parliament (C.R.T.C., 1998a).

The C.R.T.C. regulates such things as the terms of service to be provided for by the phone companies, customer billing practices, and business services (e.g., data transmission). A review of the major decisions handed down by the C.R.T.C. that are related to competition are presented in Appendix E. These decisions represent a fraction of those handed down by the C.R.T.C. since its inception.

Competition was first introduced into the telecommunications industry by the C.R.T.C. in private line service in 1979³ (C.R.T.C., 1998a; 1998b). The initial focus of this ruling was Bell Canada. As such, this decision did not affect BC TEL until 1981. Competition was allowed in terminal equipment in 1982, cellular operations in 1984, and switching systems in 1987. These decisions by the C.R.T.C. permitted companies to target larger business customers with enhanced service options. At this point, competition at the general consumer level was negligible.

³ Prior to 1979 customers were permitted to own radiotelephone terminal equipment and connect paging terminals directly to systems owned by the telephone companies.

The introduction of long distance competition in June of 1992 was a watershed in competitive developments for the telephone industry and BC TEL. The federally regulated telephone companies (i.e., members of the Stentor Alliance) were forced into competition in the long distance market against what the C.R.T.C. referred to as "Non-Dominant Canadian Carriers" (e.g., Rogers, Sprint, and AT&T).

In 1994 the C.R.T.C. opened up the local market to competition but implementation was delayed until 1998 so that local rates could be rebalanced to entice competitors into this market. Historically, local rates had been kept artificially low and were subsidized by higher long distance rates. When long distance rates began to fall with the introduction of competition, local rates were increased over a four-year period to better reflect their 'true' cost. As of January 1, 1998, competitors were allowed to enter the local market.

The introduction of local service competition in the Canadian telephone industry marked the end of heavily regulated telephone service overseen by the C.R.T.C. Currently, long distance competition is open and rates can change with minimal C.R.T.C. approval. Local phone service is also open to competition but very little activity has transpired due to infrastructure costs. It is anticipated that competitors will begin operating in major urban centres (e.g., Vancouver, Victoria) over the coming years. It is under the guise of these dramatic changes in the telecommunications industry that BC TEL undertook revolutionary organizational change.

Initially it was believed that revolutionary change most likely occurred in the early 1990's. As will be shown, however, it was necessary to go as far back as 1978 to gain a broader perspective on the changes at BC TEL as it moved from a monopoly to a competitive environment.

5.2 REVIEW OF CORPORATE DOCUMENTS

The review of corporate documents in this research was divided into organizationally based publications (e.g., annual reports, employee reports, and strategy documents) and externally based publications that reported on independent research undertaken for BC TEL (e.g., surveys, interviews). A limitation of this historical analysis is that there may be a large gap between what the company actually did and what they reported they did. This review only provides a picture of what BC TEL indicated they planned on doing. The interviews in Phase II will address the issues of what employees and executives perceived the company actually did.

5.2.1 ORGANIZATIONALLY PRODUCED PUBLICATIONS

BC TEL's organizational focus has changed over the last three decades as demonstrated in its annual reports. The 1970's were focused primarily on the product side of the business (conversion of systems to digital from analogue), the 1980's were focused on the telephone network itself (including cost reduction), and the 1990's were focused on service (e.g., new services, applications, and solutions) and change. These themes were clearly evident in the annual reports discussed below.

The telecommunications industry was partially opened to competition in 1979 through 1982 when competitors were allowed to begin selling terminal equipment and interconnect to BC TEL's equipment. This aspect of the business, while lucrative, had no affect on the core areas of revenue (i.e., local and long distance revenue). BC TEL did not shift its focus to competition until approximately 1991, just prior to the C.R.T.C. decision on long distance competition. Until this point, BC TEL focused primarily on its products (e.g., network, operations, and investments). BC TEL made some efforts towards focusing on competition (e.g., entering the terminal equipment and cellular markets) but this was done through the creation of subsidiary companies that worked at arm's length from BC TEL (e.g., BC TEL Mobility – cellular and paging). The 'real' focus on competition appears to have occurred after 1991.

5.2.1.1 SUMMARY OF PUBLICLY AVAILABLE CORPORATE REPORTS

As a publicly traded company, BC TEL must publish annual and quarterly financial reports. As part of the annual reports, BC TEL includes a message from the Chairman of the Board. Overviews of the annual reports from 1985 through 1997, reviewed as part of this research, are provided in Appendix F. Included in this Appendix is the title of each report, the number of employees in the company at the time, the focus of the message, and major changes in the executive leadership. Report summaries for the years preceding this timeframe (1976 to 1984) are included for comparison purposes only and are not further analyzed (i.e., number of employees, key ideas, and messages).

The annual reports from 1976 to 1984 focused heavily on overall company operations. In 1976 Mr. Gordon MacFarlane took over as President of BC TEL from Mr. Ernest

Richardson. BC TEL referred to itself as a 'monopoly' during this time and relations with the T.W.U. appeared to have been very strained. Following a bitter strike in 1980/1981, BC TEL instituted a new human resource initiative and talked about entering into a period of cooperation with its union through the creation of a Human Relations Task Force (BC TEL, 1981; 1982). This was the last time, however, that the T.W.U. was specifically mentioned in an annual report until 1996 when a new collective agreement had been signed and the union teamed with BC TEL in support of a cable broadcast license⁴. The omission from these documents of any mention of an internal organization that represents nearly 80% of employees is significant and may suggest the possibility of a strained relationship between BC TEL and the T.W.U.

In 1977 the company addressed the issue of systems interconnection (i.e., competitors could connect to BC TEL systems). This issue was being studied at this time by the C.R.T.C. and was ultimately implemented through Decision 79-11 in 1979 and applied to BC TEL through Decision 81-24 in 1981. In 1977 BC TEL was concerned with revenue loss from selective competition and issues regarding universal service, regulated monopolies, and cross-subsidization. The company's position was stated as follows:

The outcome of this hearing (i.e., systems interconnection) will go far to determine the future shape of communications in this country...Consequently, this Company will intervene in opposition to the application as vigorously and effectively as possible. (BC TEL, 1977: 6)

⁴ The T.W.U. was not specifically mentioned in the 1997 Annual Report.

In 1982, BC TEL instituted the Area General Manager (A.G.M.) structure. This structure split the province into five geographic regions that acted as 'independent' entities each responsible for profits and losses (i.e., balancing service and financial performance). This change in structure provided indications of a changing relationship between BC TEL and its employees as they became more responsible for financial targets. Although BC TEL promoted the AGM structure as 'tapping into the entrepreneurial spirit of employees', the documents would suggest that the new structure may have been important in satisfying issues of local quality. Local quality was seen as potentially benefiting the company in its discussions with the C.R.T.C. regarding long distance rates.

In 1982 BC TEL also set-up a company called Business Terminal Equipment (B.T.E.) to compete in the terminal equipment market. At this point in time, BC TEL appeared to be primarily concerned with giving priority to the quality of local service as it was the quality of local service that ultimately determined the range of rate increases in long distance allowed by the C.R.T.C. (BC TEL, 1982).

Beginning in the mid-1980's BC TEL began to take a somewhat more proactive view on competition. The organization sought to minimize its sole reliance on phone service for revenue by examining issues surrounding interconnection and diversification. Despite this diversification into operations such as manufacturing and R&D, BC TEL insisted on being a part of the deregulation process being studied by the C.R.T.C. as a means of ensuring its interests were being upheld. In many of the annual reports reviewed from

this time period, the standard position of BC TEL was that if competition were deemed to be in the “public interest” it would compete vigorously.

In 1989 Mr. Brian Canfield succeeded Mr. MacFarlane as President of BC TEL and in 1990 Mr. Canfield also became the Chief Executive Officer. The literature would suggest that such a change at the top executive level might have signaled a shift in the way BC TEL operated (Nadler and Tushman, 1990; Dunphy and Stace, 1993). Consistent with this observation is the fact that the company’s first significant breakthrough toward competition and change occurred in 1991.

Following Mr. Canfield’s appointment, BC TEL continued to talk about the threats of competition but BC TEL’s focus shifted away from the traditional operations side of the company towards restructuring, new strategic directions, and developing mission statements and structures more in line with corporate goals. In 1991 BC TEL fundamentally changed the way it operated by moving away from the A.G.M. structure to a process called Strategic Renewal. This system was based on business divisions (i.e., business unit, consumer unit, and emerging business unit) which were supported by telecommunications operations (e.g., network services), and corporate resource groups (e.g., human resources, finance and treasury, legal and regulatory affairs etc.). These changes were undertaken as a means toward addressing the strategies BC TEL intended to follow as listed in Table 12.

TABLE 12: Key Strategies, 1991

KEY STRATEGIES, 1991	
>	Eliminating unnecessary and redundant costs so that we can provide high value to our shareholders and customers
>	Seeking customer-focused, imaginative solutions that will provide a greater share of our total revenues
>	Encouraging innovative solutions and forming high-performance work teams
>	Organizing around profitable, customer-focused business units and developing feedback systems to monitor our performance
>	Continuing to focus on investing to improve our competitiveness and increase shareholder value

In 1988, BC TEL key strategies included being 'best in class', leading the market, and investing in facilities and R&D. In 1991, cost reduction, customer focus, work teams, increased competitiveness, and shareholder value became the focus. These differences in strategies suggest that a shift occurred at BC TEL that was centred on a competitive marketplace.

The year 1991 also marked the first time a "title" was given to an annual report. Although this may appear to be a minor point of reflection, it marks a break from previous traditions and perhaps served to emphasize that change was coming. The banner of "Year of Change and Achievement" illustrated, and served to highlight, what was occurring within the company.

The downsizing of the workforce by 15% from 1991 to 1996 provides further evidence of revolutionary change. From 1985 to 1991 the average number of employees at BC TEL was approximately 15,100 (see Appendix F). From 1991 to 1996 the number of employees at BC TEL dropped to approximately 12,356.

BC TEL talked more openly about change in 1992 in the annual report entitled "The Speed of Change". The annual report opened with a bold statement acknowledging change and what was needed to survive in a competitive marketplace.

This annual report could best be described as our first full year of strategic renewal. We initiated strategic renewal during 1991 in response to the changing, dynamic world in which we operate. We saw the need to match the speed of change within BC TEL with the speed of change around us. (BC TEL, 1992: 3)

This was the same year that long distance competition was approved by the C.R.T.C. (Decision 92-12) and that BC TEL eliminated the position of Vice-President of Government Relations. The elimination of this position can be seen to symbolize the changes that were occurring in the industry (the Stentor Alliance now represented the telephone companies to government). This report also talked passionately about employees and discussed how change was being accomplished through them. The 1993 through 1995 annual reports also focused on issues of change and identified what BC TEL needed to do in order to compete in a deregulated marketplace. In 1993 the point was made that the competition was a "great teacher" in that it had forced BC TEL to change and learn to operate in different ways. BC TEL began to focus on how it was different than its competition in that it provided a "full service" approach to the telecommunications industry.

The year 1993 was highlighted by two changes at the executive level; two executives were brought in from outside the organization. In reviewing all the annual reports from 1976 to 1997 the only other individual brought in from outside BC TEL to fill an

executive position was Mr. Bill McCourt in 1982 who became Vice-President of Network Marketing. In 1993 Mr. Paul Smith was brought in to replace Mr. Don Champion as the Vice-President of Human Resources and Ms. Gayle Stewart was brought in to fill a new position called Vice-President of Corporate Communications. The creation of such a department symbolizes a possible heightened emphasis on communications. Both of these appointments appear to symbolize an important change in hiring policy and philosophy within the organization at the highest levels. This is consistent with the literature which suggest that in order to achieve successful change an organization needs a new "team" to lead revolutionary change (e.g., Nadler and Tushman, 1990; Dunphy and Stace, 1993) and recognize the importance of communication (e.g., Duck, 1993; Hall *et al.*; 1993; Shaw and Maletz; 1995).

The 1994 annual report introduced a new organizational system that was implemented in January 1995 called the Lines of Business (L.O.B.) structure. This structure moved BC TEL away from the business unit focus found in Strategic Renewal. Under the L.O.B. system, the organization was structured into Communication Services (e.g., local, long distance, personal), Network Operations, and Corporate Services. The 1994 report also discussed the changing of BC TEL's culture toward a retail orientation. This marked the first time BC TEL talked openly about shifting its prevailing culture.

The 1995 annual report makes two particularly bold predictions about change, namely, that it is a 'journey', not a destination, and that it will be tough. A diagram in the Chairman's message was used to illustrate this 'journey' (see Figure 3). The message

indicated that the move from being the best service provider in a monopoly environment to being the best in a competitive environment could not happen instantaneously. In essence, the organization would have to be prepared to lose before it could gain. The point was made that BC TEL had to change quickly in order to survive but that employees should be prepared for tough decisions.

FIGURE 3: Becoming the Best Provider in a Competitive Environment

This annual report marked the first time that a Chairman's message included a diagram, figure, or table. This diagram was a key component of the 1995 report entitled *Re@lity* which focused on the direction of the company and the need to be prepared for "Evolution" or "Revolution". As was proclaimed in the annual report, "Regardless of your point of view, things will never be the same" (BC TEL, 1995: 3).

The 1995 Employee Report talks of local service competition being just around the corner and identified the need to reduce costs by \$100 million and eliminate 2,300 positions. "How can our industry go through such radical transformation and not change ourselves?" (BC TEL, 1995b: 3). 1995 was also the first occasion when the company

began discussing wins and losses due to competition. This was done through the annual reports, employee reports, and weekly information bulletins.

The 1996 and 1997 annual reports began to pull away from the previous focus on change. Attention was directed towards what the company had done, product launches, and the application of technology. There appeared to be a push towards marketing and looking for new opportunities outside the traditional telecommunications industry and into the overall communications industry (e.g., cable broadcasting). 1997/1998 also marked further changes within the company culminating with its reorganization into three operating units (Sales and Customer Service, Marketing, and Operations) and the replacement of Mr. Canfield as the President and CEO by Mr. Don Calder.

As documented in Table 13, since the initial C.R.T.C. decisions requiring enhanced competition in 1979 there have been three documented organizational changes that have been focused on competition and deregulation within the telecommunications industry. BC TEL's focus prior to 1991 revolved almost exclusively around the operations and product side of the business. The focus in 1991 was placed upon 'change' and 'customers' (see Appendix F). This represented a dramatic shift in the way the company focused its efforts as it attempted to shift the way it operated.

TABLE 13: Milestone Decisions Regarding Competition and BC TEL's Reaction

YEAR	MAJOR C.R.T.C. DECISIONS REGARDING COMPETITION	ORGANIZATIONAL CHANGE RESPONSE	NO. OF EMPLOYEES
1979	Competitor Interconnection – Bell Canada	–	14,705
1981	Competitor Interconnection – BC TEL	–	14,406
1982	Competition in Terminal Equipment	Area General Manager	17,842
1991	–	STRATEGIC RENEWAL (started)	15,015
1992	Long Distance Competition	–	14,524
1994	Local Competition (delayed until 1998)	–	13,700
1995	–	Lines of Business (1995-1996)	13,851
1996	–	–	12,356

Strategic Renewal can be recognized as a watershed point in the transition of BC TEL from a monopoly to a competitive company (i.e., a critical point in the revolutionary change process) and is reviewed in more detail below.

5.2.1.2 STRATEGIC RENEWAL

As discussed, prior to 1991, the Area General Manager structure was in place at BC TEL. This structure divided the organization on a regional basis⁵. BC TEL saw this as a way to increase ownership, accountability, flexibility, and customer responsiveness. The Lines of Business structure, instituted in 1995, was intended to provide more focus on operations and the 'retail' aspects of the industry (BC TEL, 1995a). Upon closer inspection of the L.O.B. structure, it appeared to be an enhancement to the 1991 Strategic Renewal initiative that was implemented to head off competitive pressures from new entrants into the long distance market.

⁵ In 1981/1982 McKinsey Consulting structured a plan for BC TEL to set-up the A.G.M. structure and B.T.E. Every effort was made to locate this report but, after much time and effort, key individuals at the executive level within BC TEL were unable to locate the plan. McKinsey Consulting was also contacted but they indicated that, in order to protect client confidentiality, it was their policy to destroy all reports and notes one year following research completion.

The Strategic Renewal initiative was presented in the annual reports as a major milestone for BC TEL. This approach moved BC TEL away from the decentralized A.G.M. structure to a more centralized structure. The reports suggest that a radically changing telephone industry and the inevitability of long distance competition forced the company into an evaluation of how it did business, how others were doing business (benchmarking), and where the industry was headed (BC TEL, 1992). As part of this initiative, BC TEL undertook a comprehensive strategic planning process. Corporate strategic planning documents (BC TEL, 1992) indicated that a company task force, which was charged with planning for the future of BC TEL, followed a “strategy—process—structure” approach to change⁶.

The ‘strategy’ component involved building the company into a market force that was prepared to compete in a deregulated environment. This, in turn, led to the ‘process’ that involved changing the way the company did business (e.g., cost controls, functional disciplines, and efficiency). The ‘structure’ put in place around these strategies and processes aimed to allow the company to interface with the marketplace in such a way as to allow for ease of customer contact and optimizing products and service segmentation (BC TEL, 1992).

BC TEL intended to manage the change process as outlined in Figure 4. The function of this system for managing change was to guide the company’s revolutionary change from 1992 to 1996 and move BC TEL from being operations and product driven to customer

⁶ The “System for Managing Strategic Change” was put together by a task force of executives and senior and middle level managers, in conjunction with an outside consulting firm (Trendsitions).

focus and 'change' driven. It provided for a system to manage the revolutionary change process rather than dictate, or layout, how change would occur.

FIGURE 4: "System for Managing Strategic Change" (BC TEL, 1992)

BC TEL's process of revolutionary change was initiated following a decision of whether or not to respond to change. In order to determine what the present status of the company was at the time, BC TEL conducted a S.W.O.T. analysis (internal Strengths and Weaknesses, external Opportunities and Threats). This analysis included a review to determine what the organization's 'excellence' was (i.e., core competence). The next stage proposed building a climate of change within the organization for what needed to be accomplished. Managers and supervisors were seen to be key in this regard and an Education Centre was seen as playing a pivotal role in providing the necessary skills for implementing change and for providing training to meet future skills requirements. Some

of the organizational climate issues that were seen as needing to be addressed included: i) becoming more responsive to internal and external customers, ii) being prepared to respond more quickly to changes in the environment, iii) continually looking for new ways to deliver products and services, and iv) finding new areas for the company to create revenue and growth (BC TEL, 1992).

Following the building of a climate of change, the next step proposed was the creation of a vision and mission for the organization. From here, the structure of the organization was to be incorporated into a plan. Finally, the strategy was to be communicated and implemented throughout the organization. A feedback loop through learning and evaluation was to bring the system back to close the loop.

In their strategic planning process, BC TEL specifically mentioned that any organizational design had to take into consideration: culture (styles and values), people, systems, structure, and strategy. They suggested that the key issues to be reviewed and analyzed were cultural change, the management of change, and identifying and leveraging core competencies. They also acknowledged the importance of leadership in taking control of change, taking action, and managing this transition.

Certain corporate goals were set and each department and division presented how they would individually meet these targets. For example, financial targets were set such as decreasing costs per telephone line by 35% by 1996. As part of this process, each department developed key success factors and quantifiable measures that were to be used

to determine if change goals were being met. Each business division (i.e., consumer, business, emerging business) and department (e.g., Human Resources, Legal and Corporate Affairs) was tasked with developing their own plans regarding how each was to fit into the overall organization (i.e., what would be their own mission and vision). Each group's plan was then "rolled up" to formulate a hybrid corporate plan.

Some of the key success factors identified by various divisions and departments included developing: (1) an ability to manage diverse cultures and establish credibility within BC TEL, (2) strategic insight, (3) employee motivation during organizational renewal, (4) a transition from a monopoly mindset to a competitive one, (5) financial management skills, (6) communication skills, and (7) a focus on employee training and development. Most of the quantifiable measurements proposed were financial in nature (e.g., cost and responsiveness, cost per line, shareholder value, and administrative cost per employee). Non-financial measurements, however, were also used to gauge the effectiveness of change (e.g., responsiveness to customer demand, quality of service).

Based on BC TEL's "System for Managing Strategic Change" (Figure 4), a process of revolutionary change is proposed in Figure 5. What differentiates the proposed process of revolutionary change from past process models of organizational change is that it recognizes the need for ongoing interaction between the situational diagnosis and planning and flexibility when planning and initiating revolutionary change.

**FIGURE 5: Proposed Process of Revolutionary Change –
Based on Corporate Documents**

Revolutionary change appears to have been triggered by External Forces that were in conflict with the way the organization operated and focused its efforts. Within the organization, these external changes are perceived to trigger four phases: Diagnosis, Planning, Initiation, and Evaluation. The documents suggest that there is a feedback loop between the Review and Planning Phases⁷. Justification for including each of these stages in the model of revolutionary change is presented below.

⁷ In order to provide easier comparability against past process models of change (see Figure 2), similar terms were used to describe the phases of revolutionary change. This adds consistency to the terminology and avoids further confusion in this area of the literature.

External forces appear to have been key in triggering revolutionary change within BC TEL. The review of the annual reports discussed earlier documented the pressure BC TEL exerted to protect its monopoly. When the C.R.T.C. allowed competitors to enter the long distance market, BC TEL was forced to reevaluate its operations and how it would transform itself to compete in a deregulated marketplace. The annual reports would suggest that these events occurring outside the organization happened continuously and influenced all phases of the process of revolutionary change.

Initially, BC TEL responded with a Diagnosis of the way in which it was doing business. The decision of whether or not to respond to external forces was undertaken through an assessment of external opportunities and threats and comparing them to internal strengths and weaknesses (BC TEL, 1992). The internal publications suggest that the Diagnosis Phase did not occur each time the company was affected by an external event, but more likely occurred when major events impacted the industry (e.g., introduction of long distance competition, introduction of local competition, allowing telecommunication companies to enter the cable market). This interaction may be indicative of a difference between incremental change and revolutionary change (i.e., revolutionary change is more likely to occur when it is triggered by a major external event).

Previous models of organizational change, as shown in Figure 2, were triggered either by a diagnosis or an external event. Researchers did not appear to indicate situations where external events forced a diagnosis of the situation and how the entity would react. The

model of revolutionary change at BC TEL acknowledges the impact of the external forces triggering a diagnosis of the organization itself.

Closely linked to the Diagnosis Phase, a flexible Planning Phase appears to have occurred at both the organizational level (through the task force) and departmental or business unit level. The flexibility of the strategy allowed for the organization to adapt to change more quickly (i.e., planning was not 'fixed in stone'). The flexibility found in this stage is unlike the previous models of organizational change reviewed in Section 2.3 where the analysis or planning phase appeared to be quite structured and situation specific.

Organizational strategies and goals appear to have been formulated with input from each of the departments and business units based upon the strategies developed. If in this phase it is determined that the planning needs to be re-evaluated due to feedback from the Evaluation Phase, there are mechanisms in place to review the diagnosis based on further information from the environment. The model therefore appears to take into account the uncertainty created by External Forces during revolutionary change (e.g., industry competition, fast paced technological change etc.) by recognizing the need for a Planning Phase that is flexible enough to allow for adjustments to occur on an ongoing basis.

The Initiation Phase was also found to be flexible in order to adjust appropriately as dictated by changes developed in the Planning Phase. Departments appear to have been given the leeway in operationalizing the flexible plan. Each department presented their own evaluations regarding how change would transpire (BC TEL, 1992). This flexibility

has not been detailed in previous process of change models when Initiation was relatively rigid. The flexibility in the Initiation Phase dictated the necessity for departments to develop the ability to change quickly and adapt (i.e. develop a climate of change).

It is interesting to note that the decision making phase (i.e., planning) appears to have been separate from the initiation phase which is similar to previous process models of organizational change. This suggests a division between those developing the strategies (i.e., top management) and those implementing (i.e., employees). Given the flexibility in both the Planning and Initiation Phases, it may have been felt that a communications strategy would be necessary to help explain what was occurring given the uncertainty that would be created in trying to develop a climate of change as outlined in Figure 4. This may assist in explaining the rationale for the creation of the Corporate Communications department and the renewed focus on human resources between 1992 and 1993.

The Evaluation Phase of the process of revolutionary change involved an examination of quantitative measures, both financial and non-financial. Although the Planning and Initiation Phases may have kept changing, the evaluation measures appeared to be more rigid. This may have been necessary so as to allow a clearer focus during the Planning and Initiation Phases (i.e., despite flexibility there must be a clear focus on the end goals). The information collected and analyzed in the Evaluation Phase was then provided as internal feedback into the continued planning of organizational strategy. The Evaluation Phase of the model is similar to that found in models of change developed after 1983.

With dramatic industry changes occurring, these measures in the Evaluation Phase may have provided guidelines on how the strategy needed to be adapted in order to react. For example, in 1995 BC TEL's financial statements looked healthy as net earnings had increased over 1994. A closer examination, however, showed that the company had sold their interest in a semi-conductor firm to help offset a net earnings decline that was primarily due to losses from long distance revenue (BC TEL, 1995). This divestiture may have been an example of feedback from the Evaluation Phase being used to influence planning in order to continue to meet strategic goals (e.g., show year over year increases in earnings to keep industry confidence, alter the strategy of investing in other companies, concentrate on core business).

The process of revolutionary change at BC TEL appears to be similar to those models of change developed after 1983. The major difference between them, however, appears to be that BC TEL built flexibility into the Planning and Initiation Phases in order to be able to react more quickly as External Forces dictated.

It was around the time that revolutionary changes were being undertaken at BC TEL (1991/1992) that the organization began to participate in research related to its employees. The next section will focus on some of this research and its application to revolutionary organizational change.

5.2.2 INDEPENDENTLY PRODUCED EMPLOYEE-BASED RESEARCH

Prior to 1992, BC TEL did not appear to be heavily involved in research focused specifically on its employees. In 1992, as the Strategic Renewal initiative was beginning

established, BC TEL participated in a national study on balancing work and family (Duxbury *et al.*, 1992). In 1994 the company participated in a Supportive Supervisor study and in 1995 and 1996 conducted a study called PulseCheck (a yearly organization wide survey to measure the climate within the organization). In 1995 BC TEL began to conduct 360° feedback evaluations for managers and executives and began to conduct research on the interrelation between work and family for shiftworkers (Johnson, 1997) and organizational support of teams (Kennedy, 1997).

A comparison of some of the common measures used in the 1992 (work and family) and 1996 (PulseCheck) research is shown in Table 14.

TABLE 14: Individual and Organizational Measures (1992 vs. 1996)

MEASURES	1992	1996
High Commitment	63%	77%
High Perceived Stress	50%	37%
High Job Satisfaction	62%	—
High Burnout	—	18%
High Depressed Mood	32%	—
Absenteeism (No. days)	5.8 days	4.6 days

In 1992 approximately 50% of BC TEL employees reported experiencing high levels of stress and nearly one-third reported experiencing high levels of depressed mood. Women were more likely to experience higher levels of stress and depressed mood than men and those in clerical positions were more likely to experience these same outcomes than those in managerial and professional positions. Managers were more satisfied with their jobs than technical and clerical personnel. Over 60% of employees had high levels of

commitment towards BC TEL and 60% reported high job satisfaction. The high levels of burnout and depressed mood are consistent with the fact that Strategic Renewal may have been a revolutionary change for the organization. The data also suggest that BC TEL was not doing a good job of managing the change process as those outside the management ranks appear to be worried and uncertain about their future. This may have been caused by the uncertainty caused by downsizing or, perhaps, a lack of communication regarding what was going to occur.

The 1996 PulseCheck survey revealed that nearly 40% of employees had high levels of stress and 18% reported high levels of burnout. Nearly 80% of employees had high levels of commitment towards BC TEL. Further analysis revealed that respondents knew what managers expected, trusted their immediate manager, perceived that their manager had helped them deal with change, understood the strategies of their business units, and were empowered to take actions to carry out responsibilities (Duxbury and Higgins, 1996). Johnson (1997) also reported similar findings. These data would suggest that departments appeared to be doing a better job of managing revolutionary organizational change including communicating with employees regarding change and where the company was going compared to the beginning of Strategic Renewal in 1992. Given the timing of these studies (1996, 1997) this could also mean that the organization was in a period of relative stability following revolutionary change as defined by the punctuated equilibrium theory (e.g., Tushman and Romanelli, 1985; Gersick, 1991).

A comparison of the 1995 and 1996 PulseCheck studies found that in 1996: more respondents worked for a supportive manager (48% versus 44%), more respondents indicated high role clarity (60% versus 50%), managers were more likely to trust management (63% versus 59%), and a greater majority of respondents felt that their manager had the authority to control change (66% versus 33%). This helped to emphasize what the 1996 data suggested.

Over this same time frame, however, it was also found that: employee trust of BC TEL had decreased, more employees felt that BC TEL was not communicating where the company was going, managers indicated their concerns were not being addressed, and overall stress and burnout levels had increased. This timeframe (1995 versus 1996) approximates the introduction of the Lines of Business structure discussed earlier. These data would suggest that BC TEL has done a good job of managing change at the management level (e.g., managers trust management; managers have authority to control change) but a poorer job at the employee level (e.g., not communicating where the company was going, increased stress and burnout). In other words, these data would suggest that there are two views of the revolutionary change process at BC TEL (managers have had a better experience than employees).

In 1995 BC TEL began the process of conducting 360° evaluations for managers (i.e., managers nominated individuals they worked with to evaluate their performance, skills, and ability on a variety of indicators with the resulting information fed back to the manager). For most managers, this testing was conducted on a voluntary basis. For

senior managers, however, the 360° evaluations were linked to performance pay. Due to the sensitive nature of such research, data from these reports will not be discussed. It is important to note, however, that the core competencies measured in these evaluations included supportive work environments, communication, teamwork, coaching and development, and leadership. These core competencies, and their importance to organizational change have been well established in the literature (e.g., Eisenberger *et al.*, 1986; Larkin and Larkin, 1994; Romanelli and Tushman, 1994). These changes in the focus of BC TEL toward the development of its managers points to further shifts in the way the organization operates and rewards its employees and are consistent with the increased focus on people development (BC TEL, 1993; 1995).

The fact that BC TEL began to undertake employee-centred research during this time of revolutionary change, and was including questions related to organizational change, communication, and supportive management in its climate and performance evaluations, indicates concern and interest in employees and their ability to cope with change. These data would suggest that BC TEL was becoming more aware that its employees were what gave it a competitive advantage and could increase customer satisfaction. This finding appears to be consistent with the company's proposed building of a climate of change within the organization and reports which focus on people (e.g., BC TEL, 1992; 1995).

The introduction of this form of employee-based independent research in 1992, as well as management's interest in the overall climate within BC TEL is consistent with the

changes occurring at BC TEL. The lack of pre-1992 data does not allow for comparison against employee attitudes before revolutionary organizational change began. The higher levels of stress in 1992 as compared to 1996 could be consistent with the fact that the organization was undergoing revolutionary change at that time (e.g., Hunt, 1993; Tichy and Sherman, 1993).

5.3 SUMMARY OF REVOLUTIONARY CHANGE AT BC TEL

Analysis of documents from BC TEL indicates three milestones in the transition of the company from a monopoly to a competitive company (see Table 13). The historical documents suggest that competition in certain aspects needed to be addressed with the creation of B.T.E. and the restructuring that took place in 1982 (the A.G.M. structure). In 1991, just prior to the introduction of long distance competition, the company began the process of revolutionary change in earnest (Strategic Renewal) under the leadership of a new C.E.O. An external event (long distance competition) appears to have triggered the company into a process of revolutionary change. The changes that occurred in 1995 (L.O.B. structure) appeared to have been aimed at enhancing the Strategic Renewal program and beginning the preparation for the introduction of local competition. The documents reviewed indicate that to manage revolutionary change BC TEL:

- appointed a new C.E.O.
- proposed a system for managing strategic change;
- hired executives from outside the company
- created a Corporate Communications Department;
- downsized the workforce by 20%;
- intended to shift the organizational culture from operations based to customer focused;
- began to concentrate on people related core competencies;
- proposed building a climate for ongoing organizational change; and,
- began to concentrate on employee-based research.

Revolutionary organizational change at BC TEL appears to have been discontinuous in nature (Nadler and Tushman, 1995). There appears to have been situations that are best described in terms of reorientation (e.g., bringing in new executives to focus on human resources and communication) and others in terms of re-creation (e.g., introduction of Strategic Renewal when long distance competition was introduced). With the addition of the L.O.B. structure to Strategic Renewal, revolutionary change appears to approximate the punctuated equilibrium model proposed by Tushman and Romanelli (1985) and Gersick (1991). The flexibility of the process of change applied by BC TEL would not fit the tendencies of reengineering given that reengineering tends to follow a formalized process of change. There were few indications that BC TEL was subscribing to a 'blank' sheet approach to change (e.g., Hammer and Champy, 1993).

At first glance, the proposed process model of revolutionary change at BC TEL appears to be very similar to that presented in Figure 2. The inclusion of a feedback loop brings this model in line with post-1983 change models. Despite the similarities there are some key differences. First of all, the Planning and Initiation Phases appear to be very flexible in order to allow the company to adapt to ever changing External Forces (i.e., environmental conditions and threats). Secondly, the strategy designed by senior management was also flexible so that changes in the Planning Phase could be made quickly. Finally, each department appeared to have the opportunity to tailor the plan to meet the needs within their own area. Past models of change do not provide for this type of flexibility as they tended to focus more on a structured approach to the phases of change (e.g., French, 1969; Bullock and Batten, 1985).

The process of revolutionary change planned by BC TEL appears to be best described by a combination of two theories of change proposed by Van de Ven and Poole (1995). It appears that both dialectic and teleological forms of change are occurring in tandem at BC TEL. Revolutionary change appears to be dialectic as the organization must continually struggle with external forces (e.g., new competitors, changing industry regulations etc.). As such, the overall Planning and Initiation Phases must be flexible enough to combat this dialectic (conflict). At the same time, revolutionary change appears to be teleological (i.e., goal setting) in terms of strategy being set by the top of the organization (i.e., senior management) which resulted in Strategic Renewal. Analysis of historical documents suggests that teleological change, in the form of Strategic Renewal, would most likely not have occurred without the dialectic with external forces.

The organizational design strategy employed at BC TEL between 1991 and 1996 was intended to be linear in nature (i.e., strategy leads to process leads to structure) with each department and business unit contributing to the end result. In this respect, BC Tel's plan was not consistent with current thinking in this area which envisions a complete interrelationship between these three dimensions as well as with the reward structure and the people within the organization (Galbraith, 1995). Corporate documents make reference to the people aspect of strategic change but there is no mention of the rewards aspect of change outside the management structure. This may be due in part to the inability of BC TEL to reward outside of its collective agreement with the T.W.U.

BC TEL had proposed, through its "System for Managing Strategic Change", building a climate for change and allowing other groups within the organization (in this case departments and business units) the flexibility to implement and set quantitative goals. This type of involvement in the change process has been identified as being critical to successful change (e.g., Kanter, 1983; Manganelli and Klein, 1994). The focus of BC TEL on employees through the use of 360° evaluations for managers and executives, testing the organizational climate, creating a corporate communications department, and focusing on core competencies related to people (e.g., supportive managers, communication, teamwork, and coaching and development) helped to emphasize its commitment to support of its employees.

Through its independent external research efforts, BC TEL appears to have made an effort towards becoming more understanding of its employees. The research undertaken on work and family issues (Duxbury *et al.*, 1992; Johnson, 1997; Kennedy, 1997) attests to the fact that BC TEL was paying attention to these issues during the time of revolutionary change. This finding helps to further emphasize that BC TEL was most likely not undertaking reengineering as reengineering efforts do not place such a high emphasis on the human aspects of change (e.g., Manganelli and Klein, 1994).

BC TEL's stated goal of shifting the organizational culture from operations based to customer focused represents a dramatic change in mindset. The creation of a cultural shift to create revolutionary change is in line with the works of Tichy (1983), Feldman (1986), and Schneider *et al.* (1996) while the building of a climate of organizational

change is symbolic of the research by Kanter (1983) and Laabs (1996). Overall, it appears that revolutionary change at BC TEL was somewhat in line with research in the organizational change literature but it allows for much greater flexibility in planning and initiation. It also appears that the process of revolutionary change at BC TEL is very much hierarchical in nature which runs at odds with the literature on including employees in the process of change (e.g., Morris, 1992; Duck, 1993; Laabs, 1996).

This review of organizational documents has helped to piece together how BC TEL had planned to undertake revolutionary organizational change. With an understanding of what BC TEL had planned to do in order to change itself, attention is now turned to what the company actually did.

CHAPTER SIX: PHASE II - INTERVIEWS ON REVOLUTIONARY CHANGE

The preceding chapter examined revolutionary change at BC TEL through the use of corporate documents and independently produced research. The focus of this chapter is to look at the same revolutionary change through the eyes of those individuals most involved in, or affected by, revolutionary change: a sample of executives who led the change and a sample of employees who experienced the change.

This chapter will begin with a discussion of the characteristics of the interview sample. Next, revolutionary change is placed within an historical context so as to provide a basis upon which to analyze and understand the organizational culture, communication, and the process of revolutionary change at BC TEL. This chapter will conclude with a proposed model of revolutionary organizational change.

The data depicted in tables for this chapter are presented in the following manner. Each table consists of three columns. The first column summarizes results for the overall sample (N=53). The second column provides data for the executive sample (N=25) while the third column gives results for the employee sample (N=25). The percentages within each column in a table represent the frequency of respondents in this particular sample who chose a particular response. To make between group comparisons more relevant percentages given in the table are always based on the total relevant sample (i.e., percentages in column one are calculated based on the total interview sample of 53; percentages in column two are calculated based on the sub-sample of 25 executives; percentages in column three are calculated based on the sub-sample of 25 employees.

It should be noted that many of the interview questions consist of multiple parts where participation in a follow-up question depends on one's response to the first part of the question (i.e., if a respondent gave a 'yes' response to a particular question they were asked a follow-up question; if they responded 'no' they would be asked a different question). When interpreting these data the reader should keep in mind that the percent who gave a particular response is based on the total relevant sample, not the number of people who were asked that particular question. Significant job type differences are also shown on these tables (they are highlighted). It should be recalled (see the discussion in the methodology section) that significant job type differences (executive and employee perspectives) are those where the sample size is at least 7 and the difference in frequency of response between the employee and executive sampled is 15% or more. Finally, it should be noted that unless otherwise noted, respondent's multiple responses were accepted (i.e., many of the columns add up to more than 100%).

6.1 SAMPLE CHARACTERISTICS

A total of 25 executives, 25 employees, and 3 members of the Board of Directors participated in the interview phase of this study (see Table 15). Within BC TEL as a whole, men make up 53% of the workforce and women 47%. Men were over-represented in the interview sample (62% of interview respondents were men) while women were under-represented (38% of interview respondents were women).

TABLE 15: Demographics Characteristic of Interview Sample

	OVERALL SAMPLE	EXECUTIVES	EMPLOYEES	BC TEL
Sample Size (n)	53	25	25	n/a
Male	62.3%	76.0%	44.0%	53.0%
Female	37.7%	24.0%	56.0%	47.0%
Only worked at BC TEL	43.5%	60.0%	33.3%	—
Avg. No. Years with BC TEL	21 Years	25 Years	17 Years	23 Years

Further examination showed that the executive sample was primarily male (76% of the executives interviewed were male). On the other hand, the employee sample was more evenly distributed (44% of the employees interviewed were male). This gender by job type confound, and the small sample size, meant that gender differences in responses could not be examined.

It was found that respondents had worked with BC TEL for an average of 21 years. These data are very consistent with the company data that indicated BC TEL employees had worked with the company for an average of 23 years. The executives sampled tended to have been with the company a longer period of time than the employees sampled (25 years versus 17 years).

Nearly 45% of respondents (60% of the executives sampled versus 33% of the employees sampled) had only worked at BC TEL. Interview respondents had worked, on average, for at least two departments providing for a broader perspective on revolutionary change.

As shown in Table 16, the majority of respondents came from three departments: Local and Long Distance Services (28%), Network Services (25%), and Human Resources

(13%). There were no significant job type differences found in departmental representation.

TABLE 16: Departmental Representation of Respondents

	OVERALL SAMPLE	EXECUTIVES	EMPLOYEES	ACTUAL % AT BC TEL
Local/Long Distance Svc. ^a	28.3%	28.0%	32.0%	30.0%
Network Services	24.5	24.0	28.0	39.7
Human Resources	13.2	12.0	16.0	4.3
Corporate Services	5.7	4.0	8.0	3.9
Emerging Business Units	5.7	8.0	4.0	17.0
Board of Directors	5.7	—	—	—
Corporate Communications	3.8	4.0	4.0	0.3
Corporate Sales	3.8	4.0	4.0	4.6
Executives ^b	3.8	8.0	—	—
Law & Regulatory	3.8	4.0	4.0	0.2
Retired	1.9	4.0	—	—

^a Local & Long Distance Services includes part of Sales (non-corporate), Customer Service & Marketing

^b Executives not associated with specific departments

Prior to the selection of the sample it was decided that in order to get a more comprehensive view of what had occurred during the change at least one member of each job type (i.e., executive and employee), from within each department, should be interviewed. As a result the departmental representation of respondents was skewed. Approximately 1% of BC TEL employees worked in the Corporate Communications and Law and Regulatory Affairs departments. In this research 4 out of the 53 respondents came from these departments (i.e., 8% of the total sample).

Human Resources Consulting Services (H.R.C.S.) was purposely over-sampled by the researcher (i.e., 13% of interview respondents were from H.R.C.S. but only 4% of BC TEL employees are part of H.R.C.S.). The rationale behind the decision to over-sample

was based on the fact that individuals within H.R.C.S. had worked across the company on various projects and were thus more likely to be able to provide a broader perspective on the revolutionary change initiative than employees in other departments may have been able to provide.

As a result of over-sampling in these three departments (i.e., Law and Regulatory Affairs, Corporate Communications, and H.R.C.S.), two departments (i.e., Network Services and Emerging Businesses) were under-sampled. Emerging businesses (e.g., BC TEL Mobility, BC TEL Systems Support, Canadian Telephone & Supplies) were purposely under-sampled because they ran at “arms length” from BC TEL’s core operations. Network Services was under-sampled by ‘default’ (i.e., the requirement for all departments to be represented at both job type levels, and the over-sampling of these three departments, resulted in an under-sampling of Network Services).

Overall, it would appear that the sample chosen is generally representative of BC TEL as a whole. Respondents have been with the company for an average of 20 years which should provide for a solid foundation upon which to discuss revolutionary change. Respondents also represent all areas of the organization thereby providing a broader perspective. These factors suggest that the responses from the sample chosen should have relevance to research on revolutionary organizational change at BC TEL.

6.2 HISTORICAL CONTEXT OF REVOLUTIONARY CHANGE

Authors such as Dahrendorf (1969), Hernes (1976), and Van de Ven and Poole (1995) have stated that in order to properly document a change process it is important to

determine when the change began and what motivated the change to begin. This section discusses questions from the interviews that were included to further our understanding of these aspects of revolutionary change at BC TEL. Questions covering the following issues are reviewed below:

- ♦ when did revolutionary change begin?
- ♦ what prompted revolutionary change to occur?
- ♦ what was the motivation for revolutionary change? and,
- ♦ was the goal of competitiveness achieved?

6.2.1 DETERMINING WHEN REVOLUTIONARY CHANGE BEGAN

Respondents were asked when they believed BC TEL began to change from a monopoly to a competitive company. As shown in Table 17, respondents provided dates that were spread out over an 18-year period (i.e., 1979 to 1997). Twenty percent of respondents pinpointed 1991 as the year change began. This date corresponds with the Strategic Renewal initiative discussed in the preceding Chapter. Fourteen percent of respondents indicated either 1982 or 1983 as the year revolutionary change began (i.e., 28% said 1982-1983). This time frame corresponds with the Area General Manager (A.G.M.) initiative and the creation of B.T.E. The fact that a substantial portion of the sample identified two quite different time periods suggests that: 1) there may be no clear view of when revolutionary change began at BC TEL, or 2) there may have been two major periods of change since 1979.

TABLE 17: Year That Change Began

Year change began	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
1979	2.0%	4.2%	—
1981	6.0	8.3	4.2
1982	14.0	16.7	8.3
1983	14.0	20.8	8.3
1984	2.0	—	4.2
1985	4.0	4.2	4.2
1986	6.0	4.2	8.3
1987	10.0	12.5	8.3
1988 – 1990	6.0	—	12.6
1991	20.0	20.8	16.7
1992	4.0	4.2	4.2
1993	6.0	4.2	8.3
1994 or later	6.0	—	12.6

While the highest percentage of both the executives and employees sampled believed that revolutionary change occurred in 1991, the beliefs of the employees sampled as to when revolutionary change at BC TEL began were more varied than those of the executives sampled. For example, each year between 1981 and 1996 was identified by at least one respondent in the employee sample as the year they perceived that the change had begun.

The results show that respondents in the executive sample perceived that revolutionary change began earlier than respondents in the employee sample did (i.e., over 45% of those in the executive sample believed that revolutionary change began between 1981 and 1983 compared to 20% of those in the employee sample). These differences may be due to the fact that: (1) the executives sampled were more aware of the changes made (lack of downward communication to the employees sampled); (2) revolutionary change may have started at the top of the organization and did not impact the employees sampled until later; or, (3) the employees sampled may have resisted the idea of revolutionary

change until it could not be ignored (i.e., deep culture prevented the recognition of revolutionary change).

In order to better understand what BC TEL was doing during the year respondents believed revolutionary change began, respondents were asked what types of changes were occurring at the time they believed revolutionary change occurred. As shown in Table 18, three major changes were identified: the creation of B.T.E. (37%), industry competition (35%), and the restructuring of the company (22%). Two other changes were identified by one-quarter of the sample: downsizing (12%) and the introduction of new technology (12%). Examination of these data shows that some respondents identified external factors (i.e., competition and new technologies) as symbolizing the beginning of revolutionary change while others identified internal factors (i.e., creation of B.T.E., restructuring, and downsizing). Whether internal or external, the factors mentioned all have something in common: they are visible and, therefore, tangible. This would suggest that for revolutionary change to be recognized it must be seen. This is consistent with the definition of change given by Van de Ven and Poole (1995).

Further examination of these data suggests that the perception of when change began was significantly associated with job type. Respondents from the executive sample were more likely than respondents from the employee sample to believe that the creation of B.T.E. was the major change occurring at the time revolutionary change began (57% versus 24%). Respondents from the employee sample, on the other hand, were more likely than respondents from the executive sample to believe that industry competition

(40% versus 26%) or downsizing (24% versus 0%) were the major changes occurring at this time: These data would suggest that where one is situated within BC TEL may affect perceptions regarding the beginnings of change (i.e., how visible or tangible events are to one's job may affect perceptions of when change began).

TABLE 18: Major Change Occurring at the Time Change Began

Major change	OVERALL SAMPLE	EXECUTIVES	EMPLOYEES
Creation of B.T.E.	37.3%	56.5%	24.0%
Industry competition	35.3	25.8	40.0
Restructure / reorganization	21.6	16.1	28.0
Downsizing	11.8	—	24.0
Introduce new technology	11.8	9.7	16.0
Creation of BC TEL Mobility	7.8	9.7	4.0
Focus on profit	3.9	4.3	4.0
Customer focus	3.9	—	4.0
Better org. communication	3.9	—	4.0

For the executives sampled it appears that the A.G.M. structure and the creation of B.T.E. signaled a change in company policy and direction that they were informed about. The employees sampled may have been aware of this change but it did not signal the beginnings of a revolutionary change in the way the company operated (i.e., a real move towards competition). Since B.T.E. was small compared to BC TEL (less than 100 employees according to the interviews), its effect on the overall employee population appeared to be negligible. For the employees sampled, seeing their co-workers let go by the organization and the introduction of new technology into their workspace appeared to bring the reality of revolutionary change home. The following excerpts from the interviews best summarize the major events occurring when revolutionary change began,

B.T.E. was the earliest instance of competition. (However,) I don't believe BC TEL began to fundamentally change until several years later (1991)... We weren't (just) sitting around doing our nails!! We just didn't focus our intention until the inevitability of competition was upon us. (Executive)

(Change) probably occurred when we began to compete with others such as S.T.N. (long distance service provider). That is when it hit home... Probably early 1990. However, B.T.E. came before that. (Employee)

Crisis has to be confirmed by disaster. I use the term "there has to be blood on the floor" . . . If our people don't see blood, there is little impetus to change. (Executive)

6.2.2 MOTIVATION FOR REVOLUTIONARY CHANGE

With a general understanding of when revolutionary change was believed to occur and the changes that were occurring at the time, respondents were asked what they perceived to be the motivators behind revolutionary change at BC TEL. A large percentage of respondents (65%) believed that the C.R.T.C. provided the motivation for revolutionary change (see Table 19). Industry competition was also cited but by a much smaller percentage of the sample (23%). If one combined 'industry competition' and the 'introduction of cellular' into the C.R.T.C. group (both outcomes were direct consequences of C.R.T.C. rulings), 92% of respondents pinpointed external rulings (i.e., a form of legislation) as the motivating force for revolutionary change.

TABLE 19: Motivators for Change to Occur

Motivator for Change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
C.R.T.C.	65.4%	64.0%	68.0%
Industry competition	23.1	24.0	20.0
Strategic Renewal (1991)	9.6	4.0	16.0
Technology	7.7	12.0	4.0
Introduction of Cellular	3.8	4.0	4.0
Profits	3.8	4.0	4.0
Labor disruption	1.9	4.0	—

No significant job type differences were observed regarding the factors motivating revolutionary change. Respondents from both the executive and employee samples cited the C.R.T.C. (64% and 68% respectively) and industry competition (24% and 20%) as the principal motivators for revolutionary change. These data would suggest that both the executives and employees sampled perceived external events to be the prime motivators for revolutionary change at BC TEL. However, as respondents stated,

It is always easy to blame them (i.e., C.R.T.C.)! (Employee)

I don't want to give the C.R.T.C. that much credit for having been THE event!! The C.R.T.C. was just reflecting what was happening around it.
(Executive)

Respondents were then asked whether they felt that revolutionary changes would have occurred at BC TEL without the intervention of the C.R.T.C. As shown in Table 20, respondents were evenly split (54% versus 46%) regarding whether BC TEL would have changed irrespective of the C.R.T.C. These data would suggest that there is no consensus on whether BC TEL would have changed without motivation from an external force.

TABLE 20: Would Revolutionary Change Occurred Without the C.R.T.C.?

Change without C.R.T.C.	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Total YES	54.0%	45.8%	60.8%
♦ Yes: But Slower	34.0	37.5	30.4
♦ Yes	20.0	8.3	30.4
Total NO	46.0%	54.2%	39.1%

An examination of these data suggests that the perception of whether or not change would have occurred without the C.R.T.C. was significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to believe that revolutionary change would not have occurred without the C.R.T.C. (54% versus 39%). Respondents in the employee sample were more likely than respondents in the executive sample to believe that revolutionary change would have occurred without the C.R.T.C. (61% versus 46%). These data would suggest that respondents from the executive sample were more likely to perceive that the organization needed to be 'forced' to undertake revolutionary change while respondents from the employee sample were more likely to perceive that it could be undertaken without external pressure. As an executive stated,

My heart would like to say yes, but my head says "probably not". 15,000 people. There has to be a compelling reason to change. If they had left us alone we wouldn't have changed. (Executive)

Of those respondents that believed revolutionary change would have occurred without the C.R.T.C., 63% (34% of the total sample) believed that BC TEL would have changed but at a slower pace than what had occurred due to the rulings. This would suggest that without the C.R.T.C. rulings, change may have been incremental (i.e., not revolutionary).

To conclude the discussion on the forces motivating revolutionary change, respondents were asked to describe change before the C.R.T.C. rulings. As shown in Table 21, the majority of respondents characterized change before the C.R.T.C. rulings as being slow and methodical (58%) or technologically driven (34%). A minority of respondents indicated that change was internally driven (11%). Respondents noted that before the C.R.T.C. rulings change occurred when necessary and at a pace where no one would be overly disturbed or displaced. The responses to this question paint a picture of 'comfortable' change within BC TEL and appear to be consistent with a culture of "jobs for life" and a stable organizational structure and hierarchy. There was a general feeling that change was not a really big issue and not much of a concern. As one employee described the organization, "It was like living at Disneyland!" The following quotations help to summarize change at BC TEL prior to the C.R.T.C. rulings,

They (BC TEL) certainly didn't embrace change. It was more like "we'll look at in 10 years and make a decision." (Employee)

We were very much an administrative guidelines, instruction, policy, tariff driven organization. Little personal accountability. We changed very slowly. We didn't move. It was acceptable in those days to leave people out in rural areas without service for a couple of days. Now we need to serve them. (Executive)

TABLE 21: Change Before the C.R.T.C. Rulings

Change before the C.R.T.C. rulings	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Slow and methodical	57.5%	56.5%	61.9%
Driven by technology	34.0	43.5	23.8
Internally driven	10.6	21.7	—
No different than today	6.4	4.3	9.5
Ahead of C.R.T.C.	6.4	4.3	4.8
Change did not occur	2.1	—	4.8

An examination of these data would suggest that the perception of change at BC TEL before the C.R.T.C. rulings was significantly associated with job type. Respondents from the executive sample were more likely than respondents from the employee sample to believe that change before the C.R.T.C. rulings was driven by technology (44% versus 24%) or internally driven (22% versus 0%). These data would suggest that prior to the C.R.T.C. decision those in the executive sample felt that they themselves drove change (i.e., internally driven). The fact that the majority of respondents in both the executive and employee samples perceived change during this time period to be “slow and methodical” suggests that this internally driven, technologically motivated, change was incremental in nature.

6.2.3 GOAL OF REVOLUTIONARY CHANGE

Preliminary interviews with executives and employees pointed toward the fact that the goal of revolutionary change at BC TEL was to increase competitiveness. In order to verify this, respondents interviewed for this research were asked whether or not they felt the goal of revolutionary change was to increase competitiveness. As shown in Table 22, 74% of respondents agreed that BC TEL had implemented revolutionary change for this reason. There were no significant job type differences found in these data.

TABLE 22: Goal of Revolutionary Change at BC TEL

Goal of change: increase competitiveness	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Yes	73.6%	68.0%	80.0%
No	26.4%	32.0%	20.0%
Is competitiveness being achieved?			
Yes	66.0%	76.0%	60.0%
No	13.2%	12.0%	12.0%
Unsure	20.8%	12.0%	28.0%

With a strong indication that the goal of revolutionary change was to increase competitiveness, respondents were then asked whether they felt competitiveness was being achieved due to revolutionary change. Two-thirds of respondents believed that competitiveness was being achieved while 21% were 'unsure'. Examination of these data would suggest that the perception of whether competitiveness was being achieved was significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that competitiveness was being achieved (76% versus 60%). Respondents in the employee sample were more likely than respondents in the executive sample to indicate 'uncertainty' regarding the competitiveness of BC TEL after the changes (28% versus 12%). These data would suggest that executives may not be communicating effectively to employees whether the goal of competitiveness is being achieved. Alternatively, employees may not have personally observed any impacts of change within their area of the company.

6.2.4 DISCUSSION OF "HISTORICAL CONTEXT OF REVOLUTIONARY CHANGE"

The analysis of the interview data provides a clearer understanding of how respondents perceived the historical context of revolutionary change at BC TEL. The data suggests

that there might have been more than one revolutionary change at BC TEL within the last 10 years. Van de Ven and Poole (1995) suggest that in order to measure change there must be an identifiable beginning. This is difficult to do at BC TEL. While respondents agree that change has occurred, there is a general lack of consistency regarding the exact timing of when revolutionary change began and the event that prompted it to occur.

These data suggest that perceptions of when revolutionary change began may depend on where one was placed within the organization (executive or employee) and what tangible event symbolizes change to a particular individual. These findings are consistent with the literature which shows that placement within an organization (e.g., Downs, 1967; DeCelles, 1995; Ingstrup, 1995) and tangible events, directly applicable to the change, (Klein, 1984; Kanter, 1985; Porras and Hoffer, 1986) may influence perceptions of change. In this study, significantly more respondents from the executive sample than from the employee sample identified the "spinning-off" of B.T.E. as symbolizing the major event occurring when revolutionary change began; significantly more respondents from the employee sample than from the executive sample perceived that revolutionary change began when the company had to compete with others and downsized.

Despite the disagreement on when revolutionary change began, it is interesting to note that most respondents perceived that the C.R.T.C. was the primary catalyst behind revolutionary change (i.e., externally driven). In other words, at BC TEL there appears to have been an identifiable external force (regulatory) which prompted revolutionary change to occur. This is consistent with previous research which found that regulatory

(legislative) forces could be prime motivators for revolutionary change (e.g., Goodstein and Burke, 1991; Nadler and Tushman, 1995).

Change at BC TEL prior to the C.R.T.C. rulings was perceived to be similar to what one may expect given the monopoly conditions under which the company operated — slow and methodical. The descriptions of change provided by respondents were very similar to descriptions of incremental change provided in the literature (Manganelli and Klein, 1994; Nadler and Tushman, 1995).

This historical look at revolutionary change at BC TEL appears to be consistent with the initial phases of the summary of process of change discussed in Figure 2 (e.g., French, 1969; Connor and Lake, 1994). There appears to have been an identifiable external event (i.e., the C.R.T.C.) that prompted revolutionary change to occur at BC TEL. As well, there appears to have been a well-defined goal in place (i.e., increase competitiveness) which motivated the change initiatives. With a clearer perception of the context of revolutionary change at BC TEL, attention is now turned towards organizational culture and resistance to change.

6.3 ORGANIZATIONAL CULTURE AND RESISTANCE TO CHANGE

Many authors have stressed the importance of organizational culture in revolutionary change (Kanter, 1983, Schneider *et al.*, 1996). Questions covered in this section include:

- ♦ what is the organizational culture like now?
 - ♦ what was the organizational culture like 1 year ago?
 - ♦ what was the organizational culture like 2 years ago?
- ♦ has the level of bureaucracy decreased since revolutionary change began?
- ♦ was there resistance to change at the senior management level? and,
- ♦ was there resistance to change at the board of directors level?

The topics of resistance to revolutionary change and bureaucracy (i.e., rules that impede change) are also included in this section since the literature suggests a connection between these constructs and organizational culture (e.g., Hultman, 1979; Smith, 1993).

6.3.1 ORGANIZATIONAL CULTURE

Prior to this section of the interview respondents were asked if they were comfortable with the concept of “organizational culture”. For those who were unclear with the concept the researcher asked respondents to identify characteristics of BC TEL that helped to distinguish it from other organizations they were familiar with. This clarification approximates a definition put forth by Robbins (1996).

Following the interviews the researcher documented the responses used to distinguish the organizational culture at BC TEL. It was found that respondents used a wide variety of descriptions to create a picture of the organizational culture. In order to make the analysis more structured and provide clarity and parsimony, content analysis was used to categorize the phrases and associations respondents used to describe the organizational culture. As shown in Table 23, the content analysis revealed eight distinct descriptions of the culture at BC TEL: stability, uncertainty, positioning, customer focus, change, pressure, profit, and employee support.

TABLE 23: Cultural Themes

CULTURAL THEME	ADJECTIVES USED TO DESCRIBE THE ORGANIZATIONAL CULTURE
Stability	smooth; predictable; cohesive; comfortable
Uncertainty	chaos; paranoia; worry; uncertainty; fear; insecurity
Positioning	competitive; progressive; reactive; responsive
Customer Focus	customer driven; service focused; market responsive
Change	evolving; fast paced; in flux
Pressure	unreal expectations; high pressure; rushed
Profit	profit driven; cost effective; bottom line critical
Employee Support	trusting; empowering; employee centred

While the words used to describe the organizational culture varied from respondent to respondent, they all described these eight common underlying constructs. The name given to each cultural theme reflects these underlying constructs and is used as the basis for the rest of the analysis and discussion of organizational culture. Table 24 presents data on how respondents described the organization culture at the time of the interviews (1997) and one (1996) and two years (1995) prior to the interview.

TABLE 24: Organizational Culture "Now", One, and Two Years Ago

Cultural theme	OVERALL (incl. Board)			EXECUTIVES			EMPLOYEES		
	Now	1YR	2YRS	Now	1YR	2YRS	Now	1YR	2YRS
Stability	22.0%	20.0%	21.4%	22.7%	18.2%	26.3%	20.0%	20.0%	18.2%
Uncertainty	18.0	32.0	33.3	13.6	40.9	36.8	24.0	28.0	31.8
Customer Focus	14.0	6.0	4.8	18.2	9.1	5.3	12.0	4.0	4.5
Positioning	14.0	10.0	9.5	13.6	4.5	—	8.0	8.0	13.6
Change	12.0	8.0	11.9	18.2	13.6	21.1	8.0	4.0	4.5
Pressure	8.0	14.0	14.3	4.5	—	5.3	12.0	28.0	22.7
Profit	6.0	8.0	2.4	9.1	13.6	5.3	4.0	4.0	—
Employee Support	6.0	2.0	2.4	—	—	—	12.0	4.0	4.5
Same Theme as Now	—	42.0	28.6	—	31.8	15.8	—	48.0	36.4

6.3.1.1 ORGANIZATIONAL CULTURE "NOW" (1997)

Respondents were asked to describe the organizational culture at the time of the interview. As shown in Table 24, respondents described the organizational culture as stable (22%), uncertain (18%), customer focused (14%), positioning oriented (14%), and change oriented (12%). Both the customer focus and positioning themes are connected to the idea of competition. If these two were combined, 28% of respondents would describe BC TEL's culture today as connected to competition. No significant job type differences were found in these data. These data would suggest that either there was no prevailing view of the culture, that the culture was in transition in 1997, or that the culture may have varied by department or some other criteria but not job function. The following quotations provide a sense of how respondents felt about the culture in 1997,

We are in transition and we are asking people to give up certainty for uncertainty and enjoy it. (Employees and some executives are saying) the job that I need is not going to be there, the skill sets that I need I don't have and you haven't given me a blueprint on how to get them! I think that is where a lot of the people are. (Executive)

This up-and-down is incredibly tiring. Shifting sands, nothing is concrete, secure. . . No one has put a label on what the culture is. (Employee)

There are some definite extremes in this company. There are pockets of (different) cultures. There are some norms but each unit creates its own living space. (Employee)

6.3.1.2 ORGANIZATIONAL CULTURE ONE YEAR AGO (1996)

Respondents were asked to describe the culture at BC TEL one year ago. Forty-two percent of respondents utilized the same description of culture as 'today' (i.e., 1997). Those who rated the culture as the 'same' were then coded into the appropriate group (i.e., if a respondent indicated the culture in 1997 as 'stable' and then in 1996 rated it as

the 'same' they would have also been coded in the 'stable' group in 1996 — one year ago). Respondents described the organizational culture as uncertain (32%), stable (20%), pressure oriented (14%), and position oriented (10%).

An examination of these data suggests that the perception of the culture one-year ago was significantly associated with job type. The executives sampled were more likely than the employees sampled to express an uncertainty theme (41% versus 28%). Respondents in the employee sample were more likely than respondents in the executive sample to express a pressure oriented theme (28% versus 0%). The employees sampled were also more likely to perceive that the culture was the same as the prevailing year (48% versus 32%). The views of the employees sampled are consistent with the findings from the PulseCheck survey discussed in the historical analysis of documents (Duxbury and Higgins, 1996). A possible explanation for the job type differences may be that the actions of employees in a pressure oriented culture (e.g., rushed, high pressure) may have led the executives sampled to interpret the culture as one of uncertainty (e.g., chaos, worry, paranoia) due to the actions of employees. As an employee stated about the culture a year ago,

People were very insecure. People who felt good about what they contributed were not worried. People that felt they worked hard but (their manager) forgot to tell them got worried. There was a story (of a guy) who packed up his desk thinking he would go. But he wasn't asked!
(Employee)

All respondents, including those who felt the culture had not changed, were then asked why they described the culture one year ago in the way they did. As shown in Table 25,

the majority of respondents (47%) cited the change in people, at both the management and employee level, as the primary reason for their response. Secondary reasons for respondents describing the culture one year ago the way they did included: structural changes (13%), an emphasis on the bottom line (13%), and the stable external environment (13%).

TABLE 25: Reasons for Describing the Culture One Year Ago Compared to Today

Reasons for culture one year ago	OVERALL	EXECUTIVES	EMPLOYEES
People changed	47.4%	36.8%	61.1%
Structural changes	13.2	15.8	11.1
Bottom line focused	13.2	21.1	5.6
Stable external environment	13.2	10.5	11.1
Effect of union	5.3	5.3	5.6
Stronger market competition	5.3	10.5	—
Poor supervisors	2.6	—	5.6

Examination of the justification by the description of the culture revealed the following. Of those respondents indicating an uncertainty cultural theme, 70% (22% of the overall sample) indicated a change in people as the reason for their response. Those respondents who described the culture as stable on the other hand were more likely to say that this was due to either the stability of the environment or the impact of the union (50% of those who rated the culture as 'stable' — 10% of the overall sample). It appears that the loss of jobs from 1995 to 1996, as discussed in the historical analysis (based on corporate documents), may have contributed to the uncertainty theme and the expression of the "people change" explanation.

An examination of these data suggests that the rationale for descriptions of the culture one year ago were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to indicate that a bottom-line focus influenced their response (21% versus 6%). Respondents in the employee sample were more likely than respondents in the executive sample to indicate that the change in people (61% versus 37%) influenced their description of the culture one year ago. These data would suggest differences in the way these groups develop their cultural perceptions. For the employees sampled, how one views organizational culture may be more impacted by human issues while for the executives sampled culture appears to be more related to business issues.

6.3.1.3 ORGANIZATIONAL CULTURE TWO YEARS AGO

Respondents were asked if the present organizational culture was different than that of two years ago. Twenty-nine percent of respondents utilized the same description of culture as today. Those who rated the culture as the 'same' were then coded into the appropriate group (i.e., if a respondent indicated the culture in 1997 as 'stable' and then in 1995 rated it as the 'same' they would have also been coded in the 'stable' group in 1995 – two years ago). Respondents described the organizational culture two years ago as uncertain (33%), stable (21%), pressure oriented (13%), and change oriented (12%). It is again interesting to note that if the positioning and customer focus themes were combined (i.e., competition), only 14% of respondents indicated the culture was connected to competition. This is significantly lower compared to 28% 'today' (i.e., 1997).

An examination of these data suggests that the perception of the culture two years ago at BC TEL was significantly associated with job type. Respondents in the employee sample were more likely than respondents in the executive sample to describe the culture as pressure oriented (23% versus 5%). The employees sampled were also more likely to use the same description of the culture compared to today (36% versus 16%).

All respondents, including those who felt the culture had not changed were then asked why they described the culture two years ago in the way they did. As shown in Table 26, the majority of respondents cited the change in people (33%), structural changes (30%), and the stable external environment (12%) as the primary reasons for their response. The first two of these reasons may have been in response to the changes made as a result of the Lines of Business structure that was occurring around this time. This interpretation of the data is supported by the fact that, at the one year comparison point (Table 25), only 13% of respondents mentioned "structural changes" as influencing their view of the culture.

TABLE 26: Reasons for Describing the Culture Two Years Ago Compared to Today

Reasons for culture two years ago	OVERALL	EXECUTIVES	EMPLOYEES
People changed	33.3%	23.5%	43.8%
Structural changes	30.3	47.1	12.5
Stable external environment	12.1	11.8	12.5
Bottom line focused	9.1	5.9	12.5
Effect of union	6.1	5.9	6.3
Stronger market competition	6.1	5.9	6.3
Lack of input into decisions	3.0	—	6.3

Examination of the justification by the description of the culture revealed the following. Of those respondents indicating an uncertainty theme, 50% (17% of the overall sample) indicated a change in people while 29% (10% of the overall sample) indicated structural changes. It appears that the loss of jobs and a changing organizational structure as discussed in the historical analysis (based on corporate documents) may have contributed to the uncertainty theme.

An examination of these data suggests that the rationale for describing the culture two years ago was significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to indicate that structural changes influenced their explanation of the culture two years ago (47% versus 13%). Respondents in the employee sample were more likely than respondents in the executive sample to indicate that the change in people (44% versus 24%) influenced their description of the culture two years ago. These data would suggest that for many of the executives sampled their view of the organizational culture two years ago was influenced by the structural changes occurring at the company. The employees, on the other hand, were more likely to attribute their description of the culture to the end result of these structural changes — a change in people (i.e., structural changes move people around, or out of, the organization).

6.3.1.4 BUREAUCRACY

Respondents were asked whether the level of bureaucracy at BC TEL had decreased since revolutionary change began. As shown in Table 27, 72% of respondents felt that the level of bureaucracy had been decreased while 28% believed that there had not been

any change in the level of bureaucracy. Respondents in the executive sample were more likely than respondents in the employee sample to believe that the level of bureaucracy had not decreased (39% versus 25%) while respondents in the employee sample were more likely to indicate that it had (76% versus 61%). These data would suggest that revolutionary change has had more of an impact on the bureaucracy at the 'front-line' level of the organization (i.e., perhaps greater empowerment) than it has had at the top. As one executive joked,

We make a big deal about dumb rules and then replace them with three others! (Executive)

TABLE 27: Decrease in Bureaucracy Since Revolutionary Change Began

Bureaucracy decreased since change began?	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Total YES	71.5%	61.1%	76.2%
♦ Yes: but not enough	35.7	27.8	38.1
♦ Yes: more empowered	33.0	22.2	38.1
♦ Yes: much more open	4.8	11.1	
Total NO	28.6%	38.9%	24.8%
♦ No	14.3	22.2	9.5
♦ No: harder get work done	14.3	16.7	14.3

Of the 72% respondents who believed that the level of bureaucracy had decreased, 50% (36% of the overall sample) felt that the changes had not been enough while 40% (33% of the overall sample) felt more empowered (i.e., less approval required to get things done). Respondents in the employee sample were more likely than respondents in the executive sample to believe that there was more empowerment since the bureaucracy had decreased (38% versus 22%). As an employee stated,

I haven't be able to understand why in my former job I could rebate a customer up to \$50,000 on each (phone) line they had, but I wasn't able to order a new chair! (Employee)

6.3.1.5 DISCUSSION OF "ORGANIZATIONAL CULTURE"

There does not appear to be consensus regarding the culture at BC TEL whether it is examined now (1997), one year ago (1996), or two years ago (1995). In fact, the data suggests that there is no consistent view of the culture held throughout the company across this timeframe. As authors have stated, you cannot change an organization without changing its culture (e.g., DeCelles, 1995; Schneider *et al.*, 1996).

There is a relatively strong indication from the data that the change in people and structural changes impacted perceptions of the culture in 1995 and 1996. The fact that there is no agreement regarding the organizational culture in 1997 suggested the process of revolutionary change is not yet complete. The literature has indicated that in certain situations an organization's deep structure impedes change from occurring (i.e., during periods of equilibrium) (Fitzgerald, 1988). The lack of a consistent organizational culture helps to support the idea that BC TEL is undergoing revolutionary change as during disequilibrium the deep structure is reconfigured (e.g., Gersick, 1995).

Cultural traditions and organizational history have been found to influence attitudes toward an organization and serve as 'proof' of management's true attitudes (Fulmer, 1974; McGill, 1977; Bigelow, 1980). In the interviews regarding the history of change, change at BC TEL, before revolutionary change, was described as slow and methodical. This description of change is most likely in line with the idea of a more stable culture.

The literature indicates that there cannot be lasting organizational change if there is no cultural change (Tichy, 1983; Feldman, 1984; Richardson and Denton, 1996). At BC TEL the most likely time that change began was 1991 suggesting that BC TEL is still in the midst of cultural change. This interpretation of the data is supported by the fact that there is no consistent view of the culture. It is important to note that, overall, there were no cultural themes that were unique to any of the time points (i.e., a particular theme was only applicable to a certain year). This being said, the two cultural themes that came up consistently through the interviews were stability and uncertainty suggesting that: (1) some people perceive that the culture has not changed; (2) some parts of the organization may have changed faster than others; or (3) some parts of the organization have been protected from change. The fact that approximately 20% of those sampled still perceive the organizational culture as stable helps to reinforce the idea that some parts of BC TEL have not yet undergone change.

In the analysis a movement towards a competitively focused culture was identified due to the increasing strength of the customer focused and positioning themes over the 3 time periods (i.e., in 1995 14% of the sample described the culture in this way; in 1996 16% of the sample described the culture in this way; and in 1997 28% of the sample described the culture in this way). The literature has found that a culture which provides a sense of being close to the customer can have a positive effect on, among other things, job satisfaction (Himle *et al.*, 1989), work stress (Babin and Boles, 1996), and organizational commitment (Eisenberger *et al.*, 1986).

Bureaucratic and political decision-making has been found to be a critical factor influencing both culture and resistance to change (Brower and Abolafia, 1995; DeCelles, 1995). The bureaucracy at BC TEL appears to have been partially dismantled (72% indicated that the bureaucracy had decreased) since revolutionary change began but there still appears to be more that can be done. Given that revolutionary change appears to have begun in the early 1990's, BC TEL has 'shifted' the way it operates in a relatively short period of time.

6.3.2 RESISTANCE TO CHANGE

The presence of resistance to change has been found to influence how successful organizational change turns out to be (Conner, 1993; Coghlan, 1994). Respondents were asked whether resistance to change occurred at either the senior management or Board of Director's level. Those who felt resistance had occurred were asked what forms the resistance took and how it had been overcome.

6.3.2.1 RESISTANCE TO CHANGE AT THE SENIOR MANAGEMENT LEVEL

As shown in Table 28, 72% of respondents believed that there was resistance to change at the senior management level while 24% did not believe so. As an employee stated,

Yeah...(they resisted)...quite strongly. They basically gave lip service to competition until they saw the loss in revenue. (Employee)

While the majority of both the executives and employees sampled believed there was resistance to change at the senior management level, an examination of the data suggests that perceptions regarding resistance were significantly associated with job type.

Respondents in the executive sample were more likely than respondents in the employee sample to perceive that resistance to change had occurred (83% versus 65%) while respondents in the employee sample were more likely to indicate that resistance to change had not occurred (30% versus 13%). It would appear that the executives sampled were more likely to identify resistance within the senior management group (i.e. could see it; tangible) while the employees sampled were less likely to do so (hear about it; intangible).

TABLE 28: Resistance to Revolutionary Change – Senior Management

Did senior management resist change?	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
YES	71.8%	82.7%	65.0%
NO	23.9%	13.0%	30.0%
Do Not Know	4.3%	4.3%	5.0%
If YES, How?			
Voiced formally	33.2	46.0	16.3
Covert, quiet	33.2	27.5	48.8
Voiced informally	5.5	9.2	
If YES, Types of Resistance?			
Protecting own part of organization	50.8	68.9	37.9
Neglect other parts of organization	21.0	3.8	27.1
If YES, How Overcome?			
Communication	29.7	43.5	13.0
Pressured to change	27.2	34.8	19.5
Profit based performance	11.7	4.4	13.0
Severance packages (leave company)	9.9	8.7	13.0
Resistance not been overcome	5.0	—	13.0

These data would suggest that a potential gap exists between the top and the bottom of the organization regarding information dissemination. Alternatively, the employees sampled may have been given the impression that “everyone was on board” while the executives sampled were more aware of the reality of resistance to change at senior levels. Under either scenario it appears that issues surrounding communication may explain the job type differences.

Those respondents who believed senior management resisted change were next asked how resistance to change had occurred. As shown in Table 28, respondents indicated resistance to change by senior management was undertaken through either formally voicing concerns (33%) or covert means (33%). An examination of these data would suggest that perceptions regarding how resistance to change at the senior management level occurred are significantly associated with job type.

Respondents in the executive sample were more likely than respondents in the employee sample to perceive that resistance was voiced formally (46% versus 16%) while respondents in the employee sample were more likely to indicate that resistance occurred covertly (49% versus 28%). These data would suggest that resistance may have been taking place at the top levels of the organization where only senior management was present and the executives sampled could observe it. It would appear that the executives sampled viewed resistance as being voiced formally (e.g., in planning sessions) while the employees sampled appear to have learned about resistance at the top from others (i.e., behind “closed doors”). Resistance to change at the senior management level appears to

not have been expressed to the employees sampled; therefore, when the employees sampled found out about resistance, they perceived it as covert.

Those respondents who perceived that senior management resisted change were then asked what types of resistance occurred. As shown in Table 28, the majority of respondents indicated that the main type of resistance exhibited by senior management involved protecting their area of the organization (51%) while a minority of respondents indicated resistance involved neglecting other parts of the organization (21%). Again, an examination of these data suggests that the perception of how change was resisted was significantly associated with job type.

Respondents in the executive sample were more likely than respondents in the employee sample to perceive that senior management resisted by protecting their own area of the organization (69% versus 38%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive resistance through the neglect of other parts of the organization (27% versus 4%). These data would suggest that where one is positioned within the organization may affect perceptions of resistance. The executives sampled may have viewed senior managers passionately protecting their area of the company from change while the employees sampled perceived senior managers neglecting other areas of the organization, perhaps as a means of protecting their own area.

Finally, respondents who believed senior management resisted change were asked how resistance had been overcome. As shown in Table 28, respondents perceived that resistance by senior management had been overcome through: communication (30%), pressure to change (27%), profit based performance (12%), and senior managers leaving the company (10%). Seven percent of respondents indicated that resistance had not yet been overcome. These data would suggest that resistance to change at the senior management level may have been overcome through two quite different strategies: (1) heavy-handed means (pressuring people to change, asking people to leave the company); or, (2) through negotiation (communicating, offering people an incentive to change).

An examination of these data suggests that the perception of how resistance had been overcome was significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that resistance had been overcome through communication (44% versus 13%). These data would again suggest that perceptions of whether resistance had been overcome was based on where one was situated within the organizational hierarchy. While executive respondents believed that communication had helped overcome resistance, employee respondents saw resistance as being overcome through tangible means (e.g., senior managers working towards profit rewards). The following quotations help to summarize perceptions regarding how resistance was overcome, or not overcome, at the senior management level,

It (overcoming resistance) was constant reinforcement that competition needed to be responded to and we could not stick our head in the sand.
(Executive)

We had to agree with competition. It was just a matter of how it would be phased in. Once we made this change in mindset, then we had to get off our butts...It took 2-3 years to get the management team on board. Prior to that, a very significant element believed we had to fight at the regulatory level, not in the marketplace. (Executive)

In a lot of cases managers do not change though. It is expected but it doesn't happen. People are comfortable in their environment. They like the status quo. (Employee)

6.3.2.2 RESISTANCE TO CHANGE AT THE BOARD OF DIRECTORS

Respondents were asked whether they perceived resistance to change within the Board of Directors. An overwhelming 95% of respondents believed that the Board had not resisted change (see Table 29). No significant job type differences were found in these data. Similar percentages of both the executives and employees sampled (approximately 95% of each) held this view. In the interviews the general feeling among the employees sampled was that since they had not heard about instances of resistance to change at the Board level that they must have been accepting of it (i.e., implicit assumptions).

TABLE 29: Resistance to Change by Board of Directors

Did board resist change?	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
No	92.7%	95.3%	94.1%
Yes (divide into 'camps')	4.9%	4.8%	—
Do not know	2.4%	—	5.9%

6.3.2.3 DISCUSSION OF "RESISTANCE TO CHANGE"

As was to be expected during a change of the magnitude experienced by BC TEL, it was perceived that there was resistance to change by senior management but not at the Board of Directors level. This finding is consistent with authors such as Hultman (1979), Kilmann and Covin (1988), and Reger *et al.* (1994) who talk emphatically about the fact

that in the majority of cases that when you have fundamental change you have resistance at the top of the organization.

The findings from this study are consistent with previous research which has shown that revolutionary change may cause senior managers to simply give up and neglect parts of the organization to the detriment of the organization as a whole (Coghlan, 1994; Streat, 1996) or fight vigorously, either formally or covertly, to protect their own area of power (McGill, 1977; Mohrman *et al.*, 1989). The interview data would suggest that some senior management resisted change by shielding areas of BC TEL from revolutionary change while others could have worked for a manager who shielded their department from change. Other senior managers seem to have resisted change by neglecting parts of the organization outside of their own area. These findings are in line with the literature which found fears regarding the erosion of power lead to resistance to change (e.g., Westley, 1990; Tichy and Sherman, 1993). These findings are also consistent with the fact that some respondents viewed the organizational culture as stable (i.e., respondents were in an area where their senior management team resisted change).

What should be of major concern to BC TEL is that 49% of the employees sampled (75% of those who indicated there was resistance to change) believed that senior managers covertly resisted change. Covert resistance can be most damaging to any change effort and the more threatening the change is perceived the more covert the resistance (McGill, 1977; Judson, 1993).

Respondents perceived that BC TEL facilitates change (i.e., decreases resistance) either through communication (talks with, presents information to, resisters) or through the use of pressure tactics to 'convince' senior managers to change. Communication has been discussed in the literature as an effective way to reduce resistance to change and create consensus (e.g., Hall *et al.*, 1993; Shaw and Maletz, 1995). The use of pressure tactics to overcome resistance has been found to lead more to compliance than to acceptance of change (Falbe and Yukl, 1992). The perceived use of such pressure tactics may assist in explaining the covert resistance perceived by the employees to have been undertaken by some senior managers.

6.4 COMMUNICATION OF INFORMATION ON CHANGE

Respondents were asked a series of questions regarding organizational communication during revolutionary change at BC TEL. Questions covering the following issues are reviewed below:

- ♦ who was responsible for the communication of revolutionary change?
- ♦ how was information on revolutionary change communicated?
- ♦ what measures were used to gauge the effectiveness of such communications? and
- ♦ did employees have all the information on change they needed to do their jobs?

6.4.1 RESPONSIBILITY FOR COMMUNICATING REVOLUTIONARY CHANGE

Respondents were asked who they believed was responsible for communicating information on the changes at both the corporate and departmental level. Each of these issues is covered separately below.

6.4.1.1 RESPONSIBILITY FOR CORPORATE COMMUNICATION OF CHANGE

Respondents were asked who they felt was responsible for communicating information on revolutionary change at the corporate level. As shown in Table 30, respondents identified three groups as responsible for corporate communication: a combined effort of the C.E.O. and executive team (31%), the executive team (22%), and the C.E.O. alone (20%). A small percentage of respondents indicated that the Corporate Communications department (10%) was responsible.

TABLE 30: Responsibility for Corporate Communication of Change

Responsibility for corporate communication of change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
C.E.O. & Executive Team	31.4%	34.8%	28.0%
Executive Team only	21.6	21.7	20.0
C.E.O. only	19.6	21.7	16.0
Corporate Communications Dept.	9.8	4.3	16.0
Managers/supervisors	5.9	8.7	4.0
No one	3.9	8.7	—
Human Resources Dept.	2.0	—	4.0
Do not know	2.0	—	4.0

It appears that, while corporate communication of information on change was perceived to be the responsibility of executives (over 70% of respondents perceived that responsibility was with some group at the executive level), there was no consensus on who within this group was ultimately responsible for this type of communication. These data would suggest that responsibility for corporate communication of change is not well delineated or understood at BC TEL. This lack of clarity could lead to problems in information dissemination. As an employee stated,

It (communication) has to filter down. Sometimes this is two years too late! In the past we did not hear about changes until long after they have happened. (Employee)

No significant job type differences were found in these data. This is an important finding as it suggests that even though both the executives and employees sampled perceived that executives were in charge of communicating information on change, even the executives sampled were unclear over who within this category was responsible. This suggests the possibility of poor communication within the executive level of the organization regarding this responsibility. This also suggests that, at times, corporate information on change may not have been delivered because everyone was waiting for someone else to do it (i.e., it is someone else's responsibility).

6.4.1.2 RESPONSIBILITY FOR DEPARTMENTAL COMMUNICATION OF CHANGE

Respondents were asked who they perceived was responsible for communicating information on revolutionary change at the departmental level. As shown in Table 31, respondents perceived managers and supervisors (46%), departmental executives (24%), and "everyone" (13%) to be responsible for departmental communication of change. The sentiment that departmental communication of change is the responsibility of "everyone" was based on the notion that whoever receives information is responsible to immediately disseminate it. This is consistent with the notion of a competitive organizational culture whereby, in order to stay ahead of the competition, everyone needs to know what is going on in real time. No significant job type differences were found in these data.

TABLE 31: Responsibility for Departmental Communication of Change

Responsibility for departmental communication of change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Managers / Supervisors	45.7%	40.0%	54.2%
Department Executives Only	23.9	30.0	20.8
Everyone	13.0	20.0	8.3
C.E.O. only	6.5	—	4.2
Corporate Communications Dept.	4.3	—	8.3
Human Resources Dept.	2.2	—	4.2
No one	2.2	5.0	—

6.4.1.3 CORPORATE VERSUS DEPARTMENTAL RESPONSIBILITY FOR COMMUNICATING

A comparison of Tables 21 and 22 revealed that respondents perceived managers and supervisors, the C.E.O., the Corporate Communication Department, and the Human Resources Department as being responsible for both corporate and departmental communication of change. The C.E.O. and the C.E.O. and Executive team were deemed to only be responsible for corporate communication of information on change while departmental executives and “everyone” were found to only be responsible for departmental communication. It appears that there was less uncertainty over who was responsible for communicating change at the departmental level. This may be indicative of better communication at the departmental level than at the corporate level or, in the case of the employees sampled, a greater ability to observe who was communicating this sort of information.

Respondents were more likely to perceive that managers and supervisors were responsible for communicating change at the departmental level (46% versus 6%) and that the C.E.O. was responsible for communicating change at the corporate level (20% versus 7%). Respondents from both the executive (40% versus 9%) and employee

samples (54% versus 4%) were more likely to perceive that managers and supervisors were responsible for communicating change at the departmental level and that the C.E.O. was responsible for communicating change at the corporate level. These data would suggest that managers and supervisors have a significantly more critical role in departmental communication of change while the C.E.O. has a significantly more critical role in corporate communication of change. These findings are consistent with the historical analysis based on corporate documents which suggested that the top of the organization set the direction for revolutionary change but individual departments were responsible for their own change processes.

6.4.2 METHODS USED TO COMMUNICATE INFORMATION ON CHANGE

Organizations have many methods of communication at their disposal. Respondents were asked to identify the primary means used to communicate information on the changes occurring at BC TEL (i.e., by what means were respondents receiving information on change). Respondents identified a total of seven vehicles through which they were receiving corporate and departmental information on change. The next section reviews these findings.

6.4.2.1 METHODS TO COMMUNICATE CORPORATE INFORMATION ON CHANGE

Respondents were asked to identify the main methods used to communicate corporate information on change. As shown in Table 32, the primary communication vehicles at the corporate level were identified as being videos and large meetings (65%), voicemail (49%), bulletins and memos (41%), electronic media (29%), internal broadcasts such as StraighTalk (22%), face-to-face communication through managers and supervisors

(14%), and the grapevine (14%). These data indicate that BC TEL is using a number of different methods to communicate corporate information on change.

TABLE 32: Methods Used to Communicate Corporate Information on Change

Methods to communicate corporate change	OVERALL	EXECUTIVES	EMPLOYEES
Video/large meetings	64.7%	78.3%	48.0%
Voicemail	49.0	43.5	60.0
Bulletins/Memos	41.2	34.8	52.0
Electronic Media (Intranet)	29.4	17.4	44.0
Internal 'newscasts'	21.5	30.4	16.0
Face-to-face: Manager/Supervisor	13.7	26.1	4.0
Grapevine	13.7	4.3	24.0

Despite the apparent wide use of the video and large meetings communication vehicle, there was general disdain expressed with its continued use. As respondents stated,

It (video address) is like the U.S. President's fireside speech!! This is supposed to do it, but it is not enough. (Employee)

Videoconferences and bulletins communicate understanding. Effective in getting commitment to act, no. But that is a one-on-one thing with the direct supervisor. We are not doing a good job of getting our front-line supervisors equipped to handle this. (Executive)

People want more than the facts, they want to know what the hell is going on. To the extent that I know, I have to sit down and talk to them...The best way is to go into the field and kick tires with people...They want to know about the subtle changes affecting them. (Executive)

A number of people feel the company is holding back on where the company is going...It is a lot fuzzier than I would like. . . We have to find a way to make people more comfortable even if it is that fuzzy. In fairness to our executives, they have tried to do more videoconferences to get the information out there. We have to find a better way to do that. (Employee)

An examination of these data suggests that the perception of the methods used to communicate corporate change information were significantly associated with job type. Respondents in the executive and employee samples had significantly different perceptions of the use of all the methods identified by respondents. Respondents in the executive sample were more likely than respondents in the employee sample to indicate the use of videos and large meetings (78% versus 48%), internal 'newscasts' (30% versus 16%), and face to face communications by managers and supervisors (26% versus 4%) to communicate corporate information on change. On the other hand, respondents in the employee sample were more likely than respondents in the executive sample to indicate voicemail (60% versus 44%), bulletins and memos (52% versus 35%), electronic media (44% versus 17%), and the grapevine (24% versus 4%). The use of the grapevine may indicate that 'formal' corporate communication of change was not being done effectively causing 'informal' channels to appear. As an employee stated,

There is very little corporate information being passed down to us. We get information at team meetings but there are no other sources. (Our group) is not highly thought of. There is very much a feeling of isolation here. Company information is nearly non-existent. The grapevine is the primary mode to get information. (Employee)

During the interviews both the executives and employees sampled discussed the importance of face-to-face communication and having to work harder at promoting this form of communication. It was felt that this area of communication was not being used effectively at the corporate level and that it may require a cultural change in order for it to be accomplished. As respondents stated,

In the 1970's if I marched in to talk to a superior and told him I didn't like the way he (or she) was operating things the first thing he (or she) would have said would have been "what the hell are you doing in my office?" Secondly, "who cares what you think, GET OUT!" We spend a whole lot of time communicating. (Executive)

How can I bond to a piece of paper or a voice? I might follow a voicemail more than an email. True change comes from my working and dealing with you one-on-one. (Employee)

6.4.2.2 METHODS TO COMMUNICATE DEPARTMENTAL INFORMATION ON CHANGE

Respondents were asked to identify the main methods used to communicate departmental information on change. As shown in Table 33, at the departmental level the primary communication vehicles identified were: videos and large meetings (60%), voicemail (43%), bulletins and memos (39%), electronic media (31%), and face-to-face communication through managers and supervisors (24%). Similar to what was found at the corporate level, departments were found to have used a number of different communication vehicles to reach their members.

TABLE 33: Methods Used to Communicate Departmental Change

Methods to communicate departmental change	OVERALL	EXECUTIVES	EMPLOYEES
Video/large meetings	59.5%	52.6%	63.6%
Voicemail	42.9	31.6	54.5
Bulletins/memos	39.1	36.8	40.9
Electronic Media (Intranet)	31.0	36.8	27.3
Face-to-face: Manager/Supervisor	23.8	31.6	18.2
Grapevine	4.8	—	9.1
Internal 'newscasts'	4.8	—	9.1
None gets through	4.8	5.3	4.5

Only one job type difference was found in these data: respondents in the employee sample were more likely than respondents in the executive sample to perceive that

departmental information on change was being communicated through voicemail (55% versus 32%). These data would suggest that the executives and employees sampled had more consistent perceptions of the methods used to communicate information on change at the departmental level than at the corporate level. The fact that respondents at the departmental level were less likely to mention that information was being communicated using the grapevine may reflect the fact that there was more effective use of formal communication channels at the departmental level and that information was reaching respondents. This is consistent with the fact that there was more agreement on who was responsible for communication of information on departmental change.

6.4.2.3 CORPORATE VERSUS DEPARTMENTAL METHODS TO COMMUNICATE CHANGE

A comparison of Tables 23 and 24 revealed that respondents provided nearly identical explanations of the methods used to communicate both corporate and departmental information on change. Respondents identified the use of videos and large meetings, voicemail, bulletins and memos, electronic media, and face-to-face communication through managers and supervisors for both corporate and departmental communication of change. Overall, significantly more respondents mentioned the use of internal 'newscasts' at the corporate level than at the departmental level (22% versus 5%). These data would suggest that the information communicated using this method was more general, or global, in nature and did not address specific departmental change issues.

The executives sampled were more likely than the employees sampled to mention the use of videos and large meetings (78% versus 53%) and internal 'newscasts' (30% versus 0%) for use in communicating corporate change information and the use of electronic

media for use in communicating departmental information (37% versus 17%). In contrast, the employees sampled were more likely to mention the use of electronic media for use in communicating corporate change information (44% versus 27%) and the use of videos and large meetings for communicating departmental information (64% versus 48%). These data would suggest that the executives and employees sampled have different perceptions of the methods used to communicate information on change based on a corporate versus departmental analysis. As such, the effectiveness of change communication is drawn into question. These data may also suggest that the executives sampled based their responses on what they themselves used while the employees sampled based their responses on how information was delivered to them.

6.4.3 MEASURING THE EFFECTIVENESS OF CHANGE COMMUNICATION

While organizations state that they understand that the key to better performance in a change program is communication, organizational members are skeptical about an organization's ability to communicate effectively during times of change (Argyris, 1994). This section looks at how the effectiveness of corporate and departmental change communication was measured at BC TEL.

6.4.3.1 MEASURING THE EFFECTIVENESS OF CORPORATE CHANGE COMMUNICATION

Respondents were asked if the effectiveness of corporate change communication was measured during the change process. As shown in Table 34, respondent opinions were divided on this issue. Fifty-four percent of respondents believed that no assessment of effectiveness had been undertaken while 46% believed that it had been measured.

TABLE 34: Measurement of Corporate Change Communication Effectiveness

Was corporate communication measured	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
NO, not being measured	54.2%	34.8%	69.6%
YES, being measured	46.8%	65.2%	29.4%
♦ PulseCheck	21.3	30.4	12.6
♦ Survey (not PulseCheck)	12.8	17.4	8.4
♦ Informally	12.8	17.4	8.4

An examination of these data suggests that perceptions regarding whether or not the effectiveness of corporate communication had been measured were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to believe that the effectiveness of corporate change communication had been measured (65% versus 29%) while respondents in the employee sample were more likely to believe that it had not been measured (70% versus 35%). These data would suggest that if the effectiveness of corporate change communication had been measured such information may not have been communicated to employees. As respondents stated,

I am not aware of it (being measured). This bothers me. You put a note on the fridge door. You know the message is there but do you understand why? This part is missing. We need to test for knowledge. (Employee)

I think we anticipate that because we are in the communications business everyone is getting the message. They are not. It is amazing when you get out there and find out what employees think is going on. (Executive)

Those who perceived that the effectiveness of corporate communication was measured were then asked how this was done. Forty-six percent of this group (21% percent of the sample) believed that it was measured through PulseCheck (corporate climate survey).

27% (13% of the sample) believed that it was being measured through surveys other than PulseCheck, and 27% (13% of the sample) believed that measurement was done informally. Respondents in the executive sample were more likely than respondents in the employee sample to indicate that the PulseCheck was used to measure the effectiveness of corporate communication (30% versus 13%).

When respondents were asked to name a survey, other than PulseCheck, that measured communication effectiveness no one was able to. Respondents, however, insisted that such surveys did exist. These data (40% identified that it had not been measured, 34% indicated that it had been measured informally) would suggest that measuring the effectiveness of corporate change communication was not a priority. In fact, during the interviews it was observed that there was a general feeling among the executives sampled that they 'intuitively knew' the effectiveness of corporate communication and thus formal measurement was not really required.

6.4.3.2 MEASURING THE EFFECTIVENESS OF DEPARTMENTAL CHANGE COMMUNICATION

Respondents were also asked if the effectiveness of departmental change communication was measured during the change process. Responses were very similar to those with regard to corporate change communication. As shown in Table 35, 59% of respondents indicated that the effectiveness of departmental communication was measured while 41% believed that it was not. An examination of these data suggests that perceptions regarding the measurement of the effectiveness of departmental change information were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that effectiveness was being

measured (79% versus 35%) while respondents in the employee sample were more likely than respondents in the executive sample to perceive that it was not being measured (65% versus 21%).

TABLE 35: Measurement of Departmental Change Communication Effectiveness

Was departmental communication measured	OVERALL	EXECUTIVES	EMPLOYEES
YES, being measured:	59.1%	79.2%	35.0%
♦ Informally	34.1	41.7	25.0
♦ PulseCheck	13.7	20.8	5.0
♦ Survey (not PulseCheck)	6.8	8.3	5.0
♦ Focus Groups	4.6	8.3	—
NO, not being measured:	40.9%	20.8%	65.0%

Those who perceived that the effectiveness of departmental communication was being measured were asked how it was being measured. Fifty-eight percent of respondents (34% of the sample) believed that measurement was done on an informal basis and 23% (14% of the sample) believed that it was done through PulseCheck. Respondents in the employee sample were more likely than respondents in the executive sample to perceive that measurement was done on an informal basis (42% versus 25%). These data would suggest that the effectiveness of departmental communication was not measured in a structured way. As such, the overall importance the organization and the departments placed on their communication efforts during change must also be questioned.

6.4.3.3 CORPORATE VERSUS DEPARTMENTAL MEASUREMENT OF COMMUNICATION

The findings regarding the measurement of communication at both the corporate and departmental levels are consistent with other observations on the communication of change (i.e., no consensus on who has responsibility for communicating; therefore, no

consensus on who should measure its effectiveness and how). Respondents in the executive sample who believed that the effectiveness of communication was being measured were more likely to perceive it was being measured at the departmental level than at the corporate level (79% versus 65%). Those executives sampled who did not believe that effectiveness was being measured were more likely to perceive it was not being measured at the corporate level than at the departmental level (35% versus 21%). No significant differences were found within the employee sample probably due to the small number who believed effectiveness was being measured. In addition, there were no significant differences identified between the corporate and departmental levels regarding how the effectiveness of communication was measured. Overall, these findings would suggest that little had been done to rigorously understand how effective the communication of change information was within the company or departments.

6.4.4 RECEIVING NECESSARY CHANGE INFORMATION

Communication on change initiatives may occur within an organization but it may not have the desired effect if it is not the information an individual needs to do their job (e.g., Snyder and Morris, 1984). To determine if this was the case at BC TEL, respondents were asked (both executives and employees) whether they felt employees were receiving all the information necessary on change to do their jobs from both the company and their department.

6.4.4.1 RECEIVING NECESSARY CORPORATE CHANGE INFORMATION

As shown in Table 36, 53% of respondents believed that employees were not receiving all the corporate information on change they needed to do their jobs while 47% of

respondents believed they were. No significant job type differences were observed in these data.

TABLE 36: Employees Receiving All Corporate Change Information Needed

Receiving corporate information needed	OVERALL	EXECUTIVES	EMPLOYEES
Total NO	53.0%	60.8%	48.0%
♦ No: not enough on business	22.4	39.1	8.0
♦ No: but know where to get if need	16.3	8.7	24.0
♦ No	14.3	13.0	16.0
Total YES	46.9%	39.1%	52.0%
♦ Yes	24.5	13.0	32.0
♦ Yes: too much to process	22.4	26.1	20.0

Of the 53% of respondents who did not feel employees were receiving all the corporate information necessary on change, 42% (22% of the sample) felt they were not getting enough information regarding the business while 31% (16% of the sample) believed that although they were not receiving such information they knew where to get such information if needed. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that they did not get enough information on the business (64% versus 17% of those who said 'no' or 39% and 8% of the respective total samples). Respondents in the employee sample were more likely than respondents in the executive sample to believe they knew where to get corporate information on change if they needed it (50% versus 14% of those who said 'no' or 24% and 8% of the respective total samples). These data should be of concern given that 60% of executives, whose responsibility it should be to ensure information is passed down through the hierarchy, perceive that their employees are not receiving all the information necessary to do their jobs.

The following quotations support the idea that corporate information may not be reaching employees:

We had to do a better job of explaining where this was all going...All people want to know is how it affects me. At the end of the day will I have a job? Will I be staying in this town? In theory the answer was "it depends"...It is so damn important how you set the stage. Where are the areas of your interest? What would you like to see discussed? I would go through the areas of interest. I found that to be an effective way. I would try and blend what they wanted, or were looking for, with the message that I needed to deliver. (Executive)

While I am on (maternity) leave the only information I get is whatever that is addressed as "confidential" to me. I am getting union newsletters but nothing directly from the company. (Employee)

They (employees) have enough information particularly as it relates to the organization. Not sure if they get enough information as it relates to them. (Executive)

Of the 47% of respondents who believed that employees were receiving all the corporate information on change necessary, 48% (22% of the sample) indicated that, while employees received the information, it was too much to process. Both the executives and employees sampled expressed concern regarding the amount of information being 'too much to process' and having to 'weed' change information out from general communications. As well, both groups expressed concern over the company not 'personalizing' the change message in such a way that employees could easily understand the implications to them.

6.4.4.2 RECEIVING NECESSARY DEPARTMENTAL CHANGE INFORMATION

Respondents were asked whether or not they believed employees were receiving all the information necessary regarding departmental change initiatives. As shown in Table 37,

nearly two-thirds of respondents believed employees were receiving all the information on change necessary to do their jobs while one-third did not (see Table 37). Perceptions regarding whether or not employees were receiving all the departmental information necessary were found to be significantly associated with job type.

TABLE 37: Employees Receiving All Departmental Information Needed

Receiving all departmental information needed	OVERALL	EXECUTIVES	EMPLOYEES
Total YES	65.9%	47.4%	81.8%
♦ Yes	41.5	26.3	54.5
♦ Yes: but too much to process	24.4	21.1	27.3
Total NO	34.2%	52.7%	18.1%

Respondents in the employee sample were more likely than respondents in the executive sample to believe that they were getting all the departmental information on change that was necessary to do their jobs (82% versus 47%). Respondents in the executive sample were more likely than respondents in the employee sample to believe employees were not getting the necessary information (53% versus 18%).

The question must be asked, "how can employees have all the information necessary to do their jobs if those who are in charge of passing the information down do not believe they are receiving it?" It may be that, unbeknownst to employees, executives may not be providing them with all the information they need regarding departmental change. It is also possible that executives may have been purposely holding back corporate or departmental information on change that is relevant to employees or that the employees sampled are simply unaware of what they do not know.

6.4.4.3 RECEIVING NECESSARY INFORMATION—CORPORATE VERSUS DEPARTMENTAL

A comparison of Tables 27 and 28 revealed that respondents who believed that employees were receiving all the information on change necessary to do their job were more likely to perceive that it was being accomplished at the departmental level as opposed to the corporate level (66% versus 47%). Those respondents who did not believe employees were receiving all the information on change necessary to do their job were more likely to perceive that it was not being accomplished at the corporate level as opposed to the departmental level (53% versus 34%).

When it comes to receiving all the information necessary to do their jobs the employees sampled were more likely to indicate that they were receiving all the departmental information than corporate information (82% versus 53%). Similarly, the employees sampled were more likely to indicate that they were not receiving all the corporate than the departmental information necessary (48% versus 18%).

6.4.5 DISCUSSION OF “COMMUNICATION OF INFORMATION ON CHANGE”

There appears to be general agreement among respondents that the executive level of the organization was responsible for corporate communication of change and that managers (supervisors) and departmental executives were responsible for departmental communication. Although it is encouraging to find that respondents could identify someone as being responsible for communicating change information, it is disconcerting to learn that there appears to be up to seven individuals or sub-groups that respondents perceive as having this responsibility. Even within the executive sample there was disagreement over who was ultimately responsible for communicating change

information. These findings suggest that change information may not have been disseminated because everyone considered this task as the responsibility of someone else.

Where many groups are involved in communicating change there is a greater opportunity for information to be lost, duplicated, or not transmitted (i.e., it was someone else's responsibility) (Sinetar, 1988). Under such circumstances a well-managed communications program should be in place. The data would suggest that this was not the case at BC TEL. BC TEL appears to be doing a poor job of communicating who is in charge of change and, perhaps by extension, a poor job of communicating in general. It has been found that poor, or conflicting, communication may be a prime cause of failure in change initiatives (Smeltzer, 1991; Hall *et al.*, 1993).

The methods used to communicate information at both the corporate and departmental level are varied. Respondents identified up to seven methods through which change information may be passed on throughout the organization. Respondents also noted that the amount of information provided can be overwhelming and may put pressure on those receiving it to keep up-to-date with the various methods being used in order to stay current. Such pressure is contrary to the research literature which suggests that communication must not overwhelm the receiver or else the original message being conveyed may be lost (Smeltzer, 1991; Larkin and Larkin, 1994).

BC TEL appears to use video and large meetings as a primary method to communicate both corporate and departmental information. This seems to have occurred despite the

fact that those interviewed preferred face-to-face communication. During turbulent times the use of rich communication sources is highly recommended by many authors (e.g., Shaw and Maletz, 1995; Richardson and Denton, 1996). Larkin and Larkin (1994), for example, identify face-to-face communication as being preferred 2.5 times more than video or other audio-visual media. The problems with video and large meetings to communicate change information are well documented (e.g., tend to include the use of senior managers instead of supervisors; do not address specific issues related to work areas) (e.g., Bush and Frohman, 1991).

The executives and employees sampled appear to have different perceptions regarding whether BC TEL measured the effectiveness of change communications. In short, most of the executives sampled believed such measurement was being undertaken while most of the employees sampled did not. The data tends to support the views of the employees sampled given the informal nature of the methods respondents cited as being used to measure the effectiveness of communication. These findings should be of concern given that there are many formalized methodologies available to measure the effectiveness of communication (e.g., Glauser, 1984). Organizations such as BC TEL spend many thousands of dollars determining the effectiveness of advertising campaigns (Wright *et al.*, 1984); to measure the effectiveness of internal communication in an ad hoc manner during times of revolutionary change is questionable.

It was surprising to find a divergence in thinking between the executives and employees sampled with regard to whether employees were receiving all the information on change

necessary to do their jobs. The employees sampled were equally divided regarding whether they were receiving all the corporate information on change but were adamant that they were receiving all the departmental information needed. It was surprising to find that the majority of the executives sampled perceived that employees were not getting all the information needed regarding both corporate and, especially, departmental change. The perceived use of the grapevine by 24% of the employees sampled suggests that employees were seeking such information (Noon and Delbridge, 1993).

The literature indicates that employees should have access to all information regarding change. To be most effective, change communication requires full and complete disclosure on as personal a level as possible (Kotter and Schlesinger, 1979; Snyder and Morris, 1984; Richardson and Denton, 1996). It appears that at BC TEL, 'ignorance is bliss' as it relates to employee's perceptions of receiving all the necessary information to do their jobs.

6.5 THE PROCESS OF CHANGE

During the interviews an emphasis was placed on the process of change followed at BC TEL. This portion of the interview attempted to gain a better understanding of the transition process used by the company in their move from a regulated (monopoly) to a deregulated (competitive) marketplace. Questions covering the following issues are reviewed below:

- ♦ who at BC TEL was perceived to be in charge of the change process?
- ♦ was there a formal process of change at BC TEL (and, if there was a process, what was it)?
- ♦ were there objectives (goals) in the change process and were they measured?
- ♦ do respondents feel the company is now at a competitive advantage due to change?
- ♦ who had input into the change process? and
- ♦ were any departments not touched by revolutionary change?

6.5.1 RESPONSIBILITY FOR CHANGE

Responsibility for changing an organization can be an overwhelming undertaking (Manganelli and Klein, 1994). Responsibility may also result in multiple stakeholders seeking to guide the change process. This part of the interview sought to determine who, at both the corporate and departmental levels, was perceived to be responsible for change.

6.5.1.1 CORPORATE RESPONSIBILITY FOR CHANGE

Respondents were asked who they believed was responsible for guiding the corporate change process at BC TEL. As shown in Table 38, respondents believed that the C.E.O. (42%), a combination of the C.E.O. and senior executives (26%), the senior executives (26%), or the Board of Directors (13%) were ultimately responsible for corporate change. The top three responses, which correspond to the senior executive level of the organization, were mentioned by 94% of respondents. This was the same group that was perceived to be responsible for communicating information on change. Only 6% of respondents could not identify someone (or some group) that they perceived to be ultimately responsible for change at BC TEL.

TABLE 38: Responsibility for Corporate Change

Who was responsible for corporate change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
C.E.O. only	41.5%	44.0%	36.0%
C.E.O. & Senior Executives	26.4	36.0	20.0
Senior Executives only	26.4	20.0	36.0
Board of Directors	13.2	8.0	16.0
Combination of departments	5.7	8.0	4.0
Key managers	5.7	4.0	8.0
No one / Unsure	5.7	4.0	8.0
G.T.E.	3.8	—	8.0
Human Resources	3.8	8.0	—
C.R.T.C.	1.9	—	4.0

An examination of these data suggests that perceptions regarding responsibility for corporate change are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that the C.E.O. in combination with the senior executives were responsible for corporate change (36% versus 20%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that only the senior executives were responsible (36% versus 20%). These data would indicate that while respondents do agree that responsibility for change was centred at the senior executive level of the organization, there was not a clear understanding amongst the executives sampled as to who was ultimately responsible for corporate change.

6.5.1.2 DEPARTMENTAL RESPONSIBILITY FOR CHANGE

Respondents were asked who they believed was responsible for the departmental change process. As shown in Table 39, the majority of respondents believed that departmental executives were responsible for guiding departmental change (61%). There was also a perception on the part of some respondents that employees (22%) and/or managers and

supervisors (16%) were responsible for change at the departmental level. It is interesting to note that 13% of respondents did not know who was responsible for departmental change or indicated that no one was responsible. It appears that when it comes to departmental responsibility for change, departmental executives are seen to be the ones primarily responsible with employees and managers (supervisors) being seen by some as having a role.

TABLE 39: Responsibility for Departmental Change

Responsibility for departmental change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Dept. executives/ general managers	61.0%	78.2%	22.7%
Department employees	22.2	17.4	27.3
Managers/ supervisors	15.6	—	31.8
No one/ unsure	13.3	4.3	22.7
C.E.O. & Senior Executives	8.6	9.0	8.8
Customers	6.6	4.3	9.0

It is also interesting to note the lack of perceived responsibility the C.E.O. has for departmental change. This is consistent with the historical analysis of documents which found that departmental executives had responsibility for departmental change. As an executive stated,

On issues such as cultural change, he (the C.E.O.) lets us (department) get on with it. Bit of risk-taking. (Executive)

An examination of these data suggests that perceptions regarding responsibility for departmental change are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive

that departmental executives were responsible for departmental change (78% versus 23%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that managers and supervisors were responsible for departmental change (32% versus 0%) or indicate that they were unsure who was responsible (23% versus 4%). This second finding is cause for concern. If no one is seen as being responsible for change many questions may arise (who gets blamed when things go wrong? Who is seen as the prime motivator for change to occur? Who does one trust?). The inability to answer such fundamental questions may lead to extreme confusion, uncertainty, and resistance to change.

The data has shown that at the departmental level the employees sampled were more apt to believe that their managers and supervisors had responsibility for change whereas the executives sampled believed that they themselves were responsible. This difference in perceptions may lead to clashes over which group receives 'credit' when change goes well and which group can 'distance' themselves when change goes poorly. As well, these data would suggest that in some departments executives did a good job in 'downloading' responsibility for change to front-line personnel while in other departments this does not appear to have occurred.

6.5.1.3 CORPORATE VERSUS DEPARTMENTAL RESPONSIBILITY FOR CHANGE

A comparison of Tables 29 and 30 revealed that the combination of the C.E.O. and senior executives were the only group identified as having responsibility for change at both the corporate or departmental levels. Respondents were more likely to perceive this group as responsible for corporate rather than departmental change (26% versus 9%). The

executives sampled were more likely to perceive the C.E.O. and the senior executives as responsible for corporate, rather than departmental, change (36% versus 9%).

These data would suggest that, overall, no one group or individual was perceived to control both corporate and departmental change. These data also suggest that ultimate responsibility for revolutionary change at either the corporate or departmental level is unclear. This leaves open the opportunity for miscommunication, confusion, and resistance to change. This may explain some of the discrepancies with respect to the perceptions of the organizational culture discussed earlier.

6.5.2 PROCESS OF CHANGE

No matter who is perceived to be responsible for change, planning the process of organizational change can overwhelm an organization (Goodstein and Burke, 1991). This part of the interview sought to determine if there was a distinguishable series of steps to guide the change process at BC TEL and whether the steps themselves 'changed' as the process progressed.

6.5.2.1 WAS THERE A FORMAL PROCESS OF CORPORATE CHANGE?

Respondents were asked whether they believed there was a formal process in place to guide change at the corporate level. Forty-percent of respondents believed there was a formal process in place while 37% believed there was a vague or ad hoc plan in place and 6% were uncertain (see Table 40).

TABLE 40: Was There a Formal Process of Corporate Change?

Formal process to guide corporate change?	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Total YES Formal (Strategic Renewal)	40.4%	64.0%	20.0%
Sort of Vague (ad hoc) plan	36.5%	16.0%	56.0%
Total NO	16.3%	16.0%	16.0%
♦ No	13.5	16.0	8.0
♦ No: Just good people/lucky	3.8	—	8.0
Unsure	5.8%	4.0%	8.0%
If a formal or ad hoc 'process', did it change			
Total YES	59.6%	72.8%	45.6%
♦ Yes: changed as conditions changed	34.6	44.5	22.8
♦ Yes: continually	25.0	28.3	22.8
Unsure	13.9%	4.1%	22.8%
Total NO	3.8%	—	7.6%

The 37% of respondents who indicated that there was a vague or ad hoc 'process' in place (i.e., no formal process but general ideas and goals of how the company changed which were implemented with little warning) believed that the company primarily reacted to external events. Four percent of respondents indicated that the company had "just been lucky" and that there were good people in place to offset the lack of a formal planning process.

An examination of these data suggests that perceptions regarding whether there was a formal or ad hoc process of change are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that there was a formal process for change (64% versus 20%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that an ad hoc process was used (56% versus 16%). These differences

may be due to the fact that formal processes were developed by those at the top of the organization and were inadequately communicated to those lower down. As employees stated,

I haven't seen a plan. I hope that there is one!! I have a gut feel that it is pretty disorganized. (Employee)

It (change) just kind of happens!! (Employee)

Given that executives were generally identified as responsible for change, it is surprising to find a large discrepancy within the executive sample regarding the formal process of change. As one executive stated, however,

And the sky clears and the sun shines!! No. I don't want to imply there wasn't a process. It was sure as hell not done by the book. We spent virtually no time in flow charting what we would do. (Executive)

These data would suggest that the majority of executives sampled believed there was a formal process to guide corporate change (e.g., Strategic Renewal) while the employees sampled believed that no formal process existed. The discrepancy within the executive sample as to whether there was a process to guide corporate change may be linked to uncertainty over who was responsible for change. This would suggest that some of the executives sampled may have perceived that 'someone else' within the organization was responsible for the formal process to guide corporate change and they could not identify it because they were 'out of the loop'.

The discrepancy between the executives and employees sample may be linked to the poor communication between the “top” and “bottom” of the organization discussed earlier. The uncertainty over responsibility for revolutionary change is consistent with the uncertainty discussed regarding responsibility for communicating information on change. This consistency may help in explaining the significant use of the grapevine by the employees sampled to find out corporate change information.

6.5.2.2 DID THE CORPORATE PLAN CHANGE AT ANY TIME?

Three quarters of the sample (those respondents who believed there was a formal process in place to guide corporate change (40%), or believed there was an ad hoc change process (37%) were asked if they thought the process had changed at any time. As shown in Table 40, 78% of these respondents (60% of total sample) indicated that the process did change while 23% of these respondents (18% of total sample) indicated either that it did not change or that they were uncertain if it had changed.

An examination of these data suggests that perceptions regarding whether the corporate process changed at any time were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that the process changed (73% versus 46%). Respondents in the employee sample were more likely than respondents in the executive sample to be “unsure” as to what happened (23% versus 4%). These data appear to confirm a lack of communication between executives and employees regarding the process of corporate change.

Almost 35% of respondents indicated that the process changed as conditions changed while 25% perceived the process as changing continually. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that the process changed as the company learned from changing external conditions (45% versus 23%). These data would suggest that the process of change, however vague, was not static. As one executive stated,

Nobody ever said five years in advance here is the way it is going to happen. There were always changes as we moved along . . . It was never static. (Executive)

6.5.2.3 REEXAMINATION OF WHEN CHANGE BEGAN

From the historical analysis presented in Chapter 5, the researcher was led to believe that the Strategic Renewal initiative specifically related to the 1991/1992 revolutionary change process. After transcribing the interviews, however, the researcher noticed that respondents appeared to be using the term "Strategic Renewal" to describe other structural changes as well. This prompted the researcher to perform a cross-tabulation comparing when respondents believed change began (data in Table 17) to their description of the revolutionary change process (data in Table 40). This analysis enabled the researcher to link the respondent's perceptions of when change began to the process used to guide change. The results of this cross-tabulation are presented in Table 41.

TABLE 41: Year Change Began BY Plan for Change²

	Sort of: Vague Plan	No Plan, "Lucky"	Yes: Strategic Renewal Program
1979	—	—	2.0
1981	2.0	—	4.1
1982	4.1	4.1	6.1
1983	4.1	4.1	6.1
1984	2.0	—	—
1985	2.0	—	2.0
1986	2.0	4.1	—
1987	8.2	2.0	—
1988	2.0	—	—
1989	2.0	—	—
1990	2.0	—	—
1991	4.1	—	14.3
1992	2.0	—	2.0
1993	2.0	—	4.1
1994	—	2.0	—
1995	2.0	—	—
1996	2.0	—	—
% total sample	42.5%	16.3%	40.7%

² Only respondents providing both pieces of information were included in this analysis (n=49).

Table 41 shows that respondents used the terminology "Strategic Renewal" to apply both to the 1992 structural change and the 1982 Area General Manager structure (also known as the McKinsey Plan). A further segmentation based on job type revealed that the executives sampled were more inclined than the employees sampled to use the term 'Strategic Renewal' when they should have used the term A.G.M. (see Appendix G).

The executives sampled, who stated that the process of change was best explained through Strategic Renewal, were divided into two distinct groups: 53% who perceived that it began between 1981 and 1983 (1981-1983 represented the introduction of the A.G.M. structure) and 33% who believed it began in 1991. The remaining 13% were

equally divided between the years 1979 and 1993. The number of employees sampled who chose Strategic Renewal was too small for any analysis to be conducted.

A review of responses from those who felt there was a vague, ad hoc, process clearly shows 'confusion' over when change began (i.e., spread out over a long period of time). This is consistent with their explanation of the change process as being vague and is uniform across both the executive and employee samples. These findings further suggest the possibility of a lack of communication within the organization.

6.5.2.4 WAS THERE A FORMAL PROCESS OF DEPARTMENTAL CHANGE

To further understand the process of revolutionary change at BC TEL, respondents were asked whether there was a process in place to guide departmental change. Fifty-five percent of respondents indicated that there was a vague or ad hoc plan in place while 39% believed that formal processes existed (see Table 42). The vague plan revolved around things such as goals to be achieved, reactions to the marketplace, and reacting to mandates handed down from BC TEL.

An examination of these data suggests that perceptions regarding a formal process of departmental change are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that departmental strategic plans were used to guide the departmental change process (55% versus 28%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that the process of change was vague and ad hoc (60% versus 45%). These data would suggest that if there were formal processes

for departmental change the communication of those processes throughout the departments was not well done or that processes existed in some departments but not others.

TABLE 42: Was There a Formal Process of Departmental Change?

Formal, departmental process for change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Sort of Vague (ad hoc) plan	55.0%	45.4%	60.0%
YES: Formal dept. strategic process	38.8%	54.5%	28.0%
UNSURE	6.1%	—	12.0%
If a formal or ad hoc process as indicated above, did it change			
Total YES	63.6%	93.8%	35.2%
♦ Yes: reacted to human aspects of change	39.4	62.5	17.6
♦ Yes:	24.3	31.3	17.6
Total UNSURE	27.3%	6.3%	34.7%
Total NO	3.0%	—	5.9%

Sixty-four percent of respondents perceived that the processes changed while 27% were 'unsure'. In other words, the majority of respondents perceived that departmental change processes were subject to change. An examination of these data suggests that perceptions regarding whether the formal or ad hoc departmental process plans changed are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that changes to the process occurred (94% versus 35%). Respondents in the employee sample were more likely than respondents in the executive sample to be 'unsure' at to whether changes occurred (35% versus 6%). These data would suggest that employees may have been poorly communicated to regarding the change process used at the departmental level.

Thirty-nine percent of respondents indicated that changes were made to the process reflecting and incorporating the human aspects of change (e.g., culture, supportive management). Respondents in the executive sample were more likely than respondents in the employee sample (63% versus 18%) to indicate that changes to the process were related to the human aspects of change (i.e., departments were unaware of the impact of change on people and had to adjust accordingly). The executives sampled indicated that departmental change was where they worked at creating a new organizational culture. This is consistent with the finding that BC TEL appears to have a number of different cultures. Respondents in the employee sample were more likely than respondents in the executive sample to be 'unsure' as to whether there were changes made in the departmental process of change (35% versus 6%). These data would suggest that the changes made with respect to the human aspects of change were 'lost' on those who they were intended to benefit or were not communicated.

6.5.2.5 CORPORATE VERSUS DEPARTMENTAL "PROCESS OF CHANGE"

The data shows that respondents were confused regarding if and what the processes were used to guide revolutionary change both at the corporate and departmental level. One would expect that those responsible for change (i.e., executives) would have a clearer idea of whether there were processes in place to guide a fundamental change. Job type analysis showed that: (1) 64% of the executives sampled perceived there was a formal process in place to guide corporate change; and, (2) the executives sampled were evenly divided on whether or not there was a formal process in place to guide departmental change (55% versus 45%). Not surprisingly (given the data on communication presented

earlier), the employees sampled indicated that they did not believe there were formal processes in place at BC TEL to guide either corporate or departmental change.

As discussed earlier, respondents had difficulty identifying who was responsible for change at either the corporate or departmental levels. Respondents also had difficulty identifying who was responsible for communicating change. In combination, these sets of data are consistent with the fact that both the executives and employees sampled had difficulty identifying the process used for revolutionary change at BC TEL. This finding is not surprising given that respondents could not easily identify who was responsible for revolutionary change or who was responsible for communicating such change. This may explain why the majority of employees sampled indicated that they believed the process used was ad hoc in nature.

As was to be expected from the preceding data, respondents had difficulty when asked to describe the steps involved in the change process. This suggests that the process of change, if one existed, was not communicated effectively. As one employee stated,

As in hardcopy? I think I saw something once. Obviously it had a big impact on me!! (Employee)

At the corporate level, only 40% of respondents could specifically name a process used to guide change (e.g., Strategic Renewal initiative). As shown in Figure 6, the historical analysis demonstrated that the A.G.M. structure was implemented in 1982 followed by the Strategic Renewal initiative in 1991/1992 and the Lines of Business structure in 1995.

FIGURE 6: Documented History of Organizational Change at BC TEL

Those respondents who indicated a formal process to guide change only named the Strategic Renewal initiative which we know was initiated in 1991/1992. The cross-tabulation from Table 41 (Year Change Began BY Plan for Change), however, showed that approximately 40% of this group (15% of the total sample) believed that "Strategic Renewal" began between 1981 and 1983 while 50% (19% of the total sample) believed "Strategic Renewal" began between 1991 and 1993. Analysis by job type as shown in Appendix G indicated that the executives sampled were equally split on whether Strategic Renewal began in 1981 through 1983 or 1991 through 1993.

It is possible that the executives sampled were simply using the terminology of "Strategic Renewal" incorrectly to describe the A.G.M. initiative. There also exists the possibility that the basis for the Strategic Renewal initiative was formed in 1981 when the A.G.M. was constructed and it was given its name in 1991 (i.e., a master plan in 1982 began with the A.G.M. and then proceed to Strategic Renewal). As an executive stated, however,

Were we thinking of the next structure? I don't think so. It (A.G.M.) was good at the time for the development of the organization and the people in it. The department structure (Strategic Renewal) was necessary for competitive efficiency. There was really no master plan to merge these two changes. (Executive)

The movement to the L.O.B. structure did not appear to be perceived as a major change for the organization (i.e., it was not mentioned as frequently as Strategic Renewal). Alternatively: (1) there may not have been a specific process for this change and therefore it was not appropriate to mention it, or, (2) there may have been so much change occurring at this time that the L.O.B. change process simply got 'lost'.

Respondents were more likely to indicate that the process of change at the departmental level was significantly more ad hoc than at the corporate level (55% versus 37%). The executives sampled were more likely than the employees sampled to indicate that the process of change at the departmental level was significantly more vague than at the corporate level (45% versus 15%). Not being able to definitively identify the corporate change process, executives may have required more flexibility at the departmental level to shift quickly thus necessitating a more vague and ad hoc system. These data may also suggest that a flexible process at the executive level translates into a vague, ad hoc process at the employee level.

6.5.3 MEASURING THE SUCCESS OF CHANGE

Van de Ven and Poole (1995) indicated that one must be able to empirically measure a difference in form, quality, or state within an organization (over time) in order to determine that a change occurred. This section of the interview sought to determine what criteria were used to measure the effects of change (e.g., success of change) at both the corporate and departmental level.

6.5.3.1 MEASURING THE SUCCESS OF CORPORATE CHANGE

Respondents were asked whether the success of corporate change initiatives was measured. As shown in Table 43, 73% of respondents indicated that the success of corporate change was measured while 15% did not believe it was measured and 12% did not know.

TABLE 43: Measuring the Success of Corporate Change

Measuring the success of corporate change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
YES	73.1%	87.5%	60.0%
NO	15.4%	8.3%	24.0%
UNSURE	11.5%	4.2%	16.0%
If YES, what was measured?			
Revenue/costs/shareholder value	50.0	66.7	32.0
PulseCheck/employee satisfaction	19.2	16.7	20.0
Productivity (incl. service measures)	14.8	16.6	12.0
Quality of Service	11.5	12.5	8.0
Number of employees	9.6	8.3	8.0
Marketshare	9.6	16.7	4.0
Customer satisfaction	9.6	8.3	12.0
Customer profitability	9.6	12.5	8.0
Number of customers	3.8	8.3	—
Balanced scorecard measures	3.8	8.3	—
Wins/losses	1.9	4.2	—

An examination of these data suggests that perceptions regarding whether the success of corporate change was measured were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that the success of corporate change was measured (88% versus 60%) while respondents in the employee sample were more likely than respondents in the executive sample to perceive that it was not measured (24% versus 8%).

These data would suggest that the employees sampled did not have a strong sense of how BC TEL was assessing the success of change (40% either not knowing what was being measured or indicating that no measuring was being done). This appears to be consistent with previous findings regarding a lack of a formalized process of change and uncertainty over who was responsible for communication of change. Without a clear understanding of how change was being measured, employees may have been unable to gauge their success or failure at meeting objectives. This is consistent with a vague, ad hoc, change process. As an employee stated,

It would be interesting if they did (measure change). They tried very hard to communicate with employees but there was no set plan on how to manage change, or what change should take place, or how it should take place. Therefore it is hard for them to tell us what they are measuring.
(Employee)

Those respondents who indicated that the success of change initiatives was measured were asked what criteria were used for this measurement. Respondents revealed a total of twelve measurements used to evaluate change. The measure most frequently cited by respondents was related to accounting based criteria (e.g., revenues, costs, shareholder value) (50%). Secondary measures included PulseCheck / employee satisfaction surveys (19%), productivity (15%), quality of service (12%), number of employees (10%), marketshare (10%), customer satisfaction (10%), and customer profitability (10%). These data would suggest that BC TEL primarily used financial criteria to measure change with a secondary focus on social criteria.

The fact that respondents identified a wide variety of measures helps to support previous data suggesting the lack of a formalized plan and process of change at BC TEL. The variety of measurement criteria may also suggest that, as discussed earlier, there may have been a vague process of change based on continually moving targets. As such, there were many different criteria that were measured but little consistency given that the process was continually changing.

The executives sampled cited 12 ways in which BC TEL measured change at the corporate level while the employees sampled cited 8. Respondents in the executive sample were more likely than respondents in the employee sample to perceive the use of accounting based measures (68% versus 32%). It is interesting to note that within the executive sample, apart from the accounting criteria, there was little consistency regarding the measures being used to measure the effectiveness of corporate change. This reinforces the earlier contention that communication at the executive level may have been lacking and that there was uncertainty regarding who was in charge of change. Alternatively, it may suggest that the executives sampled used different criteria to measure the success of corporate change.

6.5.3.2 MEASURING THE SUCCESS OF DEPARTMENTAL CHANGE

Respondents were asked whether the success of departmental change initiatives was measured. As presented in Table 44, 76% of respondents indicated that the success of departmental change was measured with 17% indicating that it was not and 7% indicating uncertainty. Respondents in the executive sample were more likely than respondents in

the employee sample to perceive that the success of departmental change was measured (85% versus 68%).

TABLE 44: Measuring the Success of Departmental Change

Measuring the success of departmental change objectives	OVERALL	EXECUTIVES	EMPLOYEES
YES	76.2%	85.0%	68.2%
NO	16.7%	15.0%	18.2%
UNSURE	7.1%	—	13.6%
If YES, what was measured?			
Revenue/costs/shareholder value	40.5	55.0	27.2
PulseCheck / employee satisfaction	28.6	35.0	22.7
Productivity (incl. service measures)	28.6	15.0	40.9
Number of employees	16.7	15.0	18.2
Marketshare	7.1	15.0	—
Absenteeism	7.1	5.0	9.1
Quality of service	4.8	5.0	4.5
Balanced scorecard measures	4.8	10.0	—

Those respondents that indicated the success of departmental change was measured cited 8 measures. The measures identified included accounting based measures (41%), PulseCheck / employees satisfaction surveys (29%), productivity measures (29%), the number of employees (17%), marketshare (7%), and absenteeism (7%). These data would suggest that nearly equal numbers of financially based and 'people' based measures were used to measure departmental change. This finding would be consistent with the fact that respondents indicated that the departmental process of change (formal and informal) 'changed' in order to concentrate on the human aspects of change.

An examination of these data suggests that perceptions regarding the measures used to determine the success of departmental change were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive the use of accounting based measures (55% versus 27%) and marketshare measures (15% versus 0%) of departmental change. Respondents in the employee sample were more likely than respondents in the executive sample to perceive productivity measures being used to gauge successful departmental change (41% versus 15%). These data would suggest that the executives and employees sampled had different perceptions of the criteria being used to measure departmental change. There appears to have been little agreement on whether measurement was done and on what was measured.

6.5.3.3 CORPORATE VERSUS DEPARTMENTAL MEASURING OF THE SUCCESS OF CHANGE

Respondents identified 12 measurement criteria being used at the corporate level to measure change and 8 criteria at the departmental level. Measures of customer satisfaction, customer profitability, the number of customers, and wins and losses were used only at the corporate level while absenteeism was used only at the departmental level. Each of the measures found to be unique to the corporate level was related to competitiveness in the marketplace. It would appear that at the corporate level successful change was measured through financial criteria while at the departmental level it was assessed using both financial and 'people' based measures.

The executives sampled were more likely to indicate accounting based criteria at the corporate level than at the departmental level (68% versus 55%) and indicate PulseCheck

and employee satisfaction at the departmental level rather than at the corporate level (35% versus 16%). The employees sampled were more likely to indicate productivity measures being used to evaluate change at the departmental rather than the corporate level (41% versus 12%).

These data would suggest that respondents had different perceptions of what was being measured to evaluate change at both the corporate and departmental levels. Given the differences found between the executives and employees sampled regarding the process of change this finding was not surprising. These data are consistent with that presented earlier with respect to the ad hoc planning process, the inconsistency over who was responsible for change (i.e., many different criteria being used to measure the success of change), and the lack of lateral and vertical communication regarding change.

6.5.4 OUTCOMES OF CHANGE—COMPETITIVE ADVANTAGE

Respondents were asked whether revolutionary change had placed BC TEL at a competitive advantage in the marketplace. As shown in Table 45, 73% of respondents believed that BC TEL was at a competitive advantage due to revolutionary change. Eighteen percent of respondents believed that the organization did not have a competitive advantage and 10% did not know. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that change had given BC TEL a competitive advantage in the marketplace (79% versus 63%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that BC TEL was not at a competitive advantage (29% versus 8%).

TABLE 45: Competitive Advantage Due to Revolutionary Change

Competitive advantage due to change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Total YES	72.6%	79.2%	62.5%
♦ Yes: Positive marketshare	41.2	50.0	25.0
♦ Yes: Customers think of org.	29.4	20.8	41.7
♦ Yes: Financial strength	13.7	25.0	—
♦ Yes: Empowered	5.9	4.2	8.3
Total NO	17.7%	8.3%	29.2%
Do not know/unclear	9.7%	12.5%	8.3%

Of those who perceived BC TEL to be at a competitive advantage, 57% (41% of the total sample) believed this was reflected in positive marketshare, 40% (29% of the total sample) believed that customers thinking positively of BC TEL as a preeminent supplier reflected this, and 19% (14% of the total sample) believed that the financial strength of the company demonstrated this. Respondents in the executive sample were more likely than respondents in the employee sample to perceive marketshare (50% versus 25%) and financial strength (25% versus 0%) as evidence of competitive advantage. Respondents in the employee sample were more likely than respondents in the executive sample to perceive customers thinking positively about BC TEL as evidence of competitive advantage (42% versus 21%). These data would suggest that the executives sampled tended to measure competitive advantage in 'hard' numbers (marketshare, finances) while the employees sampled were more likely to use customer-focused benchmarks.

These data are consistent with that presented earlier with respect to the division between the "top" and "bottom" of the organization (i.e., high number of job type differences). These data would suggest that the employees sampled may be more likely to focus on customers regarding issues of competitive advantage (i.e., outward perspective) and that

the executives sampled may look more at financial performance (i.e., form of inward perspective).

6.5.5 DEVELOPING COMPETITIVE SKILLS

This section of the interview sought to determine if BC TEL assisted employees in gaining the skills needed to work in a competitive environment and how the provision of these skills was accomplished. As shown in Table 46, 91% of respondents indicated that BC TEL had implemented programs or policies to help employees enhance their competitive skills.

TABLE 46: How BC TEL Instilled Competitive Skills in Employees

Instilling competitive skills in employees	OVERALL	EXECUTIVES	EMPLOYEES
YES	90.5%	95.5%	85.0%
♦ General education programs	40.5	40.9	40.0
♦ Communication (wins & losses etc.)	26.2	36.4	15.0
♦ Placement in other departments	21.4	13.6	30.0
♦ Development away from work	14.3	13.6	15.0
♦ Empowerment	14.3	13.6	15.0
♦ Supportive mgmt training	11.9	9.1	15.0
♦ Rewards	4.8	4.5	5.0
♦ Hire outside	4.8	9.1	—
♦ Replace 'deadwood'	2.4	4.5	—
Do not know / none	9.5%	4.5%	15.0%

Respondents indicated that the company had provided such opportunities by preparing general education programs (41%), undertaking a higher level of communication geared toward how the company was doing in the marketplace (26%), exposing employees to different opportunities through placement in other departments (21%), allowing for professional development away from work (14%), empowering employees (14%), and

providing supportive management training (12%). These data would suggest that BC TEL instituted a number of training and development activities to assist employees in gaining skills for a competitive marketplace.

An examination of these data suggests that perceptions regarding what BC TEL undertook to enhance competitive skills are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that higher levels of communication helped to instill competitive skills in employees (36% versus 15%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that placement in other departments was done to develop competitive skills (30% versus 14%). These data would suggest that the employees sampled tended to view “tangible”, practical education programs (e.g., placement in other departments) as instilling skills rather than changes in the way the organization communicates with them (i.e., “intangibles”). Given the problems in communicating information to employees as discussed earlier, it is not surprising that the employees sampled tended to favour such practical programs as opposed to less concrete initiatives (i.e., competitively focused communication).

6.5.6 INPUT INTO THE CHANGE PROCESS

Input of key stakeholders into the change process has been found to be a critical element of successful change (e.g., Manganelli and Klein, 1994). A series of questions sought to determine if managers, customers, and G.T.E. had input into the change process and, if so, how information was fed back to them. As discussed earlier, the researcher was not allowed to ask questions related to the input of employees into the change process.

6.5.6.1 MANAGERIAL INPUT INTO THE CHANGE PROCESS

The input of managers into the organizational change process has been shown in the literature to be key to successful change (e.g., Umstot, 1984; Morris, 1992). Managerial input into corporate and departmental change is discussed separately below. Only the responses from the executive sample are reported as it was felt that employees would have no first hand knowledge of this issue.

6.5.6.1.1 Managerial Input Into Corporate Change

The executives sampled were asked whether they believed that managers had input into the corporate change process and, if so, how information was fed back to managers regarding their suggestions and the changes made. Seventy-nine percent of the executives sampled believed that managers had input into the change process while 21% did not (see Table 47).

TABLE 47: Managerial Input Into the Corporate Change Process

Managerial input into corporate change	EXECUTIVES
Total YES	79.2%
♦ Yes	41.7
♦ Informal contact with mgmt.	20.8
♦ Proactively offer input	16.7
Total NONE	20.8%
If YES, How Fed Back?	
Meetings	35.2
Informal personal contact	26.4
Through visible changes	13.2
Voicemail	8.8
360° surveys	8.8
Memos	4.4

Twenty-one percent of executives indicated that input was through informal contact while 17% indicated that managers had to proactively input into the change process. These data would suggest that BC TEL did not actively solicit managerial input into the corporate change process. This is consistent with the lack of communication between levels discussed earlier. The following quotations help to summarize the nature of managerial input into corporate change,

(Managers) have considerable input in how that change will come about, and how it will happen. I don't think you can go to people you have hired to run your engine room and not ask them how to change to meet the competing marketplace. (Executive)

Those executives sampled who believed that managers had input into corporate change were asked how information was fed back to managers with respect to their input (see Table 47). The executives sampled indicated that feedback was undertaken through: meetings (35%), informal personal contact (26%), and visible change (13%). These data would suggest that some executives sampled believed that feedback was occurring as a formal process (i.e., tangible feedback obtained) while others saw it as informal and haphazard. Such situations may have led managers to become less motivated to provide input into corporate change (i.e., why should they when only informal feedback is provided). The data appears to suggest that some of the executives sampled were good at providing feedback while others were not. This is consistent with previous data which suggests that some of the executives sampled appeared to be communicating with managers and employees while others were not.

6.5.6.1.2 Managerial Input Into Departmental Change

Respondents in the executive sample were asked whether they believed that managers had input into the departmental change process and, if so, how information was fed back to managers. As shown in Table 48, 91% of the executives sampled believed that managers had input into departmental change while 10% did not. Respondents in the executive sample indicated that managerial input came through: regularly scheduled meetings (43%), meetings specifically called to discuss departmental change (24%), and contact with upper management (24%).

TABLE 48: Managerial Input Into Departmental Change

Managerial input into departmental change	EXECUTIVES
Total YES	90.5%
♦ Regularly scheduled meetings	42.9
♦ Through meetings on change	23.8
♦ Contact with upper management	23.8
Total NONE	9.5%
If YES, How Fed Back?	
Meetings & formal feedback sessions	80.4
Voicemail	10.0
Memos	10.0
360° surveys	10.0

Those executives sampled who believed that managers had input into the corporate change process were asked how information was fed back to managers with respect to their input (see Table 47). The executives sampled indicated that the primary feedback mechanism was through meetings and formal feedback sessions (80%). Voicemail, memos, and 360° surveys were each mentioned by 10% of the executive sample. These

data would indicate that feedback to managers at the departmental level was structured and formal.

6.5.6.1.3 Managerial Input Into Corporate Versus Departmental Change

Respondents in the executive sample appeared to perceive that managers had input at both the corporate and departmental levels. The means by which managers were perceived to provide input into corporate versus departmental change were quite different. At the corporate level input appears to have been more haphazard and informal (indicating hierarchical barriers) while input at the departmental level was more structured. These data would suggest that the gap between the top and bottom at BC TEL was great when it came to corporate change but more manageable when it came to departmental change. This is consistent with the findings on communication of change.

A comparison of the feedback mechanisms used revealed that informal personal contact and feedback through visible change were both unique to managerial input into corporate change. The use of meetings, voicemail, memos, and surveys were common to both corporate and departmental change. Meetings to provide feedback were mentioned by respondents significantly more often for the departmental than for the corporate change process (80% versus 35%). These data would suggest that: (1) managers were more aware of the people issues at the departmental level, (2) were more aware of the need to achieve 'buy-in' to change, or (3) that it was easier to communicate at the departmental level than at the corporate level due to the smaller number of people involved.

6.5.6.2 EXTERNAL CUSTOMER INPUT INTO THE CORPORATE CHANGE PROCESS

Respondents were asked whether external customers had input into the corporate change process. Eighty percent of respondents indicated that customers had input into corporate change while 20% indicated that they did not (see Table 49). No significant job type differences were found in these data. These findings suggest that external customers were perceived to have had input into the change process. As one executive stated,

Corporately I think we are all much more attuned to being responsive to outside stakeholders. (Executive)

TABLE 49: Customer Input Into Corporate Change

Customer input into corporate change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Total YES	79.6%	83.3%	73.9%
♦ Customer surveys	44.9	54.2	34.8
♦ Demands for service / lobby	26.5	29.2	26.1
♦ Direct contact	24.5	16.7	30.4
♦ Indirect – leaving BC TEL	2.0	4.2	–
Total NONE	20.4%	16.7%	26.1%
If Yes, How Fed Back?			
New services	36.2	37.0	34.5
Media/Advertising-change theme	33.8	37.0	29.6
Large customer meetings	14.5	21.7	–
In phone bill	4.9	4.7	5.0
Unsure	7.2	4.7	14.8

Of those who believed that customers had input, 56% (45% of the sample) believed input came through surveys, 33% (27% of the sample) cited demands for service (e.g., through lobby groups, the C.R.T.C.), and 31% (25% of the sample) cited direct contact with customers (e.g., through sales, customer service, or operators). Respondents in the executive sample were more likely than respondents in the employee sample to perceive

that customer input came through surveys (54% versus 35%). These data would suggest that BC TEL leveraged customer knowledge by including their input in developing its corporate change process.

Those respondents who believed external customers had input into the corporate change were then asked how they believed information was fed back to customers. Respondents indicated that information was fed back through: the introduction of new services (36%), media and advertising (34%), and meetings with large customers (15%). Fourteen percent of respondents were unsure how information was fed back to external customers.

Although the executives and employees sampled were in agreement that customers had input into corporate change there were differences in how they perceived the data was being collected. An examination of these data suggests that perceptions regarding how corporate change information was fed back to external customers were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that information was fed back through large customer meetings (28% versus 0%). The feeding back of information to large customers through meetings appears to have been undertaken without the knowledge of the employees sampled. These data are consistent with that presented earlier with respect to a lack of communication and information sharing during this period of change.

6.5.6.3 INPUT OF G.T.E. INTO THE CHANGE PROCESS

G.T.E., the parent company of BC TEL, had two members on the Board of Directors. It was expected that as the majority owner they would have a large impact on corporate and

departmental change. The discussion of the input of G.T.E. into the change process was divided at the corporate and departmental level. Each is discussed below.

6.5.6.3.1 Input of G.T.E. into the Corporate Change Process

Respondents were asked whether they believed that G.T.E. had input into corporate change. As shown in Table 50, 65% of respondents indicated that they did not believe G.T.E. had input into corporate change while 26% believed they did have input and 10% were unsure. No significant job type differences were found in these data. These findings would suggest that BC TEL was relatively autonomous in making corporate change decisions. As respondents stated:

Let me tell you we led them in many, many ways. No, if anything they have looked at us. (Executive)

I don't think they try to "muscle" us around. (Employee)

TABLE 50: G.T.E. Input into Corporate Change

G.T.E. input into Corporate change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Total NO	64.7%	70.8%	62.5%
Total YES	25.5%	16.6%	29.2%
♦ Share information/financials	21.6	16.6	25.0
♦ At Board of Directors level	2.0	—	—
♦ Structurally	2.0	—	4.2
Unsure	9.8%	12.5%	8.3%

Of the 26% of respondents that believed G.T.E. had input into change, 85% (22% of the total sample) believed that input came in the form of sharing general information and

financial data. Respondents suggested that G.T.E. supplied information that the company requested and provided input on the potential financial impacts of change.

These findings indicate that, in general, G.T.E. was perceived to have had little input into the corporate change process at BC TEL. Any input provided was believed to be related to impact assessment as opposed to imposing directives on what BC TEL should do. As an executive stated,

G.T.E. has changed as well. They are much more willing to share information and allow us to understand what works and doesn't work for us as opposed to imposing a solution. We have to adapt to the Canadian market. (Executive)

6.5.6.3.2 Input of G.T.E. Into the Departmental Change Process

Respondents were asked whether they believed G.T.E. had input into departmental change. As shown in Table 51, 79% of respondents indicated that G.T.E. did not have input into departmental change while 21% believed that they did. Of the 21% of respondents that indicated G.T.E. had input into departmental change, 89% (19% of the total sample) cited G.T.E. as providing access to information.

TABLE 51: G.T.E. Input into Departmental Change

G.T.E. input into Departmental change	OVERALL	EXECUTIVES	EMPLOYEES
Total NO	78.6%	90.5%	66.7%
Total YES	21.4%	9.5%¹	33.3%
♦ Provided access to information	19.0	9.5	28.6
♦ Monitored our department	2.4	—	4.8

¹ Executive percentages are based on a small sample and are not further analyzed.

An examination of these data suggests that perceptions regarding the input of G.T.E. into departmental change were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that G.T.E. did not have input into departmental change (91% versus 67%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that G.T.E. did input into departmental change (33% versus 10%).

These data would suggest that employees, without the knowledge of executives, may have contacted G.T.E. to obtain information to assist with departmental change initiatives. These data are consistent with that presented earlier with respect to the claim that the bureaucracy had decreased and that employees were more empowered.

6.5.6.3.3 G.T.E. Input Into Corporate Versus Departmental Change

Respondents were equally likely to indicate that G.T.E. did not have input into departmental or corporate change. The executives sampled were more likely to indicate that input did not happen at the departmental level than at the corporate level (91% versus 71%). The input most cited by respondents related to the sharing of information and providing access to information. These data would suggest that G.T.E. may be an untapped resource for BC TEL to work with in future change initiatives.

6.5.7 AREAS OF BC TEL 'SACRED' TO CHANGE

Respondents were asked whether they believed there were any areas of BC TEL that were 'sacred' to change (i.e., seemed untouchable through the change process). Respondents were equally divided regarding their perceptions around this issue (i.e., 50%

perceived there were sacred areas and 50% did not) (see Table 52). No significant job type differences were found in these data.

TABLE 52: Areas of BC TEL 'Sacred' to Revolutionary Change

Areas of BC TEL sacred to change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Total Yes – Sacred Areas	50.0%	52.0%	52.0%
♦ Network Services	23.1	36.0	8.0
♦ Human Resources	17.3	8.0	28.0
♦ Corporate Services	7.7	6.0	4.0
♦ Executives	3.8	4.0	4.0
♦ Emerging Businesses	3.8	—	8.0
♦ Local Services	1.9	—	—
♦ Law & Regulatory	1.9	—	4.0
♦ Long Distance	1.9	—	4.0
Total No Sacred Areas	50.0%	48.0%	48.0%
Areas of your dept. sacred to change? ²			
Total Not sacred	70.3%	61.1%	79.0%
Total Sacred	29.7%	38.9%	21.0%

² Areas of departments that have not changed are withheld to protect confidentiality.

Twenty-three percent of respondents believed that Network Services and 17% of respondents believed that Human Resources had been sacred to change (or protected from change). An examination of these data would suggest that perceptions regarding departments that were protected from change were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that Network Services had been protected (36% versus 8%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that Human Resources had been protected (28% versus 8%). These

data are consistent with that presented earlier with respect to senior managers protecting certain areas of the company. As an executive stated,

Some parts of the organization have changed more rapidly than others. Some groups are more traditional. More entrenched. Some of the more traditional groups that were the centre of decision-making are no longer so. This has an impact. (Executive)

Respondents were then asked whether areas of their own department had been scared to change. Seventy percent of respondents indicated that their own department had not been protected from change. An examination of these data suggests that perceptions regarding whether one's own department had been protected were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that areas of their department had been protected (39% versus 21%). Conversely, respondents in the employee sample were more likely than respondents in the executive sample to perceive that no areas of their department had been protected from change (79% versus 61%).

These data would suggest that BC TEL may have not have changed the entire organization at the same time. Given the previous data presented, either there may have been strategic reasons not to change particular areas of the organization or senior managers had been successful in protecting their areas. Alternatively, employees may have thought that other areas may have not change enormously because they did not know what was going on in other departments due to poor internal communications.

It is interesting to note that 50% of respondents indicated that areas of BC TEL had been protected from change while 70% indicated that all areas of their department had changed (i.e., not sacred to change). This would suggest that communication regarding change in other parts of the organization (i.e., letting respondents know what has been changed throughout the organization) is suspect.

6.5.8 DISCUSSION OF “THE PROCESS OF CHANGE”

Overall, it appears to be nearly impossible to determine the exact process of change at BC TEL from the interviews due to the differences in perceptions between the top and the bottom of the organization. The analysis of the process of revolutionary change at BC TEL has revealed a great many job type differences (executives sampled versus employees sampled). An attempt is now made to put these job type differences into context by comparing the findings to previous research in this area.

Both the executives and employees sampled were uncertain as to who at the senior levels of the organization was responsible for corporate change. At the departmental level, the executives sampled perceived that departmental executives, or executives in general, were responsible for change while the employees sampled perceived that their own manager held this responsibility. The lack of identifiable responsibility for change at both the corporate and departmental level runs contrary to the literature which asserts that there must be an identifiable person, or group, leading change that ‘followers’ can identify with (Spector, 1989). The inability to identify who was responsible for organizational change has been found to have detrimental effects on an entire change process (Teng *et al*, 1994, Hammer and Stanton, 1995).

According to the historical analysis conducted earlier, Strategic Renewal was intended to formally guide the organization through the change process. The interviews have shown that there appears to be discrepancy among respondents regarding whether or not there was a formal process in place to guide revolutionary change at BC TEL (i.e., the operationalization of Strategic Renewal). This suggests that either this process was not communicated to respondents or that it was not implemented. This being said, those respondents who believed that there was a formal process in place called it "Strategic Renewal". Those that did not believe there was a formal process indicated that there was an ad hoc 'process' which was predicated on constant change. This discrepancy in beliefs between the executives and employees sampled may be linked to the breakdown in communications between the "top" and "bottom" of the organization discussed earlier or may reflect a difference in how change was planned.

The literature clearly states that poor communication during periods of change can be detrimental to the change process (Smeltzer, 1991; Hall *et al.*, 1993). The lack of communication between the groups observed earlier may have led the employees sampled to only see the operational aspect of a strategic plan (e.g., a flexible strategic plan at the executive level, which was poorly communicated, translated into a vague, ad hoc plan at the employee level). The inability of the employees sampled to learn about the process for corporate change may help in explaining the perceived use of the grapevine to gather information. The lack of consistency by the executives sampled to identify the process used to guide corporate change may be symbolic of poor communication within the executive community itself. This is substantiated by the

finding that the executives sampled could not distinctly identify responsibility for corporate change.

Given the external conditions facing BC TEL (e.g., changing regulations, new competitors), it appears that the process of change needed to be flexible in order to adapt quickly to changing conditions. As opposed to a rigid, inflexible process, the process of change at BC TEL appears to have been a 'loose' collection of strategies, goals, and objectives that were in continual flux or transition. There appears to be evidence to suggest that BC TEL responded to the need for change by changing its structure and culture. The literature has indicated that modifying the structure (e.g., Galbraith, 1995; Greenberg *et al.*, 1996) and / or the culture (e.g., Tichy, 1983; Feldman, 1986; Schneider *et al.*, 1996) is a reasonable way of responding to the need for change.

Flexibility appears to be key to the process of revolutionary change at BC TEL. This is, perhaps, why it was difficult for respondents (primarily those from the employee sample) to discuss the change process and outline exactly what transpired. From the historical analysis based on corporate documents, it was found that the process of change encompassed flexibility in both the Planning and Initiation Phases. Authors have discussed the idea of a flexible or ambidextrous approach to change (e.g., Duncan, 1976; Tushman and O'Reilly, 1998) but primarily in relation to the creation and use of innovation through technological change. Despite the call for flexibility in organizations regarding the management of change (e.g., Kanter, 1983), little has been done to develop models of change which encompass this flexibility. The uncertainty associated with

revolutionary change may be something that organizations must deal with as it necessitates a relatively vague, ad hoc process that encompasses the flexibility to change quickly (e.g., reacting to competition). This form of change appears to be linked to chaos theory (e.g., Cheng and Van de Ven, 1996; Warren *et al.*, 1998).

Discussing the process of revolutionary change with respondents helped to emphasize how critical it is to use terminology that has a consistent meaning. Strategic Renewal, which we know from the historical analysis based on corporate documents took place in 1991/92, was also used to describe the change that occurred in 1981/82 which the historical documents labeled the Area General Manager change. Some respondents in the executive sample identified "Strategic Renewal" as beginning in 1981/1982. It is therefore unclear whether the executives sampled were indicating change that had been continuous since 1981/82 (i.e., A.G.M. and Strategic Renewal were one process) or had simply provided an incorrect name, or timeframe for the change they were referring to.

Measuring the effectiveness of change has been found to be critical to successful change (Huse and Cummings, 1985; Tomasko, 1993; Keidel, 1994). Without a format for measuring change one cannot ascertain whether or not change has occurred (Van de Ven and Poole, 1995). From the historical analysis based on corporate documents, it was found that each department had developed its own measurement criteria. From the interviews it was found that nearly twenty-five percent of respondents perceived that BC TEL was not measuring the effectiveness of change. This reinforces a possible breakdown in communication and a perceptual gap between the executives and

employees sampled. It is also conceivable that BC TEL only measured the success of change in certain parts of the organization. Accounting based tools (e.g., costs, revenue) were the most commonly cited measures of success being used.

These data would suggest that BC TEL placed a strong emphasis on developing competitive skills through general education programs, increased communication regarding competitive wins and losses, and employee placement in other departments. BC TEL appears to have taken the approach that learning and skill development is required to support change. This finding is in line with the historical analysis based on corporate documents which identified the goal of developing a competitive mindset. Using the process of change to change skill sets has been well established in the literature (e.g., Mintzberg, 1979; Nadler and Tushman, 1995).

The literature indicates that resistance to change may occur when an organization does not seek input from those most closely affected by it (e.g., Bigelow, 1980; Klein, 1984; Kanter *et al.*, 1992; Duck, 1993; O'Toole, 1995; Laabs, 1996). The majority of executives sampled indicated that there appeared to be managerial input in the change process at both the departmental and corporate level. Moreover, managerial input tended to be undertaken through informal means or by a manager proactively seeking to provide input (as opposed to being approached by the organization). These findings are consistent with resistance to change at the top of the organization as discussed earlier. Managers appear to have had to 'force' their way into participating or get 'lucky' through informal contact with executives. The input of managers into the process of

revolutionary change appears to be far less structured than that suggested by the literature.

The reengineering literature states that all aspects of an organization must be reevaluated and changed in order for fundamental changes to be achieved (Manganelli and Klein, 1994; Hammer and Champy, 1993). These data appear to suggest that not all parts of the company have been touched by change at the same time. As such, it can be stated with relative certainty that BC TEL, as a whole, has probably not been subject to a reengineering methodology. As there appears to have been a series of ad hoc changes, revolutionary change at BC TEL may be best described as incorporating successive waves of punctuated equilibrium (i.e., periods of stability followed by revolutionary change throughout various parts of the organization at any one time) (Van de Ven and Poole, 1995). The sequential nature of the punctuated equilibrium may make it easier to undertake successful fundamental changes.

By many measures BC TEL has successfully changed itself and adapted to a competitive marketplace (e.g., increased marketshare, increased profitability, increased stock price, recent merger, interest from multinationals looking for benchmarking partners). The discrepancies between the change literature and what actually occurred at BC TEL are quite stark (i.e., theory versus practice). These differences could mean that many of the aspects of change that theoreticians identify as essential to successful change may not necessarily be as critical as they have been made out to be.

6.6 PERSONAL LOOK AT CHANGE

This part of the interview was assigned to give respondents the opportunity to provide a personal perspective on change at BC TEL. Respondents were asked to address the following questions:

- ♦ what were the tough realities of change?
- ♦ how had respondents changed their own behaviour in response to change?
- ♦ what would respondents like to see done differently next time?
- ♦ how far along in the change process is BC TEL? and,
- ♦ what advice would respondents give to a peer regarding change?

Informal discussions following the interviews revealed that this discussion gave respondents the chance to reflect on the entire process of change and its effect on them. Many expressed their appreciation for being able to undertake such a reflection, something they had not done previously.

6.6.1 REALITIES OF CHANGE

Respondents were asked to identify the 'tough' realities of change at BC TEL. As shown in Table 53, respondents identified eleven such realities. Respondents perceived that the realities of change included: having to get people on side (71%), that people will lose their jobs (25%), the stress that change causes (19%), the speed of change (12%), the idea that change is never finished and causes uncertainty (12%), and the idea that change affects public perceptions of the organization (10%).

TABLE 53: The Realities of Change

The realities of change	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Getting people on side (resistance)	71.4%	90.9%	62.5%
People will lose their jobs	24.5	22.7	29.2
The stress that change causes	18.5	13.6	20.8
Speed of change	12.2	18.2	8.3
Change is never finished – uncertainty	12.2	13.6	8.3
Public perceptions of company	10.2	—	16.7
Effects of change on personal life	8.2	5.0	12.5
Foreign companies soon competing	6.1	5.0	—
The need to change the TWU agreement	4.1	5.0	4.2
Tighter budgets and cost controls	2.0	—	4.2
BC TEL will lose customers sometimes	2.0	5.0	—

These data would indicate that the realities of revolutionary change are very much 'people' based (i.e., reflect the effect of change on individuals) thus stressing the need to have support mechanisms in place to help manage these effects. The following quotations help to summarize respondent's views on these realities of change:

I honestly believe there is a lot more stress on the employees. I don't know if this is a function of the change in society, but certainly it is a change in our business and this company. (Employee)

Not everyone will be successful and adapt. In the old days you could start and retire with the same company. Stress levels are much higher. The world is so different. (Executive)

Hope. If people see hope that benefits them personally. Change just to be competitive is not motivating. You have to change and be competitive because this will give you hope in the future. If people don't see it, why go through it? (Executive)

An examination of these data suggests that perceptions regarding the realities of change were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive realities associated with

getting people on side (91% versus 63%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive realities pertaining to the negative public perceptions of the company (17% versus 0%). Given that employees, by default, are closer to the customer, they may be more subject to the 'wrath' of the public regarding changes that the company made (or did not make) in response to competition. Both the executives and employees sampled discussed the difficulties and frustrations associated with those who were belligerent to change and the fact that little could be done to remove such people due to seniority rules.

6.6.2 SUGGESTIONS FOR THE NEXT CHANGE INITIATIVE

After approximately 40% of the interviews had been completed, the researcher began to take notice of situations where respondents would talk generally about things that they wanted to see changed the next time the company undertook a major initiative. Initially this information was not documented because it was provided by respondents informally and on an ad hoc basis after the tape recorder had been turned off. The researcher decided that such information should be captured in a formalized way. Therefore, the last 30 respondents (16 employees, 13 executives, and 1 board member; 17 male and 13 female) were asked what they would like to see BC TEL do in future change initiatives.

As shown in Table 54, respondents suggested that for future change initiatives BC TEL needed to: do a better job of communicating (47%), listen more to suggestions (40%), prepare for change sooner (be more proactive) (33%), spend more time on a change plan (27%), and monitor the impact of change (13%). The two most cited things that

respondents felt BC TEL needed to do differently next time involved communication while items 3 through 5 involved planning and measurement of change.

TABLE 54: What Should Be Done Differently Next Time

Do differently next time¹	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Communicate better (e.g., coach)	46.7%	38.5%	56.3%
Listen more to suggestions	40.0	30.8	50.0
Prepare sooner for change/proactive	33.4	46.2	25.0
Spend more time on a change plan	26.7	15.4	37.5
Monitor the impact of change	13.3	15.4	6.3
Do not fire people immediately	6.7	—	12.5
Change faster	6.7	7.7	6.3
Team-up with T.W.U.	6.7	7.7	6.3
Do nothing differently	3.3	7.7	—

¹ Sample size of 30.

These data would suggest that communication and planning were the two critical areas that BC TEL needed to work on based on what had transpired through the revolutionary change process. These data are consistent with that presented earlier regarding the lack of a formal process of change, the lack of communication on change, and the uncertainty over whether the effectiveness of change was measured.

An examination of these data suggests that perceptions regarding what should be done differently in the next change initiative were significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that BC TEL needed to prepare for change sooner (46% versus 25%). Respondents in the employee sample, on the other hand, were more likely than respondents in the executive sample to perceive that BC TEL needed to communicate

better (56% versus 39%), listen more to suggestions (50% versus 31%), and spend more time on a change plan (38% versus 15%). As two employees from the sample stated,

Keep the lines of communication open with employees and get feedback from those people on the frontline to see if it is working well or not. Pay attention. Keep your eyes and ears open. Be available if people need to talk to them—have more employee meetings. (Employee)

Make sure the employees know what is happening AND why. Just to say that competition drives us is not enough. (Employee)

These data have confirmed a number of the points of discussion previously made in this document. In times of revolutionary change employees appear to require a high level of communication that includes being a part of the process and knowing that suggestions are being listened to. The perceived use of the grapevine to find out information regarding corporate change, as identified earlier, is an example of searching for such information.

6.6.3 CHANGES IN RESPONDENT'S OWN BEHAVIOUR

Respondents were asked how their own behaviour had changed due to the changes that occurred at BC TEL. As shown in Table 55, respondents identified 13 ways in which their behavior had changed. Respondents indicated that due to revolutionary change they now: understood more complex issues (e.g., impacts of costs on revenue, impact of losing customers) (24%), were more people focused (24%), were more aware of outside issues (20%), were more customer focused (16%), did not have time for internal 'garbage' (i.e., activities that were a waste of time) (16%), and were more profit conscious (14%).

TABLE 55: Changes in Respondent's Own Behaviour Due to Change

Changes in respondent's own behaviour due to change	OVERALL	EXECUTIVES	EMPLOYEES
Understand more complex issues	23.5%	29.2%	20.0%
More people focused	23.5	37.5	12.0
More aware outside issues	19.6	29.2	12.0
No change in behaviour	21.5	12.5	32.0
More customer focused	15.7	20.8	12.0
No time for internal 'garbage'	15.7	12.5	16.0
More profit conscious	13.7	25.0	4.0
Greater feelings for corporate goals	5.9	8.3	4.0
Increased working hours	5.9	4.2	8.0
More dismayed	5.9	—	12.0
More team oriented	3.9	8.3	—
More real time oriented	3.9	8.3	—
More cautious	3.9	—	4.0
Able to adapt to new technology	2.0	—	4.0

It should be noted that 22% of respondents indicated that while they had accepted the changes they had not changed their own behaviour. This may suggest an underlying resistance to change within the organization or, alternatively, that there was no need for these individuals to change their behaviour (already exhibiting the needed behaviours). These data are consistent with that presented earlier with respect to certain areas of the company being protected from change (i.e., in these areas there may have been less of a need for behavioural change).

An examination of these data suggests that perceptions regarding behavioural change are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that they were now more people focused (38% versus 12%), more aware of outside issues (29% versus 12%), and more profit conscious (25% versus 4%). Respondents in the employee sample were more

likely than respondents in the executive sample to perceive that their behaviour had not changed (32% versus 13%). As an executive stated,

I am more focused on people and the impacts, how people cope, is the market going faster or slower. It was more market push as opposed to customer pull. We have a better balance now in terms of the rhythm of business acumen. (Executive)

These data would suggest that those employees sampled who have not changed their behaviour may be in parts of BC TEL that were 'sacred' (i.e. had not changed). It is interesting to note that 12% of the employees sampled, and none of the executives sampled, reported that they were "more dismayed" following revolutionary change. These employees expressed anxiety over having lost co-workers and fear over what their own future may be at BC TEL. These data are consistent with that presented earlier with respect to the process of change being ad hoc and uncertain and the lack of communication regarding the change.

6.6.4 WHERE BC TEL CURRENTLY STANDS IN THE MARKETPLACE

In order to gain an appreciation for the success of the change process, respondents were asked to identify an activity that they participated or just enjoyed (sport or hobby). This activity became the basis upon which to discuss where BC TEL is in its movement towards becoming a competitive company and how they are doing as a result.

Respondents were asked how far along they believed BC TEL was in this change process of transitioning into a competitive company. As shown in Table 56, 60% of respondents

believed that BC TEL was only part way through the change process while 24% believed that the process was just starting and 17% believed that change was just about complete. This is in line with the idea of sequential punctuated equilibrium as discussed earlier (i.e., different parts of the organization were at different phases of the change process).

TABLE 56: How Far Along is BC TEL in This Change?

How far along is the change?	OVERALL (incl. Board)	EXECUTIVES	EMPLOYEES
Part way through	58.7%	54.5%	66.7%
Just starting	23.9	31.8	9.5
At the end	17.4	13.6	23.8
How is BC TEL doing in the marketplace due to change			
Winning	52.2%	59.1%	42.9%
Tied (not winning or losing)	21.7	9.1	33.3
Too soon to say	17.4	22.7	14.3
Losing	8.7	9.1	9.5

Respondents in the executive sample were more likely than respondents in the employee sample to perceive that BC TEL was just starting to change (32% versus 10%). These data would suggest that the executives sampled are more pessimistic (realistic) than the employees sampled regarding how far along in the process of revolutionary change the company is. These data could also suggest that managers who had protected their unit until recently are now undertaking change thus supporting the idea that the entire company did not change at the same time (sequential punctuated equilibrium).

Given that only 17% of respondents believed that the change process was nearing completion, these data would suggest that BC TEL is, at best, only part way through the

change process. The following quotation from an employee helps to summarize views on how far along BC TEL is in the change process:

It is (like) a 3-act play and we are coming up to second intermission. We have not hit the climax yet. The final twists and turns haven't happened yet. We have been doing a good job on stage. It has been an interesting play. We have had our ups and downs and times when we have forgotten our lines. But in such cases someone has stepped in to help out. The people in the play are more interested than those outside. We have an elevated view of how interesting we are! (Employee)

Respondents were then asked whether they thought BC TEL was winning in the marketplace due to the changes made. As shown in Table 56, fifty-two percent of respondents believed that BC TEL was winning in the marketplace due to the changes made while 21% of respondents believed the company was neither winning nor losing. Only 9% of respondents believed that BC TEL was losing in the marketplace due to the changes made. These data would suggest that the majority of respondents believed the changes have helped the company in the marketplace (i.e., respondents deemed BC TEL to be successful as this was one of the main goals of revolutionary change put forth earlier).

An examination of these data suggests that perceptions regarding how BC TEL is doing in the marketplace are significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to perceive that BC TEL was winning in the marketplace (59% versus 43%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive that BC TEL was neither winning nor losing in the marketplace (33% versus 9%). These

data would suggest that the executives and employees sampled had very different views of how changes have impacted BC TEL's position in the marketplace. The opinions of the executives sampled may have been based on accounting measurements which they felt were the primary measure of the success of corporate change.

Although the majority of employees sampled indicated that BC TEL was winning in the marketplace, a significant percentage appeared to be unsure as to how the company was doing (i.e., neither winning nor losing). On one side, the employees sampled expressed concern that the company was always telling them things were 'bad' and the worst was yet to come (i.e., 'losing'). On the other side, the employees sampled were aware of the financial success of the company and the positive feedback received from customers. The feelings of the employees sampled that the company was best described as 'tied' in the marketplace could be characterized as follows,

Last week my job (manager) sent me something to say we had a good six months. This is the first time I have ever had a hint we had a good six months! Other than that, every year was a bad year. (Employee)

Respondents were then asked to describe some of the struggles they felt BC TEL has had to deal with during the change process. As shown in Table 57, respondents indicated that BC TEL had to deal with the fact that: the company had to continually adjust its style to stay ahead (36%), not everybody believed that change was needed (22%), the competition was catching up quickly (18%), and the company was slow to start the change process (11%). There was also a consensus among 22% of respondents that there were really no struggles that had to be dealt with.

TABLE 57: What Were Some of the Struggles During the Change Process?

Struggles dealt with	OVERALL (inc. Board)	EXECUTIVES	EMPLOYEES
Have to adjust plan/style of business	35.6%	40.9%	35.0%
Not everyone believes change needed	22.2	22.7	20.0
Competition catching up quickly	17.8	9.1	30.0
Slow to start	11.1	9.1	10.0
Competitive field uneven	6.7	9.1	5.0
Lack emotion (people not convinced)	4.4	4.5	—
None	22.2	27.3	15.0

These data would suggest that the major struggles pertained to issues surrounding competition within the marketplace, the process used to guide change, and resistance to change. The struggle of having to adjust as the change progressed adds validity to the proposition stated earlier (in the interviews and the historical review of documents) that BC TEL had a flexible, ad hoc process of change that was not communicated effectively.

Respondents in the employee sample were more likely than respondents in the executive sample to perceive that BC TEL had to deal with the fact that the competition was catching up quickly (30% versus 9%). The fact that the employees sampled were more likely than the executives sampled to perceive the struggles associated with the competition catching up may be the result of employees having to deal with the daily effects of competitors. Executives were farther removed from the effect of customers.

6.6.5 ADVICE TO A PEER ON CHANGE

Respondents were asked to draw upon their experiences with revolutionary change at BC TEL to provide one piece of advice to a peer regarding change. Respondents provided 16 unique pieces of advice for their peers and, as was to be expected, the advice provided

was as varied as those interviewed. As shown in Table 58, the majority of the advice provided related to the 'people' aspects of change (e.g., do not forget people, involve people, embrace change) and the managerial aspects of the change process (e.g., create vision, need to manage change). Fifty-seven percent of respondents believed the best advice they could give a peer would be to embrace change, 33% suggested that peers not forget the people affected by change and to ensure people are involved in the process of change, and 10% would advise a peer to just do their best. The following quotations help to summarize advice to peers,

Once having defined your strategic direction on where to go, put 80% to 90% of your focus on the human side of the process. (Executive)

Hang onto your hat!! Once you are moving, you are moving! You have to be able to laugh!! (Employee)

You have to care about your people. Just bloody well care and it will come together. (Executive)

TABLE 58: Advice To a Peer on Change

Advice for a peer on change	OVERALL (inc. Board)	EXECUTIVES	EMPLOYEES
Embrace change/get moving	57.0%	43.5%	78.3%
Do not forget the people/involve people	32.6	43.5	17.4
Just do your best	10.2	4.3	17.4
Communicate / be a coach	8.1	8.7	4.3
Create vision/strategy-manage change	8.1	8.7	4.3
Change never ends	6.1	4.3	8.7
Take change with a "grain of salt"	6.1	—	8.7
Keep an open mind	4.1	4.3	4.3
Be prepared for the worst	2.0	4.3	—
Celebrate success	2.0	—	4.3
Be prepared to adjust	2.0	4.3	—
Go with your instincts	2.0	4.3	—
Spend more time w/front employees	2.0	4.3	—

An examination of these data suggests that the advice respondents would provide to peers regarding change was significantly associated with job type. Respondents in the executive sample were more likely than respondents in the employee sample to advise their peers to not forget the people component of change (44% versus 17%). Respondents in the employee sample were more likely than respondents in the executive sample to perceive to advise peers to simply embrace change and get moving (78% versus 44%). The following quotations help to summarize the feeling of the executives and employees sampled regarding advice for peers,

Like golf, the more you play, the better you get...like change. (Executive)

Accept it. It makes it more interesting. Smile and nod! Accept it and try. Having the right attitude is critical. We have to continue to change. (Employee)

Spend more time with frontline employees in order to understand what is driving them. The people interfacing with our customers are so far ahead of many of us. (Executive)

Be flexible. Adapt to what you can adapt to and question what you can't. When I am supportive of the company, I want them to be supportive of me. (Employee)

The data would suggest that employees who have experienced revolutionary change perceived that 'fighting' change has more severe consequences than simply accepting it. The danger in this perception is that 'bad change' may be accepted so as to avoid the consequences of fighting it. Thus, communication and support for revolutionary change becomes even more critical.

6.6.6 DISCUSSION OF "PERSONAL LOOK AT CHANGE"

The importance of the human (or people) side of revolutionary change cannot be overemphasized. The human aspects of change have been found to be the toughest part of organizational change to understand and deal with (e.g., Pfeffer, 1994; Diamond, 1995; Laabs, 1996). Furthermore, the literature suggests that the more dramatic the change the more difficult the impact on people (Curtis, 1991). The measures of support and non-support for revolutionary change discussed in the next chapter will help to address some of these issues.

When asked what the tough realities of change were respondents placed the work involved in getting people on side as the greatest obstacle. Of the 11 realities of change cited, approximately one-half dealt with people issues associated with change. These findings are in line with the support literature (e.g., Ford and Bagot, 1978; Galinski and Stein, 1990; Goff *et al.*, 1990; Greenburg and Rhodes, 1991).

The perceived impact and importance of communication cannot be overstated in organizational change (e.g., Ford and Ford, 1995). These data suggested that communication and planning were the two critical variables that respondents wanted BC TEL to work on in future change initiatives. Respondents indicated that to help employees deal with revolutionary change BC TEL had to communicate better and listen more. Earlier analysis found that communication (both at the corporate and departmental level) and feedback (related to input into revolutionary change) was unstructured and incomplete. This suggests that, perhaps, BC TEL did not match the communication media used with the message to be delivered. For example, the literature would indicated

that the lack of face-to-face communication identified earlier may have prompted this type of response (e.g., Larkin and Larkin, 1994; Richardson and Denton, 1996).

These findings are consistent with previous studies which contend that organizations need to understand the importance of managing and planning for change and gathering input from as many stakeholders as possible (e.g., Chakravarthy and Lorange, 1991; Burnes, 1992; Conner, 1993; Duck, 1993). Respondents at BC TEL tended to want the organization to spend more time developing change plans. The executives sampled also wanted the organization to prepare sooner for change and be more proactive in the process of change.

It is understood that people may adapt their behaviours to help cope with change (Bunker, and DeLisle, 1991) and go through a process of coming to deal with change and the stress that it may cause (Stanton *et al.*, 1993; Pritchett, 1996). When asked how they had changed their own behaviours, the executives sampled focused on their own understanding of more complex issues and their increased focus on people. The highest percentage of employees sampled (32%) believed they had not changed their own behaviour suggesting that these respondents may have been in parts of the organization that had not changed or were resisting change. It has been argued that if one cannot change behaviour then one cannot change the culture (Duck, 1993; Shaw and Maletz, 1995). These data would suggest that those who described the culture as stable may not have changed their own behaviour or may have been in areas of the organization that were protected from change.

These findings are in line with the literature which suggests that change is a constant, never ending process (e.g., Kanter, 1985; Marks and Shaw, 1995; Nadler and Tushman, 1995). There was a general perception that BC TEL was winning in the marketplace due to the changes but that the company had to continually adjust its style. This appears to be in line with the need for a flexible change process as discussed earlier.

Respondents were asked to provide one piece of advice for a peer regarding change. The majority of employees stated that the best advice they could give would be to embrace change and “get on with it”. For the executives sampled, the most important pieces of advice were to not forget the people and to embrace change. These suggestions are in line with Kanter’s (1983) work on creating a culture of change as well as with the support literature (e.g., Meyer and Allen, 1991; Sparrowe and Liden, 1997).

6.7 SUMMARY OF FINDINGS

The analysis of the interview data has assisted in providing a more valuable understanding of the perceptions of respondents toward revolutionary change at BC TEL. For each of the 51 questions posed during the interviews (4 questions were directed specifically to executives and are not included in these summaries), the analysis conducted focused on overall respondent perceptions of revolutionary change and significant job type differences. This summary will focus on (1) where common views were held between the executives and employees sampled (i.e., there was a consensus); and, (2) significant job type differences in perceptions of revolutionary change.

The two summaries are based on different criteria. For the first summary it was decided that when the opinions expressed by both the executives and employees sampled on any one question exceeded 60%, consensus had been achieved (i.e., the executives and employees sampled were deemed to be expressing similar views when 60% or more of both groups expressed the same opinion). Significant differences between the two groups (i.e., 90% of managers thought 'A' versus 65% of employees) are not identified or discussed in this section. For the second summary, significant job type differences were deemed to have occurred when the between group differences exceeded 15%.

6.7.1 COMMON VIEWS (CONSENSUS) BY JOB TYPE

Consensus between the executives and employees sampled was identified on 15 of the 51 questions asked of all respondents (29%). A summary of the responses where consensus was found is shown in Table 59 and discussed below.

Consensus regarding the historical context of revolutionary change appears to be consistent with the suggestion that revolutionary change at BC TEL had an identifiable force and that goals were being achieved due to the changes made. These data are consistent with the literature suggesting that external forces may be the impetus for revolutionary change (e.g., Nadler and Tushman, 1990, 1995; Goodstein and Burke, 1991) and that change should aim to positively impact operations (e.g., Manganelli and Klein, 1994).

TABLE 59: Consensus Between The Executives and Employees Sampled

HISTORICAL CONTEXT OF CHANGE (7 questions)	
➤	The C.R.T.C. motivated change to occur
➤	The goal of change was to increase competitiveness
➤	Competitiveness was being achieved
ORGANIZATIONAL CULTURE (5 questions)	
No consensus identified	
RESISTANCE TO CHANGE AND BUREAUCRACY (6 questions)	
➤	Senior management resisted change
➤	The Board of Directors did not resist change
➤	The bureaucracy at BC TEL had decreased since revolutionary change began
ORGANIZATIONAL COMMUNICATION (8 questions)	
No consensus identified	
PROCESS OF CHANGE (18 questions)	
➤	The success of corporate change was measured
➤	The success of departmental change was measured
➤	BC TEL is at a competitive advantage due to revolutionary change
➤	BC TEL is undertaking training in competitive skills
➤	External customers did input into corporate change
➤	G.T.E. did not input into corporate change
➤	G.T.E. did not input into departmental change
➤	All areas of respondent's own department had been touched by change
PERSONAL LOOK AT CHANGE (7 questions)	
➤	The toughest reality of revolutionary change is to get the people on side

Various authors (e.g., DuBrin, 1974; Davidson, 1993; Strebel, 1996) have suggested that long-standing corporate culture can be a major barrier to transition and that communication may become one of the means for overcoming this. In these data, however, no consensus was identified on any of the questions dealing with culture or communication (see Table 59). This finding would suggest that the communication and culture at BC TEL was not homogenous and that one's view of these particular aspects of change may have been based on something other than job type (e.g., departmental

affiliation). Rogers and Rothlisberger (1952) identified that communication was made more difficult when people do not see and/or assume the same things or share the same values. The lack of consensus regarding the culture at BC TEL would support this proposition.

The literature has suggested that organizational culture and communication of change may reduce resistance to change (e.g., Duck, 1993; Shaw and Maletz, 1995). Given that consensus did not occur on these aspects of change it was not surprising to find that both the employees and executives sampled agreed that senior managers had resisted change. The fact that senior managers resisted change is supported in the literature which posits that the more fundamental the change the more resistance that may occur at higher levels within an organization (e.g., Conner, 1993; Coghlan, 1994).

The executives and employees sampled had common views regarding aspects of the process of change where they could identify a tangible difference due to change (e.g., the measurement of change, input of external stakeholders into the change process). This is consistent with the literature which suggests that respondents may have an easier time identifying tangible activities directly applicable to the process of change (Klein, 1984; Porras and Hoffer, 1986).

The lack of consensus regarding the personal aspects of change suggests that the executives and employees sampled had different experiences with revolutionary change. The literature has identified that at the individual level of analysis, experiences with

change may vary dramatically (e.g., Bunker and DeLisle, 1991; Rosenthal, 1996; Streat, 1996). This finding adds further validity to the need to support employees through revolutionary change as discussed in the next chapter.

6.7.2 SIGNIFICANT DIFFERENCES BASED ON JOB TYPE

Having identified a general lack of consensus between the executives and employees sampled with respect to critical areas of revolutionary change, this section summarizes overall significant differences between the two groups. As shown in Table 60 and discussed below, significant job type differences were identified on 39 out of the 51 questions posed to interview respondents (77% of the questions).

Significant differences between the executives and employees were identified on: 57% of the questions on the historical context of change, all of the questions on organizational culture, 83% of the questions on resistance to change and the bureaucracy, 63% of the questions of organizational communication, 78% of the questions on the process of change, and all of the questions on the personal look at change. The high percentage of significant job type differences suggests a perceptual gap between those at the “top” and “bottom” of the organization with respect to all dimensions of revolutionary change. It is possible that the executives sampled may have viewed their actions in a positive light (i.e., improve self-image). The dispersion of opinion based on job type, however, is consistent with the literature which has suggested perceptual differences between executives and employees (e.g., DeCelles, 1995; Ingstrup, 1995).

TABLE 60: Summary of Job Type Differences

HISTORICAL CONTEXT OF CHANGE	Executives (more likely to indicate)	Employees (more likely to indicate)
Changes occurring at time change began	Creation of B.T.E.	Competition; Downsizing
Whether change would have occurred without the CRTC	No	Yes
Description of change before the C.R.T.C. rulings	Technology driven; Internally driven	—
Whether competitiveness was being achieved	Yes	Unsure
ORGANIZATIONAL CULTURE		
Culture one year ago	Uncertainty Theme	Pressure Theme; Same as now
Reason for cultural change from one year ago	Bottom line focus	People changed
Culture two years ago	—	Pressure Theme; Same as now
Reason for cultural change from two years ago	Structure changed	People changed
RESISTANCE TO CHANGE AND BUREAUCRACY		
Did senior management resist change	Yes	No
How did senior management resist change	Voiced formally	Covert, quiet
Types of resistance by senior management	Protected their area	Neglect other areas
How resistance by senior management was overcome	Commun. need for change	—
Whether the bureaucracy decreased	No	Yes
ORGANIZATIONAL COMMUNICATION		
Methods used to communicate corp. information	Videos/large mtgs; Internal newscasts; Face-to-face (mgr)	Voicemail; Bulletins/memos; Electronic media; Grapevine
Methods used to communicate dept. information	—	Voicemail
Whether corporate communication was measured	Yes	No
Whether departmental communication was measured	Yes	No
Whether employees received dept. information necessary	No	Yes

TABLE 60: Summary of Job Type Differences (contd.)

PROCESS OF CHANGE	Executives (more likely to indicate)	Employees (more likely to indicate)
Responsibility for corporate change	CEO/Senior Execs	Senior Exec only
Responsibility for departmental change	Dept. Execs	Mgrs / Supervisor; No one / Unsure
Where there was a formal process to guide corp. change	Yes	No
If a formal corporate process, did it change	Yes	Unsure
Whether there was a formal process to guide dept. change	Yes	No
If a formal departmental process, did it change	Yes	Unsure
Was the success of corporate change measured	Yes	No
If corporate change measured, how	Revenues / costs	—
Was the success of departmental change measured	Yes	—
If departmental change measured, how	Revenue / costs; Marketshare	Productivity
Whether BC TEL is at a competitive advantage	Yes	No
How corporate input fed back to customers	Meetings with large customers	
Whether G.T.E. had input into departmental change	No	Yes
Whether all areas of one's dept. touched by change	No	Yes
PERSONAL LOOK AT CHANGE		
Toughest realities of change	Getting people on side	Public perceptions of organization
What should be done differently next change	Prepare for change sooner	Commun. better; Listen to suggestions; More time on plan
How respondents changed their own behaviour	More people focused	Aware of outside issues; More profit conscious; No change in behaviour
How far along in the change process BC TEL is	Just starting	—
How BC TEL is doing in the marketplace	Winning	Tied
What struggles have had to be dealt with	—	Competition catching up
Advice to a peer regarding change	Do not forget the people	Embrace change

The data suggests strong differences between the intentions of change (i.e., executive views of change) and the realities of change (i.e., employee views of change) despite the fact that the intentions of executives were probably quite good. It is possible that the executives viewed their actions in a certain light in order to project a positive 'self image'. The findings indicate that the reality of revolutionary change may be that it is so

fast and fundamental that it cannot be handled as suggested in the literature. Even though executives may know what they should do, and would like to think they have done it, employees do not necessarily observe this. Employees, however, view the reality of revolutionary change as something that the organization 'has to get on with'. This would suggest that 'buying into change' may be a large component of successful change as has been suggested in the literature (e.g., Smith, 1993).

A review of the differences suggests that, for the majority of the questions asked, the executives sampled were more positive than the employees sampled (i.e., the executive sampled were more likely to agree that a particular aspect of change was occurring). If this analysis had considered organizational change only from an upper management perspective as has been commonly done in the literature (e.g., Goodstein and Burke, 1991; Teng *et al.*, 1994; Champy, 1995; Jarvenpaa and Stoddard, 1998) the perspective on change discussed herein would have been very different. As such, the large number of perceptual differences identified draws into question the applicability of past research which has viewed change solely from an organizational perspective without incorporating an employee perspective. The model of revolutionary change to be presented next begins the process of incorporating such perspectives into a model of revolutionary change.

6.8 MODEL OF REVOLUTIONARY CHANGE BASED ON INTERVIEWS

The findings from the interviews resulted in the development of a conceptual model of revolutionary change at BC TEL based on the perspectives of both the executives and employees sampled. This section begins with a general discussion of the proposed model

of revolutionary change and concludes with a detailed discussion of the key components of the model.

6.8.1 DEVELOPMENT OF A MODEL OF REVOLUTIONARY CHANGE

The model of revolutionary change presented in Figure 7 integrates the findings from earlier discussions in the interview phase of this research involving: the historical context of change, the process of change, organizational communication, organizational culture, the personal views on change, and resistance to change. It is proposed that revolutionary change at BC TEL can be best modeled as a combination of teleological and dialectic theories of change occurring simultaneously.

FIGURE 7: A Model of Revolutionary Change – Based on Interviews

To reiterate what was discussed earlier, teleological theories maintain that: (1) entities proceed towards goals (or end states); and, (2) goal seeking, by its nature, stimulates

change (Van de Ven and Poole, 1995). Dialectic theories are based on the notion that forces compete for dominance and control (i.e., two or more entities must engage one another in order for dialectical change to occur) (Van de Ven and Poole, 1995).

Revolutionary change at BC TEL appears to have been prompted by the external environment. As the catalyst for change, the external environment prompted BC TEL to set goals and objectives in response to outside events as a means of changing (i.e., teleological change stimulated directly by the environment). This focus appears to have motivated BC TEL to look at external events (e.g., competition, regulation) and how it would adapt. The goals of revolutionary change, as suggested in the interviews, appear to be related to organizational competitiveness.

From the interviews it appears that there was uncertainty over the exact process of change followed by BC TEL. From the historical analysis based on corporate documents, it was believed that "Strategic Renewal" was most likely the vehicle through which change was to occur. The data from the interviews, however, was unclear as to whether this was the formal plan used. The data does suggest, as was presented in process model of change based on the historical documents (i.e., Figure 5), that the process of revolutionary change was flexible and somewhat ad hoc.

The model of revolutionary change presented postulates that teleological change was undertaken primarily at the executive level of the organization (where responsibility for change was determined to be) in response to the organization's battle with the external

environment (external dialectic). Inside the organization, employees and executives appear to have been engaged in internal dialectic change which was most likely caused due to a breakdown in communications and resistance to change. It should be noted that this breakdown in communications was experienced within the executive ranks and between the executive and employee levels. Similarly, both executives and employees appear to have resisted change.

The employees and executives sampled had conflicting perceptions regarding many of the aspects of revolutionary change discussed in the interviews. These differences prompted the inclusion of a perceptual gap between the groups in the proposed model of revolutionary change. The perceptual gap is different from previous research in this area which has tended to focus on a view of change based on the top of the organization. The inclusion of this gap in the model reflects an awareness that one's view of revolutionary change depends on where one is situated within the organization. It also suggests that: (1) there is no one way to describe or manage revolutionary change; and, (2) to increase the chances of successful change and support change, it may be necessary to reduce this gap (i.e., attempt to ensure everyone is 'reading from the same page').

A process of revolutionary change based on goal setting in reaction to outside events would be consistent with the notion of teleological and dialectic theories of change at work simultaneously (i.e., setting goals in direct response to conflict). Explanations of the main components of the model of revolutionary change are presented below.

6.8.1.1 EXTERNAL ENVIRONMENT

Revolutionary change at BC TEL appears to have been initiated, and sustained, by events outside the organization (e.g., competition, regulatory-based change). The C.R.T.C. decision was found to be the primary catalyst for revolutionary change. Respondents indicated that revolutionary change would most likely not have occurred without the C.R.T.C. decision on deregulation in the long distance industry helping to further emphasize the importance of outside events in stimulating change. .

From the historical analysis based on corporate documents it was suggested that BC TEL fought against changes in the telephone industry until the regulations were in place. Subsequent to the implementation of the regulations, market competitors then became the outside force pressuring BC TEL to change. Thus, it appears that BC TEL was engaged in dialectic change first with the C.R.T.C. and then with the competitors entering the industry. This conceptualization of dialectic change (i.e., dialectic change can be either internal or external to the entity) is similar to that proposed in the literature (e.g., Neal and Northcraft, 1991; Van de Ven and Poole, 1995). This interaction is further explained in the discussion on dialectic change.

6.8.1.2 TELEOLOGICAL CHANGE

In terms of teleological change, long-term development and change is viewed as a repetitive sequence of setting and evaluating goals based on what is learned (Van de Ven and Poole, 1995). As such, the process model of revolutionary change based on corporate documents (see Figure 5) was found to have strong similarities to the synthesis of organizational change models from 1951 to 1994 (see Figure 2) which was presented

as what was intended to happen at BC TEL. The process of revolutionary change as determined from the interviews, however, suggests that the reality of revolutionary change was not as straight forward as suggested.

Similar to past models of change, the interviews have helped to strengthen the belief that revolutionary change most likely begins with a situational diagnosis (e.g., Milio, 1971; Connor and Lake, 1994). In the case of BC TEL, this diagnosis is postulated as being impacted directly by the dialectic that appeared to occur with the external environment. In this situation the external environment surfaces as an important aspect of the process of change given its direct interaction with the organization. The interaction was seen to stimulate teleological change which was focused at the executive level of the organization (as suggested by the finding that those within the executive ranks were primarily responsible for change). The employees sampled, in particular, appeared to understand the process of change to be ad hoc, random, and centred at the upper levels of the organization. The perceived randomness of the process of change may be due to the fact that the employees sampled felt sheltered from what was occurring at the executive level. This sheltering may have been a result of the perceived gap between the groups.

In previous models of change the diagnosis stage was postulated to lead to an analysis or planning stage which would delineate what was to be done (e.g., Bullock and Batten, 1985). From the interviews at BC TEL, however, there was little to suggest that a specific delineation of activities could be mapped out. Instead, ad hoc, flexible goals and objectives seem to be an integral part of revolutionary change. Past models of change

have not provided the flexibility to continually change and update (e.g., Hinings and Greenwood, 1983; Bullock and Batten, 1985).

6.8.1.3 DIALECTIC CHANGE

In situations of dialectic change, opposing sides that create conflict may be either internal (e.g., conflicting goals or groups) or external (e.g., pursuing goals that collide with the direction of other entities) to the organization (Van de Ven and Poole, 1995). The rationale for the inclusion of both internal and external dialectic change in the proposed model of revolutionary change is examined below.

6.8.1.3.1 External Dialectic

The literature suggests that, in order for change to occur, one has to define when change began (Van de Ven and Poole, 1995). There is evidence to suggest that, depending on one's job type, the 'rumblings' of revolutionary change began sometime following the establishment of Business Terminal Equipment (B.T.E.) in 1982, but most likely began in earnest in the early 1990's and continued throughout the mid-1990's. This is supported by the responses of those sampled regarding the events that were occurring at the time change began as well as by the historical analysis of change based on documents.

From the historical view of change identified in the interviews, it was found that respondents perceived the C.R.T.C. as the catalyst for revolutionary change, irrespective of the exact time change began. This is consistent with research which suggests that the environment surrounding an organization may prompt change to occur (e.g., Downs, 1967; Goodstein and Burke, 1991; Dunphy and Stace, 1993; Nadler and Tushman, 1990).

1995). In the case of BC TEL, it appears that the environment induced an external dialectic change (i.e., conflict occurred between BC TEL and the external environment).

6.8.1.3.2 Internal Dialectic

Within BC TEL there appeared to be dialectic change prompted by the interaction between the executives and employees sampled. This internal dialectic is consistent with the development of a perceptual 'gap' between the groups (discussed in detail below) and has been confirmed in previous research (e.g., Snyder and Morris, 1984; Legare, 1995).

The interview data suggests that the executives sampled concentrated on the strategic aspects of change as suggested by the continual reevaluation and changing of goals. On the other hand the employees sampled appear to have been focused on the operational aspects (e.g., how to meet these continually changing goals) without a clear indication of, among other things, what the process of change was and how success was being measured. The perceived strength of the grapevine to understand the process of revolutionary change adds validity to the internal dialectic as the employees sampled attempted to gain more information on decisions at the executive level. Perceived resistance to change at the senior management level within the company further enhanced the idea of an internal dialectic as respondents indicated that senior management protected their own areas of the company and neglected others. The literature has also found support for the pairing of resistance to change and internal conflict (e.g., Farkas and Wetlaufer, 1996; Brower and Abolafia, 1995).

6.8.1.4 PERCEPTUAL "GAP" BETWEEN EXECUTIVES AND EMPLOYEES

As discussed in the summary of the interviews, major differences were identified in the perceptions of both the executives and employees sampled regarding revolutionary change. A perceptual gap between the executives and employees sampled was proposed given that consensus between the groups occurred on only 29% of the questions asked while significant differences were identified on 77% of the questions asked.

The notion of a perceptual gap between the executives and employees sampled is further emphasized by the differences identified in the section on the "personal look at change". Those in the employee sample were more likely than those in the executive sample to perceive that BC TEL needed to communicate better, listen more to suggestions, and spend more time on a change plan. The inference appears to be that these aspects of change were not undertaken as well as they could have been (at least from an employee perspective) thus adding credibility to the inclusion of a gap.

The gap proposed in the model of revolutionary change suggests that during times of fundamental change there exists the possibility of perceptual differences in how executives and employees view the process of revolutionary change. The question must then be asked, "how does an organization close, or minimize, such a gap?" or "what is the impact of such a gap on the success of the change process?" The next Phase of the research (discussed in the next Chapter) provides such a perspective.

6.8.2 CONCLUSION

Van de Ven and Poole (1995) postulated that revolutionary change was a hybrid form of change, namely, a combination of evolutionary and dialectic change theories. This research has also suggested that revolutionary change may be best explained as a hybrid of two change theories. In this case, however, revolutionary change appears to be best described as a hybrid of dialectic and teleological change theories. It is proposed that an organization may be undergoing revolutionary change when it simultaneously undertakes a flexible process of internal change that involves ad hoc goal setting (teleological) in response to conflict with its environment (dialectic).

BC TEL, through revolutionary change, appears to have entered into a dialectic exchange with the environment and set into motion the development of internal goals (teleological change). The phases of this process are put forth as both flexible and dynamic allowing for the company to react quickly as situations dictate. This high need for flexibility may distinguish revolutionary change from other forms of change.

From the interviews it would appear that the process of revolutionary change was very top-down. Strategies appear to have been developed at the top of the organization and then moved down to the departmental level. Flexibility in the implementation of revolutionary change appears to be critical given the ongoing environmental changes. It appears, however, that as a result of the flexibility instilled in the process, the employees sampled may have entered into a period of uncertainty over what was occurring. As such, a perceived gap appears to have developed between the executives and employees sampled based on a lack of communication and support that were required for such an

unstructured process of change. The experiences of employees seemed to have been a function of how the executives they reported to perceived revolutionary change. It is suggested that organizational support for revolutionary change may be one method for transcending the perceived gap between the groups. The next chapter will analyze support for revolutionary organizational change.

CHAPTER SEVEN: DEVELOPING A MEASURE OF PERCEIVED ORGANIZATIONAL SUPPORT FOR REVOLUTIONARY CHANGE

The second and third objectives of this research involved: (1) developing a behaviourally based measure of perceived organizational support (and non-support) for revolutionary change, and (2) assessing the role of support for revolutionary change on various organizational and employee outcomes. The analysis undertaken in conjunction with these objectives is described in this chapter. The chapter itself is divided into five parts.

Part one discusses the act nomination stage of the A.F.A. (Stage I) used to identify behaviours which respondents perceived to be supportive and non-supportive of revolutionary change. Part two discusses the identification of the prototypical supportive and non-supportive behaviours associated with revolutionary change (Stage II of the A.F.A.). Part three discusses the extent to which a sample of BC TEL employees perceived that the supportive and non-supportive behaviours identified in Stage II had occurred at BC TEL (Stage III of the A.F.A.). Part four reports on the validity and reliability of the measures developed including links to organizational and employee based outcomes. Part five draws conclusions based on the development of the measures.

7.1 STAGE I: NOMINATION OF BEHAVIOURS (ACTS)

Stage I of the A.F.A. involved interviews to identify behaviours that BC TEL employees perceived to be supportive and non-supportive of revolutionary change. This section discusses the characteristics of the sample and identifies the behaviours utilized in Stage II of the analysis.

7.1.1 STAGE I – SAMPLE

A total of 40 employees were randomly selected for the act nomination stage of the A.F.A. The individuals chosen represented each of the eight departments at BC TEL. The demographics of the sample chosen are virtually identical to the demographic characteristics of BC TEL as a whole:

- 55% of interview respondents were male versus 53% of BC TEL employees;
- 75% of interview respondents were from line departments versus 70% of BC TEL employees;
- 70% of interview respondents were from non-managerial positions versus 76% of BC TEL employees.

In order to minimize the potential of urban versus rural bias as BC TEL is a multi-site organization, efforts were undertaken to ensure that interview respondents represented various geographical locations. Forty percent of interview respondents were from outside the Lower Mainland of British Columbia compared to 30% from BC TEL as a whole.

7.1.2 STAGE I – ANALYSIS

The interviews undertaken to identify the behaviours that were supportive and non-supportive of revolutionary change generated a total of 139 supportive behaviours and 171 non-supportive behaviours. The lists of behaviours were evaluated by the researcher, two long-time BC TEL employees (neither of whom were interviewed during this stage of the research), and another researcher experienced with the use of the A.F.A. All redundancies and vague statements were discarded and some behaviours were re-phrased so that the behaviour was stated clearly and in a manner that captured its essence. This evaluation generated a final list of 37 unique supportive behaviours and 34 unique non-supportive behaviours (see Appendix H) which were then used in Stage II of the A.F.A.

7.2 STAGE II: DETERMINING CONSENSUS

Stage II of the A.F.A. involved identifying the prototypical supportive and non-supportive acts of revolutionary change. This section discusses the characteristics of the sample chosen to evaluate the acts nominated in Stage I. The most supportive and non-supportive acts are then identified and analyzed.

7.2.1 STAGE II – SAMPLE

A sample of 500 employees, randomly stratified along departmental lines, was chosen to rate the 37 supportive acts and 34 non-supportive acts identified in the Stage I interviews. A total of 188 usable questionnaires were returned representing a response rate of 39% (14 questionnaires were returned as undeliverable). Demographic characteristics of the sample are shown in Table 61.

TABLE 61: Stage II Respondent Demographics

DEPARTMENT	TOTAL	MALE (46%)	FEMALE (54%)
Network Services	28.4%	41.5%	16.1%
Long Distance	22.7	13.4	31.2
Local Services	15.9	17.1	15.1
Corporate Services	14.8	14.6	15.1
Corporate Sales	9.1	7.3	10.8
Human Resources	5.1	2.4	7.5
Corporate Commun.	2.8	3.7	2.2
Law & Regulatory	1.1	—	2.2
JOB TYPE			
Managerial	43.2%	54.1%	33.3%
Service Representative	18.4	8.2	27.3
Clerical	15.1	1.2	27.3
Technician	12.4	25.9	1.0
Sales	4.9	3.5	6.1
Other	3.3	1.2	5.0
Engineering	2.8	5.9	—

Departmental representation was in line with the distribution within the company as a whole. The sample, however, was somewhat skewed towards female respondents. While at BC TEL women represented approximately 47% of the workforce, just over one-half of the respondents were female (54%). As can be seen from the data in Table 61, gender and job type confounds were found in the sample (managers and technicians were more likely to be male while service representatives and clerks were more likely to be female). Gender and department were also confounded (i.e., men were more likely to work in Network Services while women were more likely to work in Long Distance Services). These gender by job type and gender by department confounds were, however, representative of the organization as a whole.

7.2.2 STAGE II – ANALYSIS (IMPORTANCE OF SUPPORTIVE BEHAVIOURS)

The 37 behaviours identified as supportive of revolutionary change in Stage I were evaluated in Stage II, the consensus stage. The means and standard deviations for each of these supportive behaviors are shown in Appendix H. The top 8 behaviours, which are summarized in Table 62, were found to typify organizational support for revolutionary change as they exceeded the cut-off score of 5. A ninth behaviour, “allying itself with other companies” was chosen for inclusion by the researcher as its mean was close to the cut-off score.

TABLE 62: Stage II – Importance of Supportive Behaviours

BC TEL Supports Change By:	Mean	Std. Dev.
Pressuring the C.R.T.C. for fair competition	5.57	1.26
Creating a telesales centre	5.45	1.30
Informing employees regarding change through bulletins / teleconferences	5.34	1.27
Communicating the need for change	5.31	1.37
Paying more attention to the bottom line	5.18	1.42
Providing managers with separation packages	5.12	1.25
Aggressively pursuing emerging business opportunities	5.11	1.53
Developing an understanding that due to change in the telecom industry the competition can be a customer	5.07	1.26
Allying itself with both telecommunication and other types of companies	4.96	1.10
Overall Mean Score	5.24	

Respondents identified “pressuring the C.R.T.C. for fair competition”, the “creating a telesales centre”, “informing employees through bulletins”, and “communicating the need for change” as the most important supportive behaviours. In other words, there was a high degree of consensus that these behaviours represented the most important ways through which BC TEL could support revolutionary change.

While most of the supportive behaviours identified seem to be applicable in other organizations, two particular supportive behaviours may be considered as specific to BC TEL: “pressuring the C.R.T.C. for fair competition” and “creating a telesales centre”. The ideas behind these two behaviours, however, are applicable to other organizations. For example, “lobbying to ensure that the company is able to compete on an equal basis with competitors” would be a generic way to word “pressuring the C.R.T.C. for fair competition”. By the same token, the idea behind the behaviour “creating a telesales centre” was the notion of being in touch with customers and letting them know what BC TEL was doing. This interpretation is based on the fact that telesales at BC TEL is not just a ‘sales’ driven operation but one that was used to keep in contact with customers from a

public relations perspective (i.e., external contact and communication). A more generic description of this behaviour could be: “keeps in contact with its customers to ensure they are aware of what the organization is doing”.

To further analyze these behaviours, factor analysis was conducted on the 9 behaviours deemed to be important in supporting revolutionary change. As well, testing for significant differences was undertaken on the basis of gender, job type (manager versus non-manager), age, department type (i.e., staff versus line), and years of service. Originally the alpha level of significance, using the Bonferroni technique, was established at .006 for individual behaviours (9 behaviours divided by an alpha of .05). Initial examination of the data suggested, however, that this significance level was too stringent for exploratory analysis and thus the alpha was relaxed to .05 to avoid missing any interesting relationships. Significant differences at both levels of alpha are highlighted in the summary tables presented.

7.2.2.1 FACTOR ANALYSIS (IMPORTANCE OF SUPPORTIVE BEHAVIOURS)

Principal Factor Analysis (P.F.A.) of the supportive behaviours revealed two themes as shown in Table 63. Four of the behaviours did not meet the factor loading cut-off criteria of .50 (“informing employees”, “creating a telesales centre”, “allying itself with other companies”, and “paying attention to the bottom line”). These behaviours loaded between .35 and .42.

TABLE 63: Importance of Supportive Behaviours – Factor Analysis

	Factor 1	Factor 2
Aggressively pursuing emerging business opportunities	.81	
Pressuring the C.R.T.C. for fair competition	.65	
Developing an understanding that due to change in the telecom industry the competition can be a customer	.64	
Communicating the need for change	.50	
Providing managers with separation packages		.77
Percent of variance explained	32.0%	7.9%

Factor one includes 4 behaviours: “aggressively pursuing emerging business opportunities”, “pressuring the C.R.T.C. for fair competition”, “developing an understanding that due to change competitors can be a customer”, and “communicating the need for change”. The second factor is comprised of a single behaviour “providing managers with separation packages”.

The presence of a solid, single factor suggests that respondents held global beliefs regarding behaviours that were supportive of revolutionary change. This would suggest that the behaviours are measuring a single construct called ‘support for revolutionary change’ (similar to Eisenberger *et al.*, 1986). Further analysis of significant differences based on this single factor are unnecessary given that it appears to be representative of global beliefs of the construct under study (Tabachnik and Fidell, 1993). Consequently, significant differences are only analyzed for each of the individual behaviours.

7.2.2.2 SIGNIFICANT DIFFERENCES—IMPORTANCE OF SUPPORTIVE BEHAVIOURS

Analysis of significant differences was undertaken on the basis of gender, job type, age, department type, and years of service for each of the behaviours identified as “important”

to organizational support of revolutionary change. The analysis undertaken on each of these criteria is shown in Appendix I. A summary of the significant differences for each criteria is shown in Table 64 and discussed below.

TABLE 64: Significant Differences – Importance of Supportive Behaviours

SIGNIFICANT DIFFERENCES	INTERPRETATION
Gender Differences	
> Providing managers with separation packages	Men > Women**
> Aggressively pursuing emerging business opportunities	Women > Men*
Job Type Differences	
> Informing employees regarding change through bulletins	Mgrs. > Non-Mgrs.**
Age Differences	
> Allying itself with telecommunication and other firms	31+ > under 30 years old**
> Providing managers with separation packages	50+ > under 30 and 41-49*
Department Type Differences	
> Aggressively pursuing emerging business opportunities	Staff > Line**
Years of Service Differences	
> Providing managers with separation packages	over 6 > under 5 years*

* Alpha meets Bonferroni significance of .006.

** Alpha significant at less than .05.

Two of the nine supportive behaviours were found to be significantly different based on gender. The men sampled were significantly more likely than the women sampled to agree that “providing managers with separation packages” ($t=2.45$; $\text{sig}=.02$; $\text{df}=183$) was an important supportive behaviour while the women sampled were more likely than the men sampled to agree that “pursuing emerging business opportunities” was important ($t=3.97$; $\text{sig}=.00$; $\text{df}=185$). These data would suggest that men and women have relatively common perceptions of how BC TEL can support revolutionary change.

Only one of the nine behaviours was found to be significantly different based on job type suggesting that managers and employees have relatively common perceptions of behaviours that are supportive of revolutionary change. The managers sampled were more likely than the employees sampled to agree that "informing employees regarding change through bulletins" was an important supportive behaviour ($t=1.96$; $\text{sig}=.05$; $\text{df}=183$). It is interesting to note that despite the perceptual differences between executives and employees identified in the interviews, managers and employees have relatively common perceptions of the importance of behaviours that are supportive of revolutionary change.

Two of the nine supportive behaviours were found to be significantly different based on respondent age. "Providing separation packages" ($F=5.89$; $\text{sig}=.00$; $\text{df}=3,180$) and "allying with other companies" ($F=3.88$; $\text{sig}=.01$; $\text{df}=3,178$) were both found to be significantly different on the basis of respondent age. In both cases, respondents under the age of 30 were less likely to agree that these were important supportive behaviours. Those over the age of 50 were significantly more likely than younger employees to agree that providing separation packages was supportive perhaps because separation packages may provide an easier way to transition out of the organization. Overall, these data would suggest that respondents of different age groups have relatively common perceptions of how BC TEL can support revolutionary change.

Only one of the nine behaviours was found to vary significantly on the basis of department type. Respondents from staff departments were more likely than respondents

from line departments to agree that “aggressively pursuing other business opportunities” was supportive of revolutionary change ($t=2.03$; $\text{sig}=.04$; $\text{df}=174$). These data would suggest that whether one is in a staff or line department does not appear to affect perceptions of behaviours that are supportive of revolutionary change.

Only one of the nine supportive behaviours was found to vary significantly with respect to a respondent’s years of service at BC TEL. “Providing separation packages” was found to vary significantly on the basis of years of service ($F=7.30$; $\text{sig}=.00$; $\text{df}=4,180$). Respondents with more than 6 years of service were significantly more likely than respondents with under 5 years of experience to agree that this was supportive. These data would suggest that respondents who have been with the organization for more than 6 years may have perceived separation packages as a way of ‘thanking’ employees for their service. These data would suggest that years of service at BC TEL does not appear to affect perceptions of behaviours that are supportive of revolutionary change.

7.2.2.3 SUMMARY OF SIGNIFICANT DIFFERENCES

Analysis of the supportive behaviours based on gender, job type, age, department type, and years of service uncovered few significant differences. Of the 45 individual behavioural differences tested (i.e., 5 criteria BY 9 behaviours) only 7 were found to be significantly associated with the context variables tested (16% of all possible differences). Only 3 of these differences met the Bonferroni criteria. These data would indicate that employees at BC TEL share a relatively common view of what the organization can do to support revolutionary change.

Of the 7 significant differences identified, the behaviour “providing separation packages to managers” was found to be significant on 3 occasions (i.e., importance depends on gender, respondent age, and years of service). It was not surprising to find that older employees with more years of service found this type of support important given that it is probably something that they (or their friends) could need (i.e., a ‘real’, tangible type of support).

Overall, there is high agreement among these groups tested that the behaviours identified are important supportive behaviours. This finding would suggest that the results from the A.F.A. with respect to the occurrence of these behaviours at BC TEL should be meaningful to all groups within the organization. That is, BC TEL will not have to tailor how it demonstrates support for revolutionary change depending on the group that it is dealing with.

7.2.3 STAGE II – ANALYSIS (IMPORTANCE OF NON-SUPPORTIVE BEHAVIOURS)

The 34 behaviours identified as non-supportive of revolutionary change in Stage I of the A.F.A. were evaluated in Stage II, the consensus stage. The means and standard deviations for each of these non-supportive behaviors are shown in Appendix H. The top 12 behaviours, which are summarized in Table 65, were found to typify non-support for revolutionary change as they exceeded the cut-off score of 5. Respondents identified the most important non-supportive behaviours as: “does not eliminate the bureaucracy”, “allows for conflicting departmental mission”, “allows departments to protect themselves from change”, and “does not make managers accountable for change”.

TABLE 65: Stage II – Importance of Non-Supportive Behaviours

BC TEL Does Not Support Change When It:	Mean	Std. Deviation
Does not eliminate the bureaucracy	5.39	1.35
Allows for conflicting departmental missions	5.34	1.43
Allows certain departments to protect themselves from change	5.26	1.48
Does not make managers accountable for stifling change	5.25	1.48
Is slow to react in some competitive environments	5.18	1.50
Does not ask employees if there was a better way to do things	5.17	1.77
Does not recognize where its greatest assets were	5.10	1.57
Does not have a common goal throughout the company	5.07	1.66
Does not allow employees to be flexible in the use of their skill sets	5.04	1.54
Only provides verbal support for change	5.03	1.55
Holds back information on where the company was going	5.02	1.63
Limits employee empowerment	5.02	1.55
Overall Mean Score	5.16	

Factor analysis was conducted on the 12 behaviours deemed to characterize non-support of revolutionary change. As well, testing for significant differences was undertaken on the basis of gender, job type, age, department type, and years of service. Originally the alpha level of significance, using the Bonferroni technique, was established at .004 for individual behaviours (12 behaviours divided by alpha of .05). Since this research is, however, exploratory in nature, the alpha was relaxed to .05 to avoid missing any interesting relationships. Significant differences at both levels of alpha are highlighted in the summary tables presented below.

7.2.3.1 FACTOR ANALYSIS (IMPORTANCE OF NON-SUPPORTIVE BEHAVIOURS)

P.F.A. testing of the most important non-supportive behaviours revealed one theme as presented in Table 66. The presence of a single factor suggests that respondents held global beliefs regarding behaviours that were not supportive of revolutionary change. This would suggest that these behaviours are measuring a single construct called 'non-

support for revolutionary change'. Consequently, significant differences will only be analyzed for each of the prototypical behaviours.

TABLE 66: Importance of Non-Supportive Behaviours – Factor Analysis

	Factor 1
Does not have a common goal throughout the company	.83
Only provides verbal support for change	.82
Does not eliminate the bureaucracy	.81
Does not recognize where its greatest assets were	.80
Limits employee empowerment	.79
Is slow to react in some competitive environments	.78
Allows for conflicting departmental missions	.74
Does not ask employees if there was a better way to do things	.73
Does not make managers accountable for stifling change	.71
Holds back information on where the company was going	.71
Does not allow employees to be flexible in use of skill sets	.65
Allows certain departments to protect themselves from change	.58
Percent of variance explained	56.2%

7.2.3.2 SIGNIFICANT DIFFERENCES – IMPORTANCE OF NON-SUPPORTIVE BEHAVIOURS

Analysis of significant differences was undertaken on the basis of gender, job type, age, department type, and years of service for each of the behaviours identified as non-supportive of revolutionary organizational change. The specific analysis on each of these criteria is shown in Appendix J. A summary of the significant differences based on each of these criterion is shown in Table 67 and discussed below.

Only one of the twelve behaviours identified as not being supportive of revolutionary change was found to be significantly different on the basis of gender. The men sampled were more likely than the women sampled to agree that the behaviour “does not make managers accountable for stifling change” was not supportive of revolutionary change ($t=2.17$; $\text{sig}=.03$; $\text{df}=183$). These data would suggest that men and women have

relatively similar perceptions of behaviours that are not supportive of revolutionary change.

TABLE 67: Significant Differences – Importance of Non-Supportive Behaviours

SIGNIFICANT DIFFERENCES	INTERPRETATION
Gender Differences	
> Organization does not make managers accountable for stifling change	Men > Women**
Job Type Differences	
> Organization does not make managers accountable for stifling change	Mgrs. > Non-Mgrs.**
Age Differences	
> Organization does not allow employees to be flexible in the use of skill sets	under 50 > 50+*
Department Type Differences	
> Organization does not make managers accountable for stifling change	Staff > Line**
Years of Service Differences	
No significant differences	

* Alpha meets Bonferroni significance of .004.

** Alpha significant at less than .05.

Only one of the twelve behaviours was found to be significantly different on the basis of job type suggesting that managers and employees have relatively similar perceptions of behaviours that are not supportive of revolutionary change. The managers sampled were more likely than the employees sampled to agree that the behaviour “does not make managers accountable for stifling change” was not supportive of revolutionary change ($t=2.28$; $\text{sig}=.02$; $\text{df}=181$). Given the flexibility and ad hoc nature of the process of revolutionary change identified in the interviews it is not surprising to find that managers were more likely to identify this behaviour as not supportive.

Only one of the twelve organizational behaviours identified as not being supportive of revolutionary change was found to be significantly different based on respondent age. The behaviour “does not allow employees to be flexible in the use of their skill sets” was found to vary significantly by respondent age ($F=4.40$; $\text{sig}=.01$; $\text{df}=4,179$). Respondents under the age of 50 were more likely than respondents over the age of 50 to agree that this behaviour was not supportive of revolutionary change. These data would suggest that respondents of different age have relatively similar perceptions regarding the importance of behaviours identified as not supportive of revolutionary organizational change.

Only one of the twelve non-supportive behaviours identified was found to be significantly associated with department type. Respondents in staff departments were more likely than respondents in line departments to agree that the behaviour “does not make managers accountable for stifling change” was not supportive of revolutionary change ($t=2.63$; $\text{sig}=.01$; $\text{df}=172$). These data would suggest that respondents in staff and line departments have relatively consistent perceptions regarding the importance of behaviours identified as not supportive of revolutionary organizational change.

None of the twelve non-supportive behaviours was found to be significantly associated with years of service at BC TEL. These data would suggest that perceptions of behaviours that are not supportive of revolutionary change most likely do not vary with years of service at BC TEL.

7.2.3.3 SUMMARY OF SIGNIFICANT DIFFERENCES

Analysis of the non-supportive behaviours based on gender, job type, age, years of service, and department type uncovered few significant differences. Of the 60 individual behaviour differences possible (i.e., 5 criteria BY 12 behaviours) only 4 were found to be significantly associated with the context variables tested (7% of all possible differences). Only 1 of these differences met the Bonferroni criteria. These data would indicate that employees at BC TEL share a relatively common view of what the organization can do to not support revolutionary change.

Of the 4 significant differences identified, the behaviour “does not make managers accountable for stifling change” was found to be significant on 3 occasions (i.e., importance depends on gender, job type, and department type). It is not surprising that managers and respondents from staff departments (sample demographics indicated that 61% of managerial respondents were from staff departments) would agree that this behaviour was not supportive given that they probably did not want accountability for a very flexible, senior executive driven, change.

Overall, there is strong agreement among these groups that the non-supportive behaviours identified are important. This finding would suggest that the results from Phase III of the A.F.A. with respect to the occurrence of these non-supportive behaviours at BC TEL should be meaningful to all groups within the organization.

7.2.4 SUMMARY OF THE IMPORTANCE OF SUPPORTIVE AND NON-SUPPORTIVE BEHAVIOURS

There is a high degree of consensus among respondents regarding the supportive and non-supportive behaviours identified as important. This analysis has found few significant differences based on gender, job type, department, respondent age, and years of service.

Previous research has postulated that age may play a role in one's ability to adapt to change (Pollman and Johnson, 1974; Gudykunst and Kim, 1984) and be a part of the process of change (e.g., Morris, 1992; Stamps, 1996). These data, however, would indicate that both younger and older respondents have relatively common perceptions of the importance of supportive and non-supportive behaviours of revolutionary change.

Research has shown that men and women communicate differently (Ashton and Fuehrer, 1993; Tannen, 1993; Burleson *et al.*, 1996). Given that a number of the supportive and non-supportive behaviours are linked to communication it was surprising to find so few gender differences in these data.

Having identified and analyzed behaviours deemed to be supportive and non-supportive of revolutionary change, the next stage of the A.F.A. (Stage III) analyzes the extent to which a sample of employees perceived that BC TEL exhibited these supportive and non-supportive behaviours.

7.3 STAGE III: TESTING THE MEASURES OF SUPPORT/NON-SUPPORT

Stage III of the A.F.A. involved identifying the extent to which a sample of BC TEL employees exhibited the important supportive and non-supportive behaviours of revolutionary change identified in Stage II. This section discusses the characteristics of the sample chosen to evaluate these behaviours. Results from the analysis of the most important supportive and non-supportive behaviours are then discussed.

7.3.1 STAGE III - SAMPLE

The Stage III survey used to quantify BC TEL's application of the supportive and non-supportive behaviours related to revolutionary change was sent to 1,150 employees. The sample was randomly stratified along departmental lines as well as by job type (i.e., manager versus employee). A total of 422 usable questionnaires were returned providing for a 37% response rate (12 questionnaires were returned as undeliverable). The demographic breakdown of respondents to this survey is provided in Table 68.

TABLE 68: Stage III Respondent Demographics

DEPARTMENT	SAMPLE TOTAL	MALE (52%)	FEMALE (48%)	ACTUAL % AT BC TEL
Department A	42.5%	63.8%	20.1%	41.7%
Department B	40.1	25.2	55.8	30.0
Balance of BC TEL	17.4	11.0	24.1	28.3
JOB TYPE				
Managerial	25.8%	28.6%	22.8%	24.0%
Technician	19.2	33.8	3.6	—
Clerical	19.4	3.8	36.0	—
Service Rep.	14.3	10.5	18.3	—
Sales	8.4	9.5	7.1	—
Operator	4.9	1.0	9.1	—
Engineering	3.7	7.1	—	—
Other	3.4	3.8	3.0	—
Drafting	1.0	1.9	—	—

These data indicated that the majority of respondents had worked at BC TEL for a long period of time (47% had been with BC TEL over 20 years, 41% had been with BC TEL from 6 to 20 years, and the remaining 13% had been with BC TEL for 5 years or less). As well, respondents had extensive experience in their current job (65% had been in the same position for 2 years) and had been personally affected by the change process (67% had between 2 and 3 managers over the last 2 years). These data would indicate that the perceptions of revolutionary change held by respondents has relevance to this research.

It should be noted that between the time the interviews related to the A.F.A. were done and this survey was administered, BC TEL underwent a consolidation. In order to protect confidentiality, the departments analyzed within this Stage are named "Department A" and "Department B".

The proportion of the sample from Department B was higher than the overall proportion of employees from this department in the company (approximately 40% in the sample versus 30% in BC TEL). The proportion of this sample from the Emerging Business Group was much lower than found in the company (2% in the sample versus 14% in BC TEL). The gender and job type breakdown of the sample is in line with corporate representation.

7.3.1.1 ANALYSIS BY DEPARTMENT

As shown in Table 68 the majority of respondents at BC TEL were from Department A and Department B (43% and 40% of the sample respectively). Given the distribution of employees in these departments it was decided that the Stage III analysis should include a

comparison of the two. Consequently, department type analysis as undertaken in Stage II (i.e., staff versus line) was not undertaken in Stage III. It should be noted, however, that testing revealed no significant differences related to staff versus line in the analysis for either the supportive or non-supportive behaviours tested in Stage III (i.e., respondents from both line and staff departments had similar perceptions of the extent to which BC TEL supported, and did not support, revolutionary change).

7.3.1.2 TESTING FOR CONFOUNDS

As part of the analysis undertaken in Stage III both gender and departmental differences (Department A versus Department B) were tested. It was found that the percentage of men and women in Department A and Department B was highly disproportional. Of the men sampled, 64% were in Department A while 25% were in Department B. Conversely, 56% of the women sampled were in Department B while 20% were in Department A. Given the distribution of gender within these departments there existed the possibility that gender differences may not be related to gender but instead related to departmental experiences. In order to determine if differences were solely related to gender or related to department testing for possible confounds was undertaken.

The first step of this testing involved the use of analysis of variance (ANOVA) to test for an interaction affect between gender and department for each behaviour where gender differences were identified. Interaction was tested to determine if a change in the dependant variable (DV) (i.e., the supportive or non-supportive behaviour being tested) over various levels of the independent variable (IV) (i.e., department) depended on the level of another IV (i.e., gender) (Tabachnik and Fidell (1989)). In order to test for

interaction, both gender and department were tested simultaneously as IV's. When the interaction was found to be significant (i.e., $\alpha < .05$) it would suggest that "the effect that one IV has on the DV is not the same for all levels of the other IV" (Stevens, 1992: 304). This would suggest that a potential confound exists but that conclusions regarding the main effect (i.e., department) could not be determined because the effect of department depends on gender. When the interaction effect was not found to be significant testing for confounds continued.

Following the testing for an interaction effect, analysis of covariance (ANCOVA) was undertaken. In order to test for the possibility of confounds department was used as the IV (i.e., Department A and Department B only) and gender was utilized as a covariate. When the effect of the covariate was determined to be significant in the ANCOVA (i.e., $\alpha < .05$), it was determined that the variation in gender was most likely attributable to departmental differences and not to differences in how men and women conceptualized the behaviour under study. When the covariate was not found to be significant for a particular behaviour it was determined that the variation in gender was most likely attributable to differences between men and women.

7.3.2 STAGE III – ANALYSIS (OCCURRENCE OF SUPPORTIVE BEHAVIOURS)

Respondents to the Stage III survey were asked to indicate the extent to which the 9 supportive behaviours identified in Stage II had occurred at BC TEL. The mean scores and standard deviations for the behaviours tested in Stage III are shown in Table 69. The higher the mean score the greater the extent to which BC TEL was perceived to have exhibited the supportive behaviour. Respondents scored BC TEL's overall support for

revolutionary change at 3.79 (out of 5) suggesting moderately high agreement on the part of respondents that these supportive behaviours were undertaken at BC TEL.

TABLE 69: Stage III – Occurrence of Supportive Behaviours

BC TEL Supported Change By:	Occurrence		Importance
	Mean	Std. Dev.	Stage II Rank
Communicating the need for change	3.92	.83	4
Informing employees regarding change through bulletins / teleconferences	3.90	.86	3
Aggressively pursuing emerging business opportunities	3.85	.84	7
Developing an understanding that due to change in the telecom industry the competition can be a customer	3.85	.78	8
Creating a telesales centre	3.83	.86	2
Paying more attention to the bottom line	3.82	.91	5
Allying itself with both telecommunication and other types of companies	3.80	.76	9
Providing managers with separation packages	3.70	.89	6
Pressuring the C.R.T.C. for fair competition	3.42	1.08	1
Overall Mean Score	3.79		

The rankings of the importance of the respective supportive behaviours from Stage II of the analysis are also provided in Table 69 and are based on the mean scores from Table 62. The higher the rank the more importance placed on the supportive behaviour by respondents. In all but one case these data would suggest that respondents agreed that the supportive behaviours identified as important in the Stage II analysis were occurring at BC TEL. The behaviour given the highest importance score in Stage II ("pressuring the C.R.T.C. for fair competition") was perceived by respondents to be occurring only moderately often (mean score 3.42).

Factor analysis was conducted to determine whether the 9 behaviours being used to measure organizational support for revolutionary change could be reduced to a smaller

number of underlying constructs. Further to this, testing for significant differences was undertaken on each of the individual behaviours and the factors identified on the basis of gender, job type, age, years of service, and department (i.e., Department A versus Department B). This testing was undertaken to determine if the extent to which BC TEL was perceived to have supported revolutionary change was dependent on where one worked within the organization.

Originally the alpha level of significance, using the Bonferroni technique, was established at .006 for individual behaviours (9 behaviours divided by alpha of .05) and .017 for individual factors (.05 divided by 3) in order to achieve an overall alpha of .05. Since this research is exploratory in nature the alpha was relaxed to .05 to avoid missing any interesting relationships. Significant differences at both levels of alpha are highlighted in the summary tables presented below.

7.3.2.1 FACTOR ANALYSIS (OCCURRENCE OF SUPPORTIVE BEHAVIOURS)

P.F.A. conducted on the 9 supportive behaviours tested revealed three distinct themes (see Table 70). Sixty-five percent of the variance was explained by these three factors. Survey respondents perceived BC TEL to be supportive of revolutionary change through: (1) Communication of Change, (2) Actions to Expand the Business, and (3) Financial Strategies for Change. The only individual behaviour that did not exceed the factor-loading threshold of .50 was “pressures the C.R.T.C. for fair competition”. Each of these composite factors is now discussed.

TABLE 70: Occurrence of Supportive Behaviours – Factor Analysis

	Factor 1	Factor 2	Factor 3
Communication of Change:			
Informing employees regarding change through bulletins / teleconferences / StraightTalk etc.	.84		
Communicating the need for change	.71		
Creating a telesales centre (inform customers about change)	.51		
Actions to Expand Business:			
Allying itself with both telecommunication and other types of companies (e.g., Van City)		.77	
Developing an understanding that due to change in the telecom industry the competition can be a customer		.64	
Aggressively pursuing emerging business opportunities		.56	
Financial Strategies for Change:			
Paying more attention to the bottom line			.66
Providing managers with separation packages			.61
Percent of variance explained	40.4%	13.5%	11.3%
Mean score of factor	3.83	3.88	3.76
Standard deviation	.709	.657	.769

7.3.2.1.1 Factor 1: Communication of Change

Factor 1 consists of 3 behaviours which relate to issues surrounding communication of change: “informing through internal mechanisms”, “communicating the need for change”, and “creating a telesales centre”. This factor explains 40% of the total variance. The overall mean score for this factor is 3.83 indicating that respondents moderately agree that BC TEL engages in such behaviours. These data would indicate that respondents believe BC TEL supports revolutionary change by communicating both internally to employees and externally to customers (through telesales).

7.3.2.1.2 Factor 2: Actions to Expand Business

Factor 2 consists of 3 behaviours which relate to actions being undertaken by BC TEL to expand its business: “allying itself with other companies”, “developing an understanding that the competition can be a customer”, and “pursuing emerging business opportunities”.

This factor explains 14% of the total variance. The overall mean score for this factor is 3.88 indicating that respondents moderately agree that BC TEL engages in such behaviours. These data indicate that respondents believe that BC TEL supports revolutionary change by developing relationships with other organizations to expand its overall business.

7.3.2.1.3 Factor 3: Financial Strategies for Change

Factor 3 consists of 2 behaviours which relate to financial strategies for change: “paying attention to the bottom line” and “providing separation packages for managers”. This factor explains 11% of the total variance. The overall mean score for this factor is 3.76 suggesting that respondents moderately agree that BC TEL engages in such behaviours. These data would suggest that respondents perceive that BC TEL supports revolutionary change by undertaking financial strategies that have a positive impact on the organization’s finances and how the employees view the organization.

7.3.2.2 SIGNIFICANT DIFFERENCES – OCCURRENCE OF SUPPORTIVE BEHAVIOURS

Analysis of significant differences was undertaken on the basis of gender, job type, age, years of service, and department (i.e., Department A versus Department B) for each of the behaviours and the composite factors identified as supportive of revolutionary change. The specific analysis on each of these criteria is shown in Appendix K. A summary of the significant differences based on each of these criteria is shown in Table 71 and discussed below.

TABLE 71: Significant Differences – Occurrence of Supportive Behaviours

SIGNIFICANT DIFFERENCES	INTERPRETATION
Job Type Differences	
➤ Allies itself with telecommunication and other firms	Mgrs. > Non-Mgrs.**
➤ Pressuring the C.R.T.C. for fair competition	Mgrs. > Non-Mgrs.**
➤ Factor 2: Actions to Expand Business	Mgrs. > Non-Mgrs.**
Age Differences	
No significant differences	
Years of Service Differences	
➤ Paying more attention to the bottom line	11-30 > under 5**; and 11-20 > 6-10**
➤ Understanding that a competitor can be a customer	11-30 > under 10**
➤ Providing managers with separation packages	30+ > less than 10**
➤ Factor 3: Financial Strategies for Change	11+ > under 10*
Department Differences	
➤ Creating a telesales centre	Dept. B > Dept. A*
➤ Communicating the need for change	Dept. B > Dept. A*
➤ Aggressively pursuing emerging business opportunities	Dept. B > Dept. A*
➤ Informs employees regarding change	Dept. B > Dept. A*
➤ Allies itself with telecommunication and other firms	Dept. B > Dept. A**
➤ Pressuring the C.R.T.C. for fair competition	Dept. B > Dept. A**
➤ Factor 1: Communication of Change	Dept. B > Dept. A*
➤ Factor 2: Actions to Expand Business	Dept. B > Dept. A*
Gender Differences	
➤ Creating a telesales centre	Women > Men*
➤ Paying more attention to the bottom line (*)	Men > Women*
➤ Communicating the need for change	Women > Men*
➤ Aggressively pursuing emerging business opportunities	Women > Men*
➤ Informs employees regarding change (*)	Women > Men*
➤ Factor 1: Communication of Change (*)	Women > Men*
➤ Factor 2: Actions to Expand Business	Women > Men**
➤ Factor 3: Financial Strategies for Change (*)	Men > Women*

* Alpha meets Bonferroni significance of .006 (.017 for factor scores).

** Alpha significant at less than .05.

(*) Differences more likely attributable to a respondent's department than gender.

The managers and employees sampled were found to have somewhat different views regarding the extent to which BC TEL had supported revolutionary change. Significant differences were identified on 2 of the 9 individual behaviours and 1 of the 3 composite

factors (see Table 71). The managers sampled were more significantly likely than the employees sampled to agree that BC TEL engaged in the following supportive behaviours: “allying itself with telecommunication and other types of firms” ($t=2.38$; $\text{sig}=.02$; $\text{df}=393$); “pressuring the C.R.T.C. for fair competition” ($t=2.85$; $\text{sig}=.01$; $\text{df}=398$); and, Factor 2 (Actions to Expand the Business) ($t=2.01$; $\text{sig}=.05$; $\text{df}=398$). These data would suggest that the managers sampled had a more optimistic view of the extent to which BC TEL supported revolutionary change or, alternatively, that they were more aware that the organization had undertaken these behaviours. These differences help to reinforce the notion of a perceptual gap between the top and bottom of the organization regarding behaviours related to aspects of the process of revolutionary change identified in the Phase II interviews.

None of the nine supportive behaviours was found to be significantly associated with respondent age (see Table 71). These data would suggest that the extent to which BC TEL had undertaken supportive behaviours was most likely not associated with age.

Testing on the basis of years of service revealed that respondents had somewhat different perceptions regarding the extent to which BC TEL had undertaken 3 of the 9 individual behaviours and 1 of the 3 composite factors (see Table 71). BC TEL’s engagement in the following supportive behaviours was found to differ significantly based on years of service:

- “understanding that a competitor can be a customer” ($F=3.14$; $\text{sig}=.02$; $\text{df}=4,404$) (respondents with between 11 and 30 years of service were significantly more likely to agree that this had occurred than were respondents with fewer than 10 years of experience);
- “paying more attention to the bottom line” ($F=3.04$; $\text{sig}=.02$; $\text{df}=4,408$) (respondents with between 11 and 30 years of service were significantly more likely than respondents with fewer than 5 years of service to agree this had occurred; also, respondents with between 11 and 20 years of service were significantly more likely than those with between 6 and 10 years of service to agree this had occurred);
- “providing managers with separation packages” ($F=3.43$; $\text{sig}=.01$; $\text{df}=4,405$) (those with over 30 years of service were significantly more likely than respondents with under 10 years of experience to agree this had occurred); and,
- Factor 3 (Financial Strategies for Change) ($F=3.67$; $\text{sig}=.01$; $\text{df}=4,409$) (respondents with over 11 years of service were significantly more likely than respondents with fewer than 10 years of service to agree this had occurred).

In general, respondents with more than 11 years of service agreed that behaviours related to company finances had occurred more often than those with less than 10 years of service. These differences may be due to the fact that those with more years of service were more likely to pay attention to such strategies given their length of time with the company and greater likelihood of staying with the company.

The data indicates that perceived support of revolutionary change is strongly dependent on which department one works in. Respondents from Department A and B had significantly different perceptions of how often BC TEL had undertaken 6 of the 9 individual behaviours and 2 of the 3 composite factors (see Table 71). Respondents from Department B were significantly more likely than respondents from Department A to agree that BC TEL had supported revolutionary change by: “creating a telesales centre” ($t=5.87$; $\text{sig}=.00$; $\text{df}=329$); “informing employees regarding change through bulletin” ($t=3.45$; $\text{sig}=.00$; $\text{df}=333$); “aggressively pursuing emerging business opportunities”

($t=4.47$; $\text{sig}=.00$; $\text{df}=331$); “communicating the need for change” ($t=2.77$; $\text{sig}=.01$; $\text{df}=333$); “allying itself with telecommunication and other types of firms” ($t=2.59$; $\text{sig}=.01$; $\text{df}=329$); “pressuring the C.R.T.C. for fair competition” ($t=2.05$; $\text{sig}=.04$; $\text{df}=331$); Factor 1 (Communication of Change) ($t=4.92$; $\text{sig}=.00$; $\text{df}=333$); and, Factor 2 (Actions to Expand the Business) ($t=3.64$; $\text{sig}=.00$; $\text{df}=332$). Overall, these data would suggest that respondents from Department B were more likely than those in Department A to agree that support had occurred. These data would suggest that BC TEL did a much better job of supporting revolutionary change in Department B than in it did in Department A. These data help to support the proposition outlined in the interviews suggesting that BC TEL did not undertake revolutionary change consistently throughout the organization or that some executives resisted change.

7.3.2.2.1 Testing for Potential Gender By Department Confounds

The men and women sampled were found to have very different views regarding the extent to which BC TEL had supported revolutionary change. Significant differences were identified on 5 of the 9 individual behaviours and each of the 3 composite factors (see Table 71). In order to determine if these were true gender differences rather than differences that could be attributed to where respondents worked, testing for gender by department confounds was undertaken utilizing the technique described earlier.

Testing for an interaction effect between gender and department was undertaken on each of the 5 individual behaviours and 3 composite factors where significant gender differences had been identified. No interactions were found to be statistically significant in any of the tests suggesting that perceptions regarding the extent to which these

behaviours occurred was most likely not dependent on both a respondent's gender and department. ANCOVA testing was then undertaken on these same behaviours and composite factors. Gender was identified as a significant covariate in 2 of the 5 tests undertaken on individual behaviours and 2 of the 3 tests undertaken on composite factors. Thus, for the following behaviours and composite factors gender differences were most likely due to where one works (i.e., department) and not to differences between men and women:

- "informing employees regarding change" ($F=8.01$; $\text{sig}=.01$; $\text{df}=1,331$);
- "providing managers with separation packages" ($F=3.78$; $\text{sig}=.05$; $\text{df}=1,328$);
- Factor 1: Communication of Change ($F=6.69$; $\text{sig}=.01$; $\text{df}=1,331$); and,
- Factor 3: Financial Strategies for Change ($F=6.27$; $\text{sig}=.01$; $\text{df}=1,331$).

These data would suggest that some of the differences identified between men and women may be explained by the fact that men appear to be more likely to work in a department where financial strategies are the focus of change (i.e., Department A) while women appear to be more likely to work in a department where there was better communication of change (Department B). The behaviours "informing employees regarding change" and "providing managers with separation packages" are both found within the Communication of Change factor.

No significant differences related to gender as a covariate were found regarding: Factor 2 (Actions to Expand the Business) ($F=1.33$; $\text{sig}=.25$; $\text{df}=1,331$); "communicating the need for change" ($F=3.49$; $\text{sig}=.06$; $\text{df}=1,327$); "aggressively pursuing emerging business opportunities" ($F=.83$; $\text{sig}=.36$; $\text{df}=1,329$); and, "creating a telesales centre" ($F=2.75$;

sig.=.10; df=1,331). Thus, the women sampled were significantly more likely than the men sampled to agree that BC TEL engaged in the following supportive behaviours: “creating a telesales centre” ($t=4.14$; sig.=.00; df=406); “communicating the need for change” ($t=3.12$; sig.=.00; df=411); “aggressively pursuing emerging business opportunities” ($t=2.81$; sig.=.01; df=409); and, Factor 2 (Actions to Expand the Business) ($t=2.24$; sig.=.03; df=412). The data would suggest that for these three behaviours and this composite factor significant differences in support are most likely attributable to differences in views between men and women and not to differences in where they work.

7.3.2.3 SUMMARY OF SIGNIFICANT DIFFERENCES

Testing for group differences on the basis of job type, age, years of service, gender, and department was conducted on the individual supportive behaviours and the composite factors. This analysis would indicate that where a respondent worked (i.e., department) most likely influenced perceptions of BC TEL’s support for revolutionary change.

No significant differences were identified on the basis of respondent age. These data would suggest that this criterion does not appear to substantially impact views regarding how BC TEL supported revolutionary change. A moderate number of significant differences were identified on the basis of job type and years of service. These data would suggest that these two criteria may influence perceptions regarding BC TEL’s support of revolutionary change.

Initially, 5 out of 9 individual behaviours and each of the 3 composite factors were found to be significantly different on the basis of gender. Further statistical analysis, however,

uncovered that 1 of the composite factors (Factor 2: Actions to Expand the Business) and 3 of the individual behaviours (“creating a telesales centre”, “communicating the need for change”, and “aggressively pursuing emerging business opportunities”) were most likely related to differences between men and women. The remaining differences were most likely attributable to departmental differences (i.e., Department A versus Department B).

The data would also suggest that the department where one works significantly influences one’s perspective of BC TEL’s support for revolutionary change. Respondents in Department B were more likely than those in Department A to agree that BC TEL engaged in the following supportive behaviours: “creating a telesales centre”, “informing employees regarding change through bulletin”, “aggressively pursuing emerging business opportunities”, “communicating the need for change”, “allying itself with telecommunication and other types of firms”, “pressuring the C.R.T.C. for fair competition”, Factor 1 (Communication of Change), and Factor 3 (Actions to Expand the Business). The differences in the levels of support for revolutionary change (especially those related to Communication of Change) may help to explain some of the differences identified in the interview section of this research (e.g., responsibility for change, process of change, how success of change was measured) and provide a further explanation for the perceptual gap.

From the interviews in Phase II of this research it was suggested that poor communication was part of the reason for a perceptual gap between the top and bottom of the organization (i.e., executives and employees sampled). The same analysis also

suggested that respondents perceived that BC TEL was communicating to employees regarding change through bulletins and teleconferences but that the communication was not occurring enough. Analysis of the A.F.A. indicates that those sampled perceived that BC TEL was “communicating the need for change” and “informing employees regarding change through bulletin and teleconferences”. In other words, the results from the interview phase and the survey phase of this research are inconsistent. A potential explanation of this is that BC TEL was undertaking supportive behaviours related to communication but that the information being provided was not related to what employees wanted to know as was suggested in the interviews (e.g., interview respondents wanted to understand the rationale behind changes).

7.3.3 STAGE III – ANALYSIS (OCCURRENCE OF NON-SUPPORTIVE BEHAVIOURS)

Respondents to the Stage III survey were asked to indicate to what extent the 12 non-supportive behaviours identified in Stage II had occurred at BC TEL. The mean scores and standard deviations for the behaviours tested in Stage III are shown in Table 72. The higher the mean score the greater the extent to which respondents perceived BC TEL to have exhibited the non-supportive behaviour. Respondents scored BC TEL’s overall non-support for revolutionary change at 3.29 (out of 5) suggesting slight agreement that these non-supportive behaviours were undertaken.

TABLE 72: Stage III – Behaviours Not Supportive of Revolutionary Change

BC TEL Did Not Support Change When It:	Occurrence		Importance
	Mean	Std. Dev.	Stage II Rank
Did not ask employees if there was a better way to do things	3.56	1.05	6
Was slow to react in some competitive environments	3.52	1.04	5
Allowed for conflicting departmental missions	3.49	.96	2
Did not eliminate the bureaucracy	3.47	.98	1
Allowed certain departments to protect themselves from change	3.39	1.00	3
Did not make managers accountable for stifling change	3.33	.97	4
Did not recognize where its greatest assets were	3.29	1.06	7
Did not have a common goal shared throughout the company	3.27	1.05	8
Did not allow employees to be flexible in the use of their skill sets	3.14	1.03	9
Limited employee empowerment	3.13	1.05	12
Only provided verbal support for change	2.99	1.04	10
Held back information on where the company was going	2.89	1.11	11
Overall Mean Score	3.29		

The rankings of the importance of the non-supportive behaviours identified in Stage II are provided in Table 72 and are based on the mean scores in Table 65. The higher the ranking the more importance placed on the behaviour by respondents. These data indicate that respondents agreed that BC TEL was engaging in the top 6 non-supportive behaviours to a moderate extent. BC TEL appears to be less likely to engage in non-supportive behaviours with lower importance rankings. These results lend support to the interview findings which suggested that BC TEL was not actively communicating with its employees, allowed for conflicting departmental missions, did not eliminate the bureaucracy, and allowed certain departments to protect themselves from change.

Factor analysis was conducted to determine whether the 12 non-supportive behaviours being tested could be reduced to a smaller number of characteristics on which respondents differed. As well, testing for significant differences was undertaken on the basis of gender, job type, age, years of service, and department (i.e., Department A versus

Department B). This testing was undertaken to determine if the extent to which BC TEL was perceived to have not supported revolutionary change was dependent on where one worked within the organization.

Originally the alpha level of significance, using the Bonferroni technique, was established at .004 for individual behaviours (12 behaviours divided by alpha of .05) and .025 for individual factors (.05 divided by 2) in order to achieve an overall alpha of .05. Since this research is exploratory in nature the alpha was relaxed to .05 to avoid missing any interesting relationships. Significant differences at both levels of alpha are highlighted in the summary tables presented below.

7.3.3.1 FACTOR ANALYSIS (OCCURRENCE OF NON-SUPPORTIVE BEHAVIOURS)

P.F.A. conducted on the 12 supportive behaviours tested revealed two distinct themes (see Table 73). Sixty-one percent of the variance was explained by these factors. Survey respondents perceived BC TEL to be non-supportive of revolutionary change through: (1) Inadequate Communication and Participation; and, (2) Bureaucratic Resistance and Favourtism. The only behaviour that did not exceed the factor loading threshold of .50 was "slow to react in some competitive environments". Each of these composite factors is now discussed.

TABLE 73: Non-Support of Change – Factor Analysis

	Factor 1	Factor 2
Inadequate Communication and Participation:		
Did not recognize where its greatest assets were	.78	
Limited employee empowerment	.77	
Only provided verbal support for change	.73	
Held back information on where the company was going	.66	
Did not allow employees to be flexible in the use of their skill sets	.66	
Did not ask employees if there was a better way to do things	.63	
Did not have a common goal shared throughout the company	.60	
Bureaucratic Resistance and Favouritism:		
Allowed certain departments to protect themselves from change		.76
Allowed for conflicting departmental missions		.71
Did not eliminate the bureaucracy		.63
Did not make managers accountable for stifling change		.63
Percentage of variance explained	49.5%	11.3%
Mean score of factor	3.19	3.42
Standard deviation	.837	.787

7.3.3.1.1 Factor 1: Inadequate Communication and Participation

Factor 1 consists of 7 behaviours which relate to issues surrounding inadequate communication and participation: “did not recognize where its greatest assets were”, “limited employee empowerment”, “only provided verbal support for change”, “held back information on where the company was going”, “did not ask employees to be flexible in the use of their skill sets”, “did not ask employees if there was a better way to do things”, and “did not have a common goal throughout the company”. This factor explains 50% of the total variance. The overall mean score for this factor is 3.19 indicating that respondents slightly agree that BC TEL engages in such behaviours. In other words, it would appear that BC TEL is somewhat likely to engage in inadequate communication around revolutionary change and participation in the change process.

7.3.3.1.2 Factor 2: Bureaucratic Resistance and Favouritism

Factor 2 consists of 4 behaviours related to issues surrounding bureaucratic resistance and favouritism: “allowed certain departments to protect themselves from change”, “allowed for conflicting departmental missions”, “did not eliminate the bureaucracy”, and “did not make managers accountable for stifling change”. This factor explains 11% of the total variance. The overall mean score for this factor is 3.42 indicating that respondents moderately agree that BC TEL engages in such behaviours. The mean score for this factor is higher than for Factor 1 indicating that it is perceived to be occurring more often. Furthermore, the behaviours that make up this factor represent the behaviours that respondents were most likely to agree were not supportive of revolutionary change (rankings from Stage II). In other words, these data would indicate that BC TEL was moderately likely to engage in behaviours that respondents feel most strongly typify non-support of revolutionary change.

7.3.3.2 SIGNIFICANT DIFFERENCES—OCCURRENCE OF NON-SUPPORTIVE BEHAVIOURS

Analysis of significant differences was undertaken on the basis of gender, job type, age, years of service, and department for each of the behaviours and the composite factors identified as non-supportive of revolutionary change. The specific analysis for each of these criteria is shown in Appendix L. A summary of the significant differences based on each criterion is shown in Table 74 and discussed below.

TABLE 74: Significant Differences – Occurrence of Non-Supportive Behaviours

SIGNIFICANT DIFFERENCES	INTERPRETATION
Job Type Differences	
➤ Allowed for conflicting departmental missions	Mgrs. > Non-Mgrs. [*]
➤ Allowed certain depts to protect themselves from change	Mgrs. > Non-Mgrs. ^{**}
➤ Did not ask emps. if there was a better way to do things	Non-Mgrs. > Mgrs. [*]
➤ Did not recognize where its greatest assets were	Non-Mgrs. > Mgrs. [*]
➤ Did not allow emps. to be flexible in the use of skill sets	Non-Mgrs. > Mgrs. [*]
➤ Only provided verbal support for change	Non-Mgrs. > Mgrs. ^{**}
➤ Limited employee empowerment	Non-Mgrs. > Mgrs. [*]
➤ Factor 1: Inadequate Communication and Participation	Non-Mgrs. > Mgrs. [*]
Age Differences	
➤ Did not ask emps. if there was a better way to do things	40-49 > 30-39 ^{**}
➤ Only provided verbal support for change	40-49 > 30-39 & 50+ [*]
Years of Service Differences	
No significant differences	
Department Differences	
➤ Did not ask emps. if there was a better way to do things	Dept. A > Dept. B ^{**}
➤ Did not recognize where its greatest assets were	Dept. A > Dept. B ^{**}
➤ Did not have a common goal throughout the org.	Dept. A > Dept. B [*]
➤ Did not allow emps. to be flexible in the use of skill sets	Dept. A > Dept. B ^{**}
➤ Limited employee empowerment	Dept. A > Dept. B ^{**}
➤ Only provided verbal support for change	Dept. A > Dept. B [*]
➤ Held back information on where the company was going	Dept. A > Dept. B [*]
➤ Factor 1: Inadequate Communication and Participation	Dept. A > Dept. B [*]
Gender Differences	
➤ Was slow to react in some competitive environments (*)	Men > Women ^{**}
➤ Allowed for conflicting departmental missions (*)	Men > Women ^{**}
➤ Only provided verbal support for change	Men > Women ^{**}
➤ Held back information on where change was going	Men > Women ^{**}
➤ Factor 1: Inadequate Communication and Participation	Men > Women ^{**}

* Alpha meets Bonferroni significance of .004 (.025 for factor scores).

** Alpha significant at less than .05.

(*) Differences more likely attributable to a respondent's department than gender.

Testing for job type differences revealed that the managers and employees sampled had significantly different views of whether BC TEL had undertaken 7 of the 12 individual behaviours and 1 of the 2 composite factors identified as non-supportive of revolutionary change (see Table 74). The employees sampled were significantly more likely than the

managers sampled to agree that BC TEL had not been supportive of revolutionary change by: “not asking employees if there was a better way to do things” ($t=3.69$; $\text{sig}=.00$; $\text{df}=393$); “not recognizing where its greatest assets were” ($t=3.27$; $\text{sig}=.00$; $\text{df}=391$); “not allowing employees to be flexible in the use of their skill sets” ($t=2.47$; $\text{sig}=.01$; $\text{df}=391$); “only providing verbal support for change” ($t=2.27$; $\text{sig}=.02$; $\text{df}=389$); “limiting employee empowerment” ($t=3.89$; $\text{sig}=.00$; $\text{df}=392$); and, Factor 1 (Inadequate Communication and Participation) ($t=3.12$; $\text{sig}=.00$; $\text{df}=394$). On the other hand, the managers sampled were significantly more likely than the employees sampled to agree that BC TEL had not been supportive of revolutionary change by: “allowing for conflicting departmental missions” ($t=3.59$; $\text{sig}=.00$; $\text{df}=393$) and “allowing certain departments to protect themselves from change” ($t=2.19$; $\text{sig}=.03$; $\text{df}=392$). The large number of differences would suggest that perceptions of BC TEL’s non-support for revolutionary change are dependent on a respondent’s job type. These data help to support the findings from the interviews concerning the inclusion of a perceptual gap between employees and managers regarding communication and participation in the change process. As well, it would appear that these data support the ideas put forth in the interviews regarding a breakdown of communication between the top and bottom of the organization.

Testing for differences on the basis of respondent age would suggest it has a minimal impact on perceptions of BC TEL’s undertaking of non-supportive behaviours related to revolutionary change (see Table 74). There were only two significant individual behaviour differences and no factor differences associated with respondent age. Significant differences associated with age were found with respect to the following non-

supportive behaviours: “not asking employees if there was a better way to do things” ($F=2.78$; $\text{sig}=.04$; $\text{df}=3,400$) (respondents aged 40 to 49 were significantly more likely than respondents aged 30 to 39 to agree that this had occurred) and “only providing verbal support for change” ($F=4.23$; $\text{sig}=.013$; $\text{df}=3,396$) (respondents aged 40 to 49 were significantly more likely than respondents aged 30 to 39 and respondents over 50 to agree that this had occurred). For both of the significant differences identified, middle aged employees (40-49) agreed these behaviours had occurred. This may suggest that these employees, due to their station in life (i.e., too young to retire, too old to easily change careers) are more aware when non-supportive behaviours are being undertaken.

There were no significant individual or composite factor differences identified with respect to years of service at BC TEL (see Table 74). These data would suggest that years of service with the company most likely does not impact perceptions of non-support of revolutionary change.

Regarding departmental differences the data would suggest that respondents from Department A and Department B had very different perceptions of BC TEL’s actions that were not supportive of revolutionary change given that significant differences were identified on 7 of the 12 individual behaviours and 1 of the 2 composite factors (see Table 74). Respondents from Department A were significantly more likely than respondents from Department B to agree that BC TEL had not supported revolutionary change by: “not asking employees if there was a better way to do things” ($t=2.08$; $\text{sig}=.04$; $\text{df}=328$); “not recognizing where its greatest assets were” ($t=2.60$; $\text{sig}=.01$;

df=326); “not having a common goal throughout the organization” ($t=3.41$; $\text{sig}=.00$; $\text{df}=327$); “not allowing employees to be flexible in the use of their skill sets” ($t=2.60$; $\text{sig}=.01$; $\text{df}=326$); “limiting employee empowerment” ($t=2.64$; $\text{sig}=.01$; $\text{df}=327$); “only providing verbal support for change” ($t=4.30$; $\text{sig}=.00$; $\text{df}=324$); “holding back information on where the company was going” ($t=2.96$; $\text{sig}=.00$; $\text{df}=328$); and, Factor 1 (Inadequate Communication and Participation) ($t=3.61$; $\text{sig}=.00$; $\text{df}=329$). The large number of differences would suggest that non-support for revolutionary change is dependent on a respondent’s department. These data would suggest that BC TEL did a much poorer job of supporting revolutionary change in Department A than it did in Department B. These data help to support the proposition from the interviews that BC TEL did not undertake revolutionary change consistently throughout the organization or that some executives resisted change.

7.3.2.2.1 Testing for Potential Gender By Department Confounds

The men and women sampled were found to have different views regarding the extent to which BC TEL had not supported revolutionary change. Significant differences were identified on 4 of the 12 individual behaviours and 1 of the 2 composite factors (see Table 74). In order to determine if these were true gender differences rather than differences that could be attributed to where the respondent worked, testing for gender by department confounds was undertaken utilizing the technique described earlier.

Testing for an interaction effect between gender and department was undertaken on each of the 4 individual behaviours and the 1 composite factor where significant gender differences had been identified. No interactions were found to be statistically significant

in any of the tests suggesting that perceptions regarding the extent to which these behaviours occurred was most likely not dependent on both a respondent's gender and department. ANCOVA testing was then undertaken on these same behaviours and the composite factor. Gender was identified as a significant covariate in 2 of the 4 tests undertaken on individual behaviours but not on the composite factor. Thus, for the following behaviours gender differences were most likely due to where one worked (i.e., department) and not to differences between men and women:

- "allowed for conflicting departmental missions" ($F=4.09$; $\text{sig}=.04$; $\text{df}=1,325$); and,
- "was slow to react in some competitive environments" ($F=4.32$; $\text{sig}=.04$; $\text{df}=1,325$).

These data would suggest that some of the differences identified between men and women may be explained by the fact that men appear to be more likely to work in a department that has been slow to react to the competitive environment and has allowed for conflicting departmental mission (i.e., Department A).

No significant differences related to gender as a covariate were found regarding: "only provided verbal support for change" ($F=.19$; $\text{sig}=.66$; $\text{df}=1,322$); "held back information on where change was going" ($F=1.90$; $\text{sig}=.17$; $\text{df}=1,326$); and, Factor 1 (Inadequate Communication and Participation) ($F=.52$; $\text{sig}=.47$; $\text{df}=1,327$). The men sampled were significantly more likely than the women sampled to agree that BC TEL engaged in the following non-supportive behaviours: "only provided verbal support for change" ($t=2.09$; $\text{sig}=.038$; $\text{df}=400$); "held back information on where change was going" ($t=1.94$; $\text{sig}=.05$; $\text{df}=404$); and, Factor 1 (Inadequate Communication and Participation) ($t=1.97$; $\text{sig}=.05$;

df=405). The data would suggest that for these three behaviours and this factor significant differences in support are most likely attributable to differences in views between men and women and not to differences in where they work.

7.3.3.3 SUMMARY OF SIGNIFICANT DIFFERENCES

Testing for group differences on the basis of gender, job type, age, years of service, and department was conducted on the individual non-supportive behaviours and the composite factors. The findings indicate that one's perception of how BC TEL behaved non-supportively towards revolutionary change most likely depends on one's job type or department.

No significant differences were identified based on years of service at BC TEL. Only 2 out of the 12 individual behaviours and no composite factors were found to be significant on the basis of respondent age. These data would suggest that these two criteria do not appear to substantially impact views regarding how BC TEL did not support revolutionary change.

Initially, 4 out of the 12 individual behaviours and 1 composite factor were found to be significantly different on the basis of gender. Further statistical analysis, however, uncovered that 2 of the individual behaviours ("was slow to react in some competitive environment" and "allowed for conflicting departmental missions") were more likely related to differences in where respondents worked as opposed to differences between men and women. The remaining differences in agreement between men and women were related to communication: two individual behavioural differences ("only provided verbal

support for change” and “held back information on where change was going”) and one composite factor (Factor 1: Inadequate Communication and Participation). The finding that men and women perceived issues related to communication differently helps to support the literature discussed earlier (e.g., Burleson *et al.*, 1996).

The data would suggest that job type significantly influences one’s perspective of BC TEL’s non-support for revolutionary change. Managerial respondents were more likely than the employees sampled to agree that BC TEL engaged in the following non-supportive behaviours: “allowing for conflicting departmental missions”; and, “allowing certain departments to protect themselves from change”. Respondents from the employee sample were more likely than respondents from the managerial sample to agree that BC TEL engaged in the following non-supportive behaviours: “not asking employees if there was a better way to do things”; “not recognizing where its greatest assets were”; “not allowing employees to be flexible in the use of their skill sets”; “only providing verbal support for change”; “limiting employee empowerment”; and, Factor 1 (Inadequate Communication and Participation). These data would suggest that managers were more likely to agree that behaviours related to bureaucratic resistance and favouritism had occurred while employees were more likely to agree that behaviours related to a lack of communication and participation had occurred. These data help to reinforce the idea of a perceptual gap within the organization related to revolutionary change as identified in the Phase II interviews.

The data would suggest that the department where one works significantly influences one's perspective of BC TEL's non-support for revolutionary change. Respondents in Department A were more likely than respondents in Department B to agree that BC TEL engaged in the following non-supportive behaviours: "not asking employees if there was a better way to do things"; "not recognizing where its greatest assets were"; "not having a common goal throughout the organization"; "not allowing employees to be flexible in the use of their skill sets"; "limiting employee empowerment"; "only providing verbal support for change"; "holding back information on where the company was going"; and, Factor 1 (Inadequate Communication and Participation). The individual behavioural differences identified represented each of the individual behaviours that make up this composite factor. No significant differences were identified for any of the individual behaviours that make up the composite factor Bureaucratic Resistance and Favourtism (Factor 2). The differences identified help to support the proposition from the interviews in Phase II that different parts of BC TEL may have had unique experiences with revolutionary change.

The non-supportive factor "Inadequate Communication and Participation" was found to be significantly different on the basis of gender, job type, and department. The importance of communication and participation in the change process has been emphasized by a number of authors as a way to decrease resistance and increase the chances of successful change (e.g., Umstot, 1984 ; Morris, 1992; Stamps, 1996). The lack of perceived support in this area is consistent with the findings from the interviews which suggested a lack of both communication and participation in the revolutionary

change process between the top and bottom of the organization and the inclusion of a perceptual gap.

7.3.4 SUMMARY OF THE OCCURRENCE OF THE SUPPORTIVE AND NON-SUPPORTIVE BEHAVIOURS

BC TEL appears to have engaged more frequently in supportive behaviours, than non-supportive behaviours as indicated by the mean scores for the two measures (3.79 versus 3.29). In general, it was found that respondent age did not impact perceptions of how often BC TEL engaged in either supportive or non-supportive behaviours. Years of service differences were not found to impact perceptions of how often BC TEL engaged in non-supportive behaviours but their impact on supportive behaviours was seen as moderate. The majority of the gender differences initially identified were found to be better explained by the department one worked in. The remaining gender differences (i.e., differences not related to the department one worked in) were not found to impact perceptions of how often BC TEL engaged in non-supportive behaviours but their impact on supportive behaviours was seen as moderate. Job type differences were found to impact perceptions of how often BC TEL engaged in non-supportive behaviours but their impact on supportive behaviours was seen as moderate. A respondent's department was found to significantly affect perceptions of both the supportive and non-supportive behaviours related to revolutionary change.

Respondents in Department B were more likely than respondents in Department A to agree that BC TEL had engaged in behaviours that were supportive of revolutionary change while respondents in Department A were more likely than respondents in

Department B to agree that BC TEL had engaged in behaviours that were not supportive of revolutionary change. These findings may help to explain some of the differences found in the interview data (e.g., since employees were associated with different departments they may have had different experiences with change). The significant number of job type differences helps to support the interview findings with regard to the perceptual gap between the top and bottom of the organization.

In order to gain a better perspective of their experience of revolutionary change at BC TEL, respondents were divided into two groups based on the two measures developed. Respondents were grouped according to whether their mean score was above or below the overall mean score for the supportive measure (i.e., perceived support). Respondents were also grouped according to whether their mean score was above or below the overall mean score for the non-supportive measure (i.e., perceived non-support).

A cross-tabulation of these groupings was undertaken based on job type and department given the significance of these two criteria as discussed earlier. The greatest support for revolutionary change is deemed to occur when support for revolutionary change is high (i.e., above its mean) and non-support for revolutionary change is low (i.e., below its mean) (upper right quadrant in Table 75). The least support for revolutionary change scenario is deemed to occur when support for revolutionary change is low (i.e., below its mean) and non-support for revolutionary change is high (i.e., above its mean) (lower left quadrant in Table 75).

The analysis based on job type is shown in Table 75. The managers sampled were significantly more likely than the employees sampled (38% versus 27%) to be located in the quadrant representing the greatest support for revolutionary change ($\chi^2=12.24$; sig.=.00; df=1). The employees sampled, on the other hand, were significantly more likely than the managers sampled (35% versus 19%) to be in the quadrant representing the least amount of support for revolutionary change ($\chi^2=55.12$; sig.=.00; df=1).

TABLE 75: Summary of Job Type By the Measures Developed

JOB TYPE SEGMENTATION		Supportive Behaviours			
		Below Mean		Above Mean	
Non-Supportive Behaviours	Below Mean	Managers:	21%	Managers:	38%
		Employees:	16%	Employees:	27%
	Above Mean	Managers:	19%	Managers:	22%
		Employees:	35%	Employees:	17%

These data would suggest that the managers sampled were significantly more likely to agree that BC TEL had frequently engaged in behaviours that were supportive of revolutionary change and infrequently engaged in behaviours which were non-supportive. The employees sampled, on the other hand, were significantly more likely to agree that BC TEL had frequently engaged in behaviours that were not supportive of revolutionary change and infrequently acted in a supportive manner. These findings appear to support the findings from the interviews which suggested that there were perceptual differences between the managers and employees particularly with respect to communication which makes up a large proportion of both the supportive and non-supportive measures.

The analysis based on departments is shown in Table 76. Respondents in Department B were significantly more likely than respondents in Department A (39% versus 23%) to be located in the quadrant representing the greatest support for revolutionary change ($\chi^2=5.65$; sig.=.02; df=1). Respondents in Department A, on the other hand, were significantly more likely than respondents in Department B (41% versus 22%) to be in the quadrant representing the least amount of support ($\chi^2=11.67$; sig.=.00; df=1).

TABLE 76: Summary of Departments By the Measures Developed

DEPARTMENT SEGMENTATION		Supportive Behaviours			
		Below Mean		Above Mean	
Non-Supportive Behaviours	Below Mean	Department A	21%	Department A	23%
		Department B	19%	Department B	39%
	Above Mean	Department A	41%	Department A	15%
		Department B	22%	Department B	20%

These data would suggest that respondents from Department B were significantly more likely to agree that BC TEL had frequently engaged in behaviours that were supportive of revolutionary change and infrequently engaged in behaviours which were non-supportive. Respondents from Department A, on the other hand, were significantly more likely to agree that BC TEL had frequently engaged in behaviours that were not supportive of revolutionary change and infrequently acted in a supportive manner. These findings appear to support the proposition from the interviews suggesting that different parts of BC TEL may have had unique experiences with revolutionary change.

In conclusion, it is suggested that job type and department type appear to drive perceptions of both support and non-support of revolutionary change. In order to provide

for a more comprehensive picture of revolutionary change at BC TEL, departmental and job type differences are summarized in table form and discussed in conjunction with other survey data related to revolutionary change at the end of Chapter 8.

7.4 RELIABILITY AND VALIDITY OF THE MEASURES

Before researchers and practitioners can use a measure and interpret its results, the measure must first be tested in order to determine that it is both reliable and valid. The reliability of the measures of organizational support and non-support of revolutionary change were assessed using Cronbach's alpha (average inter-item correlation). Validity analysis was undertaken to determine the extent to which the measures of support and non-support for revolutionary change 'measured' what they were intended to measure. Both content and construct validity were tested. The reliability and validity of the measures is now discussed.

7.4.1 RELIABILITY OF THE MEASURES

Tabachnik and Fidell (1989) state that one of the most important considerations for all analyses is reliability. They refer to reliability as how 'stable' a position is in the overall distribution of scores measured at different times (i.e., consistency). As this is the first time a measure of organizational support for revolutionary change has been used, its reliability cannot be generalized outside of this situation (i.e., BC TEL). Reliability scores, utilizing Cronbach's Coefficient Alpha, were determined for each of the measures developed and the outcomes tested (see Table 77). It should be noted that coefficient alphas of less than .60 are usually considered unsatisfactory (Churchill and Peter, 1984).

TABLE 77: Comparison of Reliability Scores

Measure	No. of Items	Reliability Score (Cronbach Alpha)
Support for Revolutionary Change:	9	.7977
Factor 1: Communication of Change	3	.7610
Factor 2: Actions to Expand Business	3	.7710
Factor 3: Financial Strategies for Change	2	.6080
Non-Support for Revolutionary Change:	12	.9057
Factor 1: Inadequate Communication & Participation	7	.8991
Factor 2: Bureaucratic Resistance and Favourtism	4	.8130
Supportive Manager:	29	.9174
Only positive scores	24	.9722
Only negative scores	5	.8039
Perceived Organizational Support	10	.9344
Perceived Stress	10	.8914
Organizational Commitment	9	.8695
Burnout	2	n/a
Job Satisfaction	5	.8188

The measure of support for revolutionary change achieved a reliability score of .80 while the measure of non-support for revolutionary change achieved a score of .91. Generally, the reliability scores for each of the composite factors was around .80. Factor 3 (Financial Strategies for Change) in the support for change measure received an alpha of .61 – just within the range for acceptable reliability. The strong reliability suggested by the Cronbach's Coefficient Alpha indicates that the two measures have high internal consistency (homogeneity). This indicates that the items for each measure (i.e., the behaviours being tested) appear to be measuring the same thing (i.e., support or non-support for revolutionary change).

The outcome measures tested in this study have achieved similar reliability scores to what has been found in the literature. The reliability of the measure of Perceived

Organizational Support (P.O.S.) at BC TEL was .93 which is a slightly higher reliability score than found in the literature (.74 to .89). The reliability of the measure of job satisfaction at BC TEL was .82 which is in line with past studies (.75 to .85). The reliability of the measure of organizational commitment at BC TEL was .87 which is in line with past studies (.82 to .93). The reliability of the measure of perceived stress at BC TEL was .89 which is towards the higher end of the range found in previous studies (.84 to .90). The reliability of the measure of managerial support at BC TEL was .92 which is a slightly higher reliability than found in the literature (.75 to .90). These findings improve overall confidence in the data collected (i.e., the reliability for the measures is in line with previous research).

7.4.2 VALIDITY OF THE MEASURES

Two types of validity testing were undertaken for this research: content validity and construct validity. Each is discussed below.

Sometimes referred to as 'face validity', content validity refers to the extent to which a measure provides adequate coverage for the topic being studied (Emory and Cooper, 1991). The use of the A.F.A. for item generation (in this case behaviours) enhances the content validity of the measures developed. The act nomination (Stage I) and the prototypicality ratings (Stage II) of the items nominated helps in establishing content validity.

Construct validity is generally perceived as a subjective evaluation and refers to the unique factors that underlie the measure developed and understanding how well it works

and relates to other theoretically sound measures and concepts (Emory and Cooper, 1991). When each of the measures of support and non-support of revolutionary change was analyzed it was found that each could be segmented into unique, interpretable, factors.

The behaviours that make up the measure of support for revolutionary change formed 3 unique principal factors. The behaviours that make up the measure of non-support for revolutionary change formed 2 unique principal factors. As shown in Table 78, correlation analysis of these factors was undertaken to determine the relationship between the factors to determine the adequacy of the components of the measures (Mason and Bramble, 1989).

TABLE 78: Correlation of Supportive and Non-Supportive Factors

	Fac 1 Support	Fac 2 Support	Fac 3 Support	Fac 1 Non-Sup	Fac 2 Non-Sup
Support of Revolutionary Change					
Factor 1: Communication of Change	—				
Factor 2: Actions to Expand Business	.542*	—			
Factor 3: Financial Strategies for Change	.260*	.376*	—		
Non-Support of Revolutionary Change					
Factor 1: Inadequate Comm & Participation	-.429*	-.355*	-.044	—	
Factor 2: Bureau Resistance & Favourtism	-.270*	-.157*	-.036	.589*	—
* Significant at alpha .01					

Each of the factors from the measure of support for revolutionary change was found to be negatively correlated with the factors from the measure of non-support of revolutionary organizational change. All correlations were found to be significant (alpha .01) with the exception of correlations involving Financial Strategies for Change. This factor was not significantly associated with the two non-supportive factors.

In order to further determine the construct validity of the measures developed, support for revolutionary change and non-support for revolutionary change were correlated against organizational and employee outcomes (see Table 79). Using the Pearson Correlation Coefficient as the test criterion, the measures of organizational support and non-support for revolutionary change were found to be significantly correlated (alpha of .01) with the measures tested as well as with each other.

TABLE 79: Correlations of Measures to Outcomes

Measure ¹	Mean	Support for Change	Non-Support for Change
Support of revolutionary organizational change	3.79		-.366
Non-Support of revolutionary organizational change	3.29	-.366	
Organizational Outcomes:			
Organizational Commitment	3.95	.378	-.430
Job Satisfaction	3.71	.247	-.352
Managerial Support	3.53	.354	-.458
Managerial Non-Support	2.12	-.230	.413
Employee Outcomes:			
Perceived Organizational Support	3.12	.372	-.518
Burnout	2.55	-.174	.338
Perceived Stress	2.41	-.186	.327

¹ All Pearson Correlation Coefficients are Significant at alpha < .01

It was found that the measures of support and non-support for revolutionary change were negatively correlated. This would suggest that as support of revolutionary change goes up, non-support of revolutionary change goes down and vice-versa. On average, the correlations observed with the measure of non-support for revolutionary change are stronger than those observed for support of revolutionary change (i.e., higher correlation co-efficients) indicating a somewhat stronger relationship with the outcome measures tested. These data would suggest that non-supportive behaviours have a stronger impact than the supportive behaviours on each of the organizational and employee outcomes

examined. This may indicate that the 'costs' associated with not supporting revolutionary change may be higher than the benefits associated with supporting revolutionary change.

The relationship between the measures developed and each of the organizational and employee based measures tested are discussed below.

7.4.2.1 ORGANIZATIONAL COMMITMENT

Organizational commitment refers to an employee's loyalty to an organization and is expressed through ongoing concern for the organization and its continued success (Northcraft and Neale, 1990). Respondents scored their overall organizational commitment as 3.95 (out of 5) indicating relatively strong organizational commitment. The Cronbach's Alpha for organizational commitment was .87 suggesting a highly reliable measure.

Organizational commitment was found to be positively correlated with support for revolutionary change (.378) and negatively correlated with non-support for revolutionary change (-.430). These data would suggest that employees who are more likely to experience supportive behaviours are also more likely to report higher organizational commitment while those who are more likely to experience non-support are also more likely to report lower organizational commitment. In other words, organizations which do not behave supportively during revolutionary change are likely to experience a decrease in organizational commitment.

7.4.2.2 JOB SATISFACTION

Job satisfaction refers to the general attitudes that an employee has toward his/her job (Baron, 1986). Respondents scored their overall job satisfaction as 3.71 (out of 5) indicating moderately high job satisfaction. The Cronbach's Alpha for job satisfaction was .82 suggesting a highly reliable measure.

The measure of job satisfaction was found to be positively correlated with support for revolutionary change (.247) and negatively correlated with non-support for revolutionary change (-.352). These data would suggest that employees who are more likely to experience supportive behaviours are also more likely to report higher job satisfaction while those who are more likely to experience non-support are also more likely to report lower job satisfaction. In other words, organizations that do not behave supportively during revolutionary change are likely to experience a decrease in job satisfaction.

7.4.2.3 SUPPORTIVE MANAGER

A supportive (or non-supportive) manager refers to a manager (or supervisor) who exhibits behaviours that are deemed to be supportive (or not supportive) by those who report to them (Hughes and Galinsky, 1988). Respondents scored overall managerial support at BC TEL as 3.53 (out of 5) indicating moderate managerial support. Respondents scored overall managerial non-support at BC TEL as 2.12 (out of 5) indicating moderately low managerial non-support. The Cronbach's Alpha for managerial support was .97 and was .80 for managerial non-support. Both measures appear to be highly reliable.

The measure of managerial support was found to be positively correlated with support for revolutionary change (.354) and negatively correlated with non-support for revolutionary change (-.458). Conversely, managerial non-support of revolutionary change was found to be negatively correlated with support of revolutionary change (-.230) and positively correlated with non-support of revolutionary change (.413). These data would suggest that employees who are more likely to experience behaviours that are supportive of revolutionary change are also more likely to report higher managerial support while those who are more likely to experience non-support of revolutionary change are also more likely to report lower managerial support.

Conversely, these data would also suggest that employees who are more likely to experience behaviours that are not supportive of revolutionary change are also more likely to report higher managerial non-support while those who are more likely to experience support for revolutionary change are also more likely to report lower managerial non-support. Organizations which do not behave supportively during revolutionary change are likely to experience a decrease in managerial support and / or an increase in managerial non-support.

At BC TEL managers were generally seen as being responsible to manage change in their departmental area. These data suggest that if managers do not undertake this responsibility they may be seen as not supporting revolutionary change. Many of the behaviours in the measure of managerial support deal with issues of communication (e.g., “makes sure I clearly understand what tasks have to be done”, “shares the company’s

strategic goals with me”, “gives me feedback when I need it”, “provides constructive performance feedback”, “asks my opinions about things”). The fact that communication is a key component of managerial support (and non-support) for revolutionary change would suggest that companies which want to make employees feel that the organization supports change may need to focus at the level of the immediate supervisor.

7.4.2.4 PERCEIVED STRESS

The measure of perceived stress used in this analysis tests the extent to which one's current life situation is perceived to be unpredictable, uncontrollable, and burdensome (Cohen *et al.*, 1983). Population norms indicate that mean scores greater than 2.6 reflect high levels of stress (Cohen *et al.*, 1983). Respondents scored their overall perceived stress as 2.41 (out of 5) suggesting that they are approaching high levels of stress. The Cronbach's Alpha for perceived stress was .93 suggesting a highly reliable measure.

Perceived stress was found to be negatively correlated with support for revolutionary change (-.186) and positively correlated with non-support for revolutionary change (.327). These data would suggest that employees who are more likely to experience behaviours that are supportive of revolutionary change are also more likely to report lower perceived stress while those who are more likely to experience behaviours that are not supportive of revolutionary change are also more likely to report high stress. Organizations which do not behave supportively during revolutionary change are likely to experience an increase in perceived stress which may impact their bottom-line through increased absenteeism and employee assistance program (EAP) costs (Duxbury and Higgins, 1998).

7.4.2.5 PERCEIVED ORGANIZATIONAL SUPPORT (P.O.S.)

P.O.S. refers specifically to exchanges between employees and the organization and may be depicted by anything that indicates a concern for employee well-being (Eisenberger *et al.*, 1986). Respondents scored P.O.S. at BC TEL as 3.12 (out of 5) indicating mixed P.O.S. (neither high nor low). The Cronbach's Alpha for P.O.S. was .93 suggesting a highly reliable measure.

The measure of P.O.S. was found to be positively correlated with support for revolutionary change (.372) and negatively correlated with non-support for revolutionary change (-.518). The correlation of non-support for revolutionary change with P.O.S. is noteworthy given its extremely high score. The fact that communication and participation is a key component of P.O.S. (e.g., "shows very little concern for me", "strongly considers my goals and values") as well as in the measure of non-support for revolutionary change may explain the strength of this correlation.

These data would suggest that employees who are more likely to experience supportive behaviours are also more likely to report higher P.O.S. while those who are more likely to experience non-support are also more likely to report lower P.O.S. Organizations which do not behave supportively during revolutionary change are likely to experience a decrease in P.O.S.

7.4.2.6 BURNOUT

Burnout has been characterized as referring to emotional exhaustion, depersonalization, and diminished personal accomplishment (Maslach, 1981). Respondents scored their overall burnout as 2.55 (out of 5) indicating moderately low levels of burnout.

Burnout was found to be negatively correlated (alpha .01) with support for revolutionary change (-.174) and positively correlated with non-support for revolutionary change (.338). These data would suggest that employees who are more likely to experience supportive behaviours are also more likely to report lower levels of burnout while those who are more likely to experience non-support are also more likely to report higher levels of burnout. Organizations which do not behave supportively during revolutionary change are likely to experience an increase in employee burnout.

7.4.3 SUMMARY OF RELIABILITY AND VALIDITY

It appears that the measures developed for both organizational support and non-support of revolutionary change are significantly correlated with well tested, previously validated measures which have been theoretically linked to the construct of support in the literature. This significant correlation between the measures developed and the outcomes tested suggests good construct validity.

Overall, it appears that organizational support and non-support for revolutionary change may have a strong impact on outcomes of interest to organizations. These data would suggest that if an organization behaves in a manner which supports revolutionary change it may expect: higher organizational commitment, higher job satisfaction, higher

perceived managerial support (lower perceived managerial non-support), higher P.O.S., lower burnout, and lower perceived stress. Alternatively, organizations that behave in a manner which does not support revolutionary change may expect: lower organizational commitment, lower job satisfaction, lower perceived managerial support (higher perceived managerial non-support), lower P.O.S., higher burnout, and higher perceived stress. Consequently, it may be in the best interest of organizations to undertake behaviours which support revolutionary organizational change, and avoid those which are perceived to be non-supportive, given their link to such outcomes.

It is also interesting to note that each of the individual and organizational outcomes tested can impact not only the process of change but also the bottom line of an organization. The potential consequences of not adequately supporting revolutionary change may negate the positive affects to be gained from changing. This may explain the high failure rate of reengineering initiatives found in the literature (e.g., Peters, 1990; Strebel, 1996).

While this analysis has demonstrated the importance of issues surrounding communication (factors involving communication were found to be important in both the supportive and non-supportive measures), the research suggests that the failure of change initiatives is much more complex than simply "not communicating" as has been suggested by previous researchers (e.g., Teng *et al.*, 1994; Hammer and Stanton, 1995; Shaw and Maletz, 1995). Other important behaviours have also been found to impact support for revolutionary change including actions to expand the business and financial strategies for change while bureaucratic resistance and favouritism are perceived as not

being supportive of revolutionary change. Thus, this research would suggest that these other behaviours may also play a critical role in the success of revolutionary change efforts.

7.5 CONCLUSION OF “MEASURE OF ORGANIZATIONAL SUPPORT FOR REVOLUTIONARY CHANGE”

This Phase of the research has filled a significant void in the revolutionary change and the support literature through the development of measures of organizational support and non-support of revolutionary change. Both measures have been linked to organizational outcomes (organizational commitment, job satisfaction, and managerial support / non-support) and employee outcomes (stress, burnout, and perceived organizational support). The measures have been shown to have high internal reliability and strong content and construct validity. The development of these measures has led to 9 observable behaviours of organizational support for revolutionary change and 12 observable behaviours of non-support for revolutionary change.

BC TEL has been shown to support revolutionary organizational change when it:

- Communicates information regarding change;
- Undertakes actions to expand the organization's business; and,
- Develops financial strategies for change.

BC TEL has been shown to not be supportive of revolutionary organizational change when it:

- Does not adequately communicate what is going on in the change process and does not allow for participation in the change process; and,
- Engages in strategies perceived to represent resistance or favouritism in change.

Issues surrounding communication of change are found in both the measure of support and non-support of revolutionary change and have also been suggested as critical in the literature. The literature points very clearly to the influence that communication has on an effective change process (Porras and Hoffer, 1986; Duck, 1993; Hall *et al.*; 1993; Stanton, Hammer, and Power, 1993; Larkin and Larkin, 1994; Shaw and Maletz; 1995). Asking employees if there is a better way to do things, sharing common goals, communicating the need for change, and informing employees of external initiatives are all seen as behaviours that support revolutionary change.

This research has found that some respondents perceived BC TEL as communicating while others did not. Analysis of the supportive behaviours indicated that respondents in Department B were more likely than respondents in Department A to experience communication related to change. An analysis of the non-supportive behaviours found that respondents in Department A were more likely than respondents in Department B to experience inadequate communication and participation related to change. These data would suggest that the department a respondent is associated with may play a role in one's experiences regarding communication and participation related to revolutionary change.

A lack of communication of change and participation in the change process was also observed in the interviews conducted in Phase II of this research. It was suggested that this deficiency may be part of the reason for a gap between the top and bottom of the organization. The survey data would suggest that those in management appear to be

experiencing more communication and participation regarding change than those in non-management positions. These findings may suggest that in some areas of the organization managers may be more likely to block communication regarding change and not invite participation while in other areas of the organization these activities are more likely to occur.

The data has shown that actions by BC TEL to expand its business are perceived as supportive of revolutionary change. These behaviours have been found to include strategic alliances with other companies, pursuing new opportunities, and changing its outlook on the impact of competitors. These aspects of support are a large component of the "initiation" phase of the synthesis of the process models of organizational change discussed in Figure 2 (Hage and Aiken, 1970; Hinings and Greenwood, 1983; Connor and Lake, 1994). Authors in the reengineering literature also place strong emphasis on these issues as a means for not only expanding business opportunities but 'rationalizing' the business organizations are involved in (e.g., Stewart, 1993; Adair and Murray, 1994). The survey data would suggest that respondents in Department B were more likely than respondents in Department A to experience these supportive behaviours suggesting that respondent's experiences regarding how BC TEL expands its business are impacted by where one works within the organization. The interview data would suggest that the impact may also be related to the executives in the department and their beliefs.

The literature has generally perceived the behaviours included in this factor as outcomes of revolutionary change (e.g., Hunt, 1993; Morris and Brandon, 1993; Champy, 1995).

In the survey data financial strategies for change were seen to be supportive of revolutionary change. These behaviours included paying more attention to the bottom line and providing separation packages. This data help to support the findings from the interviews in Phase II suggesting that accounting based measurements were one of the key determinants of successful organizational change.

Respondents identified behaviours such as allowing departments to shield themselves from change, allowing for conflicting departmental missions, not eliminating the bureaucracy, and not reacting quickly to competitive situations as being non-supportive of revolutionary change. These behaviours were deemed to indicate that BC TEL was being resistant to change and demonstrating 'favouritism'. These findings support many of the issues discussed in the interviews regarding the suggestions that revolutionary change did not occur simultaneously throughout BC TEL and that certain departments protected themselves from revolutionary change. These findings are consistent with the literature which has suggested that trust and empowerment can be a key to creating an effective corporate culture or moving the organization towards an achievable change goal (e.g., Golembiewski, 1972; Tomasko, 1993; Manganelli and Klein, 1994).

The measures of support and non-support for revolutionary change were found to be both reliable and valid. The measure of support for revolutionary change achieved a Cronbach Alpha of .80 and the measure of non-support a .91 suggesting reliability commensurate with established measures in the literature. Both measures were also found to be significantly linked with both employee and organizationally based measures indicating

construct validity. It is proposed that content validity was achieved through the use of the A.F.A. to develop the measures and the significant correlations associated with the factors identified.

This research has demonstrated that when behaviours that are supportive of revolutionary change are undertaken (i.e., communication of change, financial strategies for change, and actions to expand the business) there can be a positive impact on various organizational and employee outcomes. Conversely, when supportive behaviours are not undertaken there can be a negative impact on outcomes. When behaviours that are not supportive of revolutionary change are undertaken (i.e., inadequate communication and participation in change and bureaucratic resistance and favouritism) there can be a negative impact on various organizational and employee outcomes.

The literature has suggested that, in general, a supportive work environment can have similar effects on outcomes (e.g., Eisenberger *et al.*, 1986; Kottke and Sharafinski, 1988; Shore and Wayne, 1993; Settoon *et al.*, 1996). These data would suggest that, given the impact of support (and non-support) for revolutionary change on the various organizational and employee outcomes tested, the measures developed should be given a similar amount of research attention as that provided to supportive work environments.

CHAPTER EIGHT: OTHER SURVEY DATA

In the survey sent out in Phase III to test the measures of organizational support and non-support for revolutionary change, respondents were also queried regarding topics covered in the interviews undertaken in Phase II (Chapter 6). These questions, which can be found in Appendix C (Section C), were included in the survey to: (1) help with the interpretation of the interview data, (2) allow for greater generalizability of the interview findings, and (3) provide further information on particular topics that arose from the interviews. Questions addressed the following issues:

- ♦ the historical background to change;
- ♦ organizational culture;
- ♦ organizational communication;
- ♦ the process of revolutionary change; and,
- ♦ suggestions for future change initiatives.

It should be noted that there were fundamental differences in the ways in which data was captured in these two phases of the research which makes direct comparability of the findings problematic. During the Phase II interviews respondents were not provided with lists to choose their responses from and multiple responses were allowed. Survey respondents were provided with lists developed from the responses provided in the interviews and were asked to indicate the one most relevant, or important, item from these lists (i.e., multiple responses were not allowed).

8.1 TESTING FOR CONFOUNDS

In the previous chapter it was found that, in some cases, variations in gender were most likely attributable to departmental differences and not to differences in how men and

women conceptualized the behaviour being studied. As the data for this chapter was collected from the same people sampled in the previous chapter, there existed a possibility that confounds may also exist in this data. Therefore, testing for potential confounds between gender and department was also undertaken in this chapter. Where interval type data was collected (i.e., Question 27), ANCOVA testing as described in the previous chapter was undertaken. The majority of the data, however, was nominal (categorical) (i.e., the data collected classified a person or characteristic) and thus ANCOVA testing could not be utilized. In such situations chi-square tests were utilized.

When gender differences were found for a particular variable testing for confounds was undertaken. For nominal data the Pearson Chi-Square was utilized to determine whether gender and department were independent (Siegel and Castellan, 1988). For a variable found to be significant on gender, respondents were divided according to gender (i.e., the number of men and women who chose the particular variable). As well, respondents were grouped into 2 categories based on department: those in Department A who chose the particular variable and those in Department B who chose the particular variable. A comparison of "Gender by Department" was then undertaken as shown in Table 80.

TABLE 80: Example of Gender BY Department Confound Testing

Variable Tested	Department A	Department B
MALE	Men from Dept A who chose a particular variable	Men from Dept B who chose a particular variable
FEMALE	Women from Dept A who chose a particular variable	Women from Dept B who chose a particular variable

When the chi-square statistic was not found to be significant it was deemed that no association between gender and department was present. As such, gender differences were then viewed as most likely due to differences between men and women. When the chi-square statistic was found to be significant it was proposed that the variation in gender was most likely attributable to departmental differences and not to differences in how men and women conceptualize the variable being tested.

8.2 HISTORICAL BACKGROUND TO CHANGE AT BC TEL

Survey respondents were asked what year they believed that revolutionary change began at BC TEL. As shown in Table 81, 41% of respondents cited the years 1990 through 1993 as representing the beginning of revolutionary change. The years from 1994 onward were cited by 36% of respondents. These data would suggest that while most survey respondents perceived that revolutionary change began after 1990 they were fairly evenly split as to when it occurred.

TABLE 81: Year Change Began

Year Change Began	Ovr	Job Type $\chi^2=10.35$ sig=.04; df=4		Gender $\chi^2=4.49$ sig=.34; df=4		Department $\chi^2=2.38$ sig=.67; df=4	
		Mgr	Emp	Male	Fem	DP-A	DP-B
Pre-1982	7.2%	2.0%	9.2%	9.7%	4.2%	8.2%	6.8%
1982 – 1985	9.9	15.9	8.8	9.2	10.2	8.9	10.1
1986 – 1989	6.3	8.0	5.2	6.7	6.0	7.5	4.1
1990 – 1993	40.6	47.5	38.5	38.5	43.4	41.1	39.9
1994 onward	35.9	29.7	37.7	35.9	36.1	34.2	39.2

χ^2 =Chi-square statistic

No significant differences were found on the basis of gender or department but differences were identified by job type. The managers sampled were more likely than the

employees sampled to indicate that change began between 1990 and 1993 (48% versus 39%) ($\chi^2=16.56$; sig.=.00; df=1) while the employees sampled were more likely than the managers sampled to indicate that change took place after 1994 (38% versus 30%) ($\chi^2=35.35$; sig.=.00; df=1). These data would suggest that managers may have been aware of changes before employees or that change may have affected managers before employees. This is consistent with the interview findings which suggested that executives were aware of revolutionary change before employees were.

The survey data strongly suggests that revolutionary change began in the 1990's (76% of respondents placed the beginning of change in this time period). From the interviews it was found that 32% of respondents believed change began in the 1990's (33% of employees and 29% of executives). This timeframe corresponds with the Strategic Renewal initiative. Change from 1994 onward is most likely associated with the Lines of Business (LOB) restructuring. As 42% of the executives interviewed indicated that change began in the early 1980's it may be suggested that those at the top of the organization believed change started much earlier than the employees sampled. The executives interviewed appear to have been more aware of the changes being discussed before managers or employees felt the impact. This is consistent with the idea of change needing to be observable (e.g., some employees may not have observed revolutionary change until the LOB).

Survey respondents were also asked to identify the major events occurring at the time that they believed revolutionary change began. As shown in Table 82, respondents indicated

the beginning of restructuring (33%), the telecom industry opening to competition (32%), and the increase in customer focus (13%) as the major events occurring at the time change began. These findings would suggest that the beginning of restructuring and the telecom industry opening to competition signified the major events occurring at the time change began. From the historical analysis based on corporate documents it was suggested that these two events were related (i.e., restructuring was undertaken due to changes in the telecom industry). The percentage of respondents indicating these major events was similar to that found in the interviews. It appears that external stimuli brought about revolutionary change at BC TEL.

TABLE 82: Major Event Occurring When Change Began

Major Event Occurring	Ovr	Job Type $\chi^2=14.17$ sig=.08; df=8		Gender $\chi^2=12.08$ sig=.15; df=8		Department $\chi^2=17.82$ sig=.02; df=8	
		Mgr	Emp	Male	Fem	DP-A	DP-B
Begin restructuring/reorg.	32.9%	28.1%	34.9%	37.1%	28.3%	40.1%	24.6%
Telecom industry open	31.5	34.4	30.6	27.8	36.1	30.3	29.0
Increased focus on customer svc	12.7	12.5	12.9	11.9	13.3	8.6	21.0
Creation of B.T.E.	8.6	11.5	7.1	9.3	7.8	7.2	8.7
Availability telephone tech.	3.9	1.0	5.1	4.1	3.0	5.3	4.3
Greater focus on bottom line	3.3	1.0	4.3	4.6	1.8	4.6	3.6
Focus on internal commun.	3.0	4.2	2.4	1.5	4.8	1.3	5.8
Creation of BC TEL Mobility	3.0	4.2	2.4	2.1	4.2	2.0	2.2
Other	1.1	3.1	0.4	1.5	0.6	0.7	0.7

No job type or gender differences were found in these data. Departmental differences, however, were identified. Respondents from Department B were more likely than respondents from Department A to indicate that the increase on customer focus marked the beginning of change (21% versus 9%) ($\chi^2=6.10$; sig=.01; df=1) while respondents from Department A were more likely than respondents from Department B to indicate that the beginning of restructuring marked the beginning of change (40% versus 25%)

($\chi^2=7.67$; sig.=.01; df=1). These findings would suggest that departments may have gone through different processes of change or were motivated to change by different stimuli. This reinforces the interpretation of the Phase II interviews which suggested that different areas of BC TEL went through revolutionary change at different times and in different ways. This data is also consistent with the analysis of historical documents which suggested that each department had their own revolutionary change plan.

Survey respondents were asked what they believed were the forces motivating revolutionary change. As shown in Table 83, 49% of respondents perceived that new competitors entering the marketplace was the motivating force for revolutionary change. A substantive number of respondents also chose the C.R.T.C. (14%), changing customer needs (13%), and the need to control revenues and costs (12%) as motivating forces. It should be noted that new competitors in the marketplace could not have occurred without the C.R.T.C. decisions on competition. Therefore, one response was, in actuality, a manifestation of the other. The survey data was very consistent with the interview data in that both sets of respondents identified the introduction of new competitors and the C.R.T.C. as the forces motivating revolutionary change.

TABLE 83: Forces Motivating Change

Force Motivating Change	Ovr	Job Type $\chi^2=6.29$ sig=.71; df=9		Gender $\chi^2=27.94$ sig=.00; df=9		Department $\chi^2=19.79$ sig=.01; df=9	
		Mgr	Emp	Male	Female	DP-A	DP-B
New competitors	48.7%	47.8%	49.0%	44.6%	52.5%	42.4%	49.6%
C.R.T.C.	13.8	15.2	13.2	16.9	9.9	16.6	9.5
Changing customer needs	13.2	9.8	14.4	9.2*	19.1	9.9	21.2
Control revenues and costs	12.3	14.1	11.7	16.4*	7.4	18.5	7.3
Leaders wanted change	5.4	8.7	4.3	6.2	4.3	6.6	5.1
New business opportunities	4.9	4.3	5.1	6.2	3.7	4.6	5.1
New technologies	0.6	—	0.8	—	1.2	0.7	0.7
Changing employee needs	0.3	—	0.4	—	0.6	—	—
Downsizing	0.3	—	0.4	0.5	—	0.7	—
Other	0.6	—	0.8	—	1.2	—	1.5

* Differences more likely attributable to a respondent's department than gender

No significant job type differences were found in these data. Gender and departmental differences, however, were found. Chi-square testing of gender by department was found to be significant for "changing customer needs" ($\chi^2=16.11$; sig=.00; df=1) and "control of revenues and costs" ($\chi^2=7.54$; sig=.01; df=1). This would suggest that the gender differences identified are more likely due to differences in departmental affiliation as opposed to differences between men and women. Although the majority of respondents in both Department B and Department A (50% and 42% respectively) identified new competitors in the industry as the force motivating change, respondents in Department B were more likely than respondents in Department A to perceive that changing customer needs was the force motivating change (21% versus 10%) ($\chi^2=4.46$; sig=.04; df=1). Respondents in Department A were more likely than respondents in Department B to perceive that controlling revenues and costs was the force motivating change (19% versus 7%) ($\chi^2=8.53$; sig=.00; df=1). These findings would suggest that the differences identified between men and women may be explained by the fact that men appear to be more likely to work in an area where costs and revenues are a focus (i.e., Department A)

while women appear to be more likely to work in an area where customer needs are the focus (i.e., Department B).

These data, when interpreted in light of the historical analysis and the findings from the interviews suggest the following conclusions: (1) revolutionary change most likely occurred in the early 1990's, (2) restructuring and competition signified the major events occurring at the time this revolutionary change, (3) competition, as dictated by the C.R.T.C., was the major force driving revolutionary change, and (4) departments appear to have gone through change for different reasons and responded to change.

8.3 ORGANIZATIONAL CULTURE

From the interviews it was found that opinion was mixed on how to best describe the culture at BC TEL. A trend away from a culture of stability and uncertainty toward a competitively focused culture (i.e., combination of positioning and customer focus themes) was, however, noted. Working with the same adjectives used to describe the cultural themes in the interview analysis, survey respondents were asked which best described the culture at BC TEL: (1) during the time period when change began, and (2) at the time the survey was administered (i.e., 1998) (see Table 84).

TABLE 84: Culture When Change Began and Today

	Survey						Interviews			
	When Change Began $\chi^2=19.36$ sig=.01; df=7			Today (1998) $\chi^2=5.52$ sig=.60; df=7			2 Years Ago		Today (1997)	
Cultural Theme	Ovr	Mgr	Emp	Ovr	Mgr	Emp	Exec	Emp	Exec	Emp
Stability	54.3%	68.9%	49.4%	0.5%	—	.7%	26.3%	18.2%	22.7%	20.0%
Profit	11.7	4.9	14.4	21.2	19.3	22.0	5.3	—	9.1	4.0
Customer Focus	11.2	7.8	12.5	16.0	12.5	17.4	5.3	4.5	18.2	12.0
Positioning	7.3	2.9	8.5	27.4	26.0	27.9	—	13.6	13.6	8.0
Uncertainty	6.8	7.8	6.3	12.2	15.4	10.8	36.8	31.8	13.6	24.0
Emp. Support	4.2	3.9	4.4	0.2	—	.3	—	4.5	—	12.0
Pressure	3.7	1.9	4.1	8.2	8.7	8.0	5.3	22.7	4.5	12.0
Change	0.8	1.9	0.4	14.2	18.3	12.9	21.1	4.5	18.2	8.0

Several key differences in wording between the interviews and the survey should be noted as they make a direct comparison between these 2 sets of data difficult: a) in the surveys respondents were asked to describe the culture at the time change began; interview respondents were asked to describe the culture in 1995 and 1996 not when they believed change began; b) both interview and survey respondents were asked to describe the culture 'today' but interviews were undertaken in 1997 and surveys in 1998; c) survey respondents were given key words to choose that best described the culture while interview respondents had to use their own words to describe the culture. It is possible that the differences between the interview and survey data (description of "today") are due to the fact that the culture changed again over this time period.

The majority of respondents (54%) agreed that the culture at BC TEL when change first began could best be described as stable. There was also an indication that some respondents perceived that the culture could be best described as profit oriented (12%) or customer focused (11%). The managers sampled were significantly more likely than the employees sampled to indicate that the culture was stable (69% versus 49%) ($\chi^2=19.36$;

sig.=.00; df=1) while the employees sampled were more likely than the managers sampled to indicate that the culture was profit oriented (14% versus 5%) ($\chi^2=26.27$; sig.=.00; df=1). These data would suggest that in most parts of the organization the culture when change began was perceived as stable (i.e., smooth; predictable; cohesive; comfortable).

Respondents described the culture in 1998 as position oriented (27%), profit oriented (21%), customer focused (16%), change oriented (14%), and uncertain (12%). No significant job type differences were found in the analysis of the organizational culture in 1998. These results are similar to those obtained from the interviews in that they indicate that there is no commonly agreed to view of BC TEL's culture today.

It is interesting to note that 44% of the survey respondents used a competitive theme to describe the current culture (i.e. the combination of positioning and customer focus themes). When asked to describe the culture when revolutionary change began, only 19% respondents used a competitive theme. In fact, compared to the interview data, the survey data provides for an even stronger emphasis on a competitive theme (44% of survey respondents gave this response versus 28% of those interviewed). Together these sets of data would suggest that employees perceived that the company is shifting from a stable culture towards one that emphasizes competition.

No significant job type differences were found in these data suggesting that both the managers and employees sampled perceive the culture at BC TEL today similarly. There

were, however, gender and departmental differences found in how the culture was viewed. These results are presented in Table 85.

TABLE 85: Culture By Gender and Department

Cultural Theme	Gender						Department			
	When Change Began $\chi^2=7.03$ sig=.43; df=7			Today $\chi^2=35.92$ sig=.00; df=7			When Began $\chi^2=12.29$ sig=.09; df=7		Today $\chi^2=40.18$ sig=.00; df=7	
	Ovr	Male	Female	Ovr	Male	Female	DP-A	DP-B	DP-A	DP-B
Stability	54.3	54.7	53.9	0.5	—	1.1	51.0	56.9	—	1.3
Profit	11.7	9.4	14.4	21.2	28.0*	13.7	8.3	15.7	31.1	11.4
Cust Focus	11.2	10.8	11.7	16.0	12.3*	20.0*	14.6	7.8	9.1	24.7
Positioning	7.3	6.4	8.3	27.4	18.5*	37.4	7.6	4.6	23.8	29.7
Uncertainty	6.8	8.4	5.0	12.2	16.1	7.9	8.9	6.5	14.6	8.9
Emp. Support	4.2	5.4	2.8	0.2	0.5	—	5.7	2.6	0.1	—
Pressure	3.7	4.4	2.8	8.2	9.0	7.4	3.8	4.6	11.0	5.7
Change	0.8	0.5	1.1	14.2	15.6	12.6	—	1.3	9.8	18.4

* Differences more likely attributable to a respondent's department than gender

The data suggests that there were both gender and departmental differences with respect to the frequency with which respondents used the different themes to describe the culture today. Chi-square testing was undertaken to determine potential gender by department confounds for the following themes: profit oriented ($\chi^2=10.97$; sig=.00; df=1), customer focus ($\chi^2=9.14$; sig=.00; df=1), and positioning oriented ($\chi^2=19.94$; sig=.00; df=1). This would suggest that the gender differences in these data are more likely the result of departmental differences and not differences between men and women. Respondents in Department B were more likely than respondents in Department A to perceive a customer focused theme (25% versus 9%) ($\chi^2=10.67$; sig=.00; df=1). Respondents in Department A were more likely than respondents in Department B to perceive a profit focused theme (31% versus 11%) ($\chi^2=16.51$; sig=.00; df=1). These data would suggest that the differences identified between men and women may be explained by the fact that men appear to be more likely to work where costs and revenues are a focus (i.e., Department

A) while women appear to be more likely to work where customer needs are a focus (i.e., Department B).

The differences between departments further adds further emphasis to the possibility that different areas of the organization had unique focuses on change. Department B appears to be more focused on customers and Department A appears to be more focused on the bottom-line. The movement from a stable culture to one where there is no commonly ascribed view of culture suggests that BC TEL is not at a stage in the change process where a new culture has been established (i.e., a new deep culture). These data would suggest that the deep culture present when change began (i.e., 'stable' culture) has not yet been replaced.

These data would indicate that, as suggested in the interviews, there has been a shift in how BC TEL's culture is viewed from when change began through to 1998. The majority of respondents viewed the culture as stable when change began whereas today there is no clear consensus on how to describe the culture. A plurality of respondents, however, view the culture as competitively focused (combination of positioning and customer focus themes). The results reinforce the contention that this shift in culture is revolutionary rather than evolutionary (evolutionary change takes a long time to occur, is not a fundamental change). First, one can argue that the change from a stable culture to one that is competitive is fundamental in nature. Secondly, the change has occurred quickly in that in the early 1990's before revolutionary change began, 54% of

respondents described the culture as stable. Less than a decade later only .5% of respondents used this description.

8.4 ORGANIZATIONAL COMMUNICATION

Respondents were asked to identify: 1) the most relevant information source related to the communication of change (see Table 86); and, 2) the group which provided the most relevant information on change (see Table 87).

TABLE 86: Source Which Provided Most Relevant Information on Change

		Job Type $\chi^2=26.78$ sig=.00; df=8		Gender $\chi^2=12.44$ sig=.13; df=8		Department $\chi^2=15.20$ sig=.06; df=8	
	Ovr	Mgr	Emp	Male	Female	DP-A	DP-B
Memos	18.9%	20.4%	18.4%	17.4%	22.0%	17.1%	21.4%
Video-conference	18.6	13.3	20.5	15.5	22.6	17.7	20.8
Face-to-face	16.3	28.6	12.0	15.9	16.1	12.8	16.2
Intranet / OiStar	15.0	8.2	17.3	14.5	14.5	16.5	14.9
Voicemail	13.9	19.4	12.0	15.5	11.8	11.0	14.9
The "Grapevine"	10.5	7.1	11.7	11.6	9.1	12.8	9.1
StraightTalk	4.2	2.0	4.9	4.8	3.2	6.7	2.6
T.W.U. Transmitter	1.8	—	2.5	3.4	0.5	4.3	—
Other	0.8	1.0	0.7	1.4	—	1.2	—

As can be seen from the data in Table 86, no one information source was seen as providing the most relevant information on change. The information sources chosen as most relevant included: memos (19%), videoconferences (19%), face-to-face communication (16%), the intranet (15%), voicemail (14%), and the grapevine (11%). These data would suggest that information sources are not utilized homogeneously throughout the organization or that respondents had different preferences with respect to how they received information on change. The fact that face-to-face communication was not rated as the most relevant runs contrary to the literature which places high regard on

its use (e.g., Larkin and Larkin, 1994). Data from the interviews suggests that face-to-face communication may not be seen as relevant because it seldom occurred (i.e., respondents were asked what they had found to be relevant, not what they preferred).

No gender differences were found in these data. Job type and departmental differences, however, were found. The managers sampled were more likely than the employees sampled to indicate that face-to-face communication (29% versus 12%) ($\chi^2=14.44$; sig.=.00; df=1) and voicemail (19% versus 12%) ($\chi^2=3.26$; sig.=.07; df=1) provided the most relevant information on change while the employees sampled were more likely than the managers sampled to indicate the intranet as providing such information (17% versus 8%) ($\chi^2=4.75$; sig.=.03; df=1). Despite significance being found on the basis of department, no information sources were found to be rated differently.

Overall, these data would suggest that the employees sampled found more relevance in non-personal information sources (e.g., intranet over face-to-face). This may indicate that they do not trust information that comes from one-on-one meetings (i.e., not as accurate as the information provided to a wider audience) or have greater trust in information that comes in writing). Alternatively, the data could suggest that executives interviewed made sure to communicate change information to their managers using face-to-face communication (largest proportion of managers chose this as the most relevant mechanism – 29%) but that managers did not in-turn use face-to-face meetings to communicate to the next level down.

Respondents were then asked which group within the company provided them with the most relevant information on revolutionary change. As shown in Table 87, the majority of respondents perceived the Corporate Communications Department (28%), one's own manager (25%), one's co-workers (20%), and senior executives (18%) as providing them with the most relevant information on change. No significant job type, gender, or departmental differences were found in these data.

TABLE 87: Group Which Provided the Most Relevant Change Information

		Job Type $\chi^2=8.94$ sig=.35; df=8		Gender $\chi^2=8.70$ sig=.37; df=8		Department $\chi^2=10.86$ sig=.21; df=8	
	Ovr	Mgr	Emp	Male	Female	DP-A	DP-B
Corp. Commun. Dept.	27.7%	24.7%	28.7%	23.8%	33.0%	24.6%	26.1%
My manager	24.9	26.8	24.2	24.3	25.5	26.3	25.5
My co-workers	19.9	21.6	19.4	21.9	17.6	24.0	17.6
Senior executives	17.9	22.7	16.3	19.0	16.0	13.8	22.9
Media	6.0	3.1	6.9	7.1	4.3	6.0	4.6
T.W.U.	2.6	—	3.5	3.3	2.1	4.8	1.3
Grapevine	0.5	1.0	0.3	0.5	0.5	0.6	0.7
Internet/Intranet	0.3	—	0.3	—	0.5	—	0.7
Bulletins	0.3	—	0.3	—	0.5	—	0.7

In the interviews it was found that a combination of individuals at the senior executive level were perceived as responsible for the communication of change. The survey data would suggest, however, that they were not perceived to be the group which provided the most relevant change information. This would suggest that while senior executives have responsibility for the communication of change they are not necessarily the ones who provide relevant change information downwards. This appears to be the task of managers or Corporate Communications.

With respect to the provision of relevant change information it is interesting to note the importance of both Corporate Communications and one's own manager in the survey data. A higher number of survey respondents than those who participated in the interviews identified Corporate Communications as providing the most relevant information on change. This discrepancy may be due in part to the fact that while this department has not created enough of an image to be "top of mind" when it comes to discussions on the communication of change, it is assumed to be relevant when presented as an option on paper. Another explanation may be that respondents perceive that, given its title, it must be relevant to the communication of change information or have responsibility for executive communications on change.

The interviews also determined that managers were perceived as important in departmental communication of change. The survey has supported this finding and suggests that one of the primary roles of managers during revolutionary change is to provide relevant information to subordinates. These findings are consistent with the strong association between the perception of management support and the perception that the organization supports revolutionary change.

8.5 PROCESS OF CHANGE

Survey respondents were asked whether they felt there was a master plan in place to guide revolutionary change, whether they believed revolutionary change was driven from the top of the organization, and whether they felt BC TEL was at a competitive advantage due to the changes made. Responses to these questions are shown in Table 88.

TABLE 88: Process of Change at BC TEL

Percent Who Agreed	Ovr	Job Type		Gender		Department	
		Mgr	Emp	Male	Fem	DP-A	DP-B
Was there a master plan to guide change?	57.4	53.8	59.2	51.6*	63.9	55.7	61.6
Was change driven from the top?	82.8	82.5	82.8	84.7	80.5	88.2	76.5
Is BC TEL at a competitive advantage due to the changes made?	70.0	71.2	69.9	65.7*	74.4	65.5	74.1

* Differences more likely attributable to a respondent's department than gender

Fifty-seven percent of respondents believed there was a master plan in place to guide revolutionary change (see Table 88). These data provide further support for the interview data which suggested that if there was a plan in place to guide revolutionary change it was not universally shared. No significant job type or departmental differences were found in these data. There were, however, significant gender differences. Chi-square testing of gender by department was found to be significant ($\chi^2=42.41$; sig.=.00; df=1). This would suggest that differences in perceptions regarding a master plan are most likely not related to differences in gender but to departmental affiliation. This would suggest that the department which perceived higher levels of support (low levels of non-support) were more likely to believe a plan existed (i.e., Department B). Overall, these data would suggest that if there was a master plan in place to guide change it has not been well established throughout the organization.

From the interviews it was proposed that revolutionary change was driven from the top of the organization. In order to verify this view, survey respondents were asked whether they perceived revolutionary change as being driven from the top of the organization. An overwhelming 83% of respondents agreed that it had been (see Table 88). The interview and survey data provide strong evidence to suggest that senior management drove change

at BC TEL. No significant job type or gender differences were found but a departmental difference was identified. Although the majority of respondents in both departments agreed that change was driven from the top, respondents from Department A were significantly more likely than respondents in Department B to indicate that this was the case (88% versus 77%) ($\chi^2=7.73$; sig.=.01; df=1). This finding adds to the suggestion that departments may have had different change processes and experiences.

Respondents were asked whether they believed BC TEL was at a competitive advantage in the marketplace due to the changes made. The survey results indicate that 70% of respondents held this belief (see Table 88). These results are similar to what was found in the interviews (79% of the executives interviewed and 63% of the employees interviewed believed BC TEL was at a competitive advantage due to the changes that had taken place). No job type differences were found in these data. Significant gender and departmental differences were, however, found.

Chi-square testing of gender by department was found to be significant ($\chi^2=52.50$; sig.=.00; df=1). This would suggest that differences in competitive advantage are most likely not related to differences between men and women but to departmental affiliation. Respondents in Department B were more likely than respondents in Department A to perceive that BC TEL was at a competitive advantage (74% versus 67%) ($\chi^2=2.89$; sig.=.09; df=1). These data would suggest that the women sampled were more likely to work in a department where competitive advantage was more easily perceived (i.e., Department B) while the men sampled worked in an area where competitive advantage

was not as easy to perceive (i.e., Department A). Although the majority of respondents in both departments agreed that the company was at a competitive advantage, it would appear that the focus of change within one's own department may alter views of the company in the marketplace. As has been suggested earlier, respondents in Department B may have had a better sense for the customer since they were more externally focused while respondents from Department A were more internally focused.

During the interviews 26% of respondents (17% of executives sampled and 29% of employees sampled) reported that G.T.E. had informal input into revolutionary change, 67% (79% of executives sampled and 52% of employees sampled) indicated that managers had informal input, and 80% (83% of executives sampled and 74% of employees sampled) indicated that external customers had input. In order to verify these findings, survey respondents were asked to indicate who they felt had input into the change process (see Table 89). The choices included: executives, G.T.E., external customers, shareholders, their manager, and/or respondents themselves had input into the change process.

TABLE 89: Input into the Change Process

Percent Who Agreed	Ovr	Job Type		Gender		Department	
		Mgr	Emp	Male	Fem	DP-A	DP-B
All Executives	83.2%	89.5%	80.9%	81.7%	84.7%	84.1%	80.2%
G.T.E.	54.3	59.0	52.1	58.3*	49.5	58.9	48.2
External Customers	50.9	57.1	48.8	46.3*	55.9	43.4	62.8
Shareholders	41.9	47.6	40.3	35.8*	48.0	34.9	49.4
My Manager	26.6	49.5	18.5	24.5	27.7	28.5	24.6
Me	20.4	35.2	15.5	19.3	21.3	16.6	25.0

* Differences more likely attributable to a respondent's department than gender

As shown in Table 89, the majority of survey respondents perceived that executives had input into change at BC TEL (83%). No gender or departmental differences were found but job type differences were identified. The managers sampled were significantly more likely than the employees sampled to hold this perception (90% versus 81%) ($\chi^2=4.17$; sig.=.04; df=1). These data support the findings from the interviews which suggested that those at the top of the organization were perceived to play a major role in the change process. These data would suggest that the perception that executives had input into change at BC TEL appears to be widely held.

Fifty-four percent of survey respondents perceived that G.T.E. had input into the change process (see Table 89). No significant job type differences were found in these data but there were significant gender and departmental differences identified. Chi-square testing of gender by department was found to be significant ($\chi^2=22.91$; sig.=.00; df=1) suggesting that differences in gender were more likely due to differences in departmental affiliation than to differences between men and women. Respondents in Department A were more likely than respondents in Department B to perceive that G.T.E. had input into the change process (59% versus 48%) ($\chi^2=3.88$; sig.=.05; df=1). These findings would suggest that input from G.T.E. may have occurred where technical expertise, rather than marketing skills, were required.

Fifty-one percent of survey respondents indicated that they believed external customers had input into change (see Table 89). No significant job type differences were found in these data but there were significant gender and departmental differences identified. Chi-

square testing of gender by department was found to be significant ($\chi^2=44.78$; sig.=.00; df=1) suggesting that differences in gender were more likely due to differences in departmental affiliation than to differences between men and women. Respondents in Department B were more likely than respondents in Department A to perceive that external customers had input into the change process (63% versus 43%) ($\chi^2=12.75$; sig.=.00; df=1). Comparatively, 80% of interview respondents indicated that external customers had input into the change process. These data would suggest that external customers may not have had as major an impact on the change process as indicated in the interviews and that those who work in departments directly with customers (e.g., Department B) appear to be more likely to perceive input from this group.

Forty-two percent of survey respondents indicated that shareholders had input into the change process (see Table 89). No significant job type differences were found in these data but there were significant gender and departmental differences. Chi-square testing of gender by department was found to be significant ($\chi^2=39.53$; sig.=.00; df=1) suggesting that differences in gender were more likely due to differences in departmental affiliation than to differences between men and women. Respondents in Department B were more likely than respondents in Department A to perceive that shareholders had input into the change process (49% versus 35%) ($\chi^2=7.35$; sig.=.01; df=1). These findings would suggest that, overall, there was no consensus regarding the input of shareholders into the change process but perceived input was more likely in departments that were more focused on competitive forces (i.e., Department B).

Only 26% of survey respondents indicated that their manager had input into change (see Table 89). No significant gender or departmental differences were found. Job type differences were, however, identified. The managers sampled were more likely than the employees sampled to indicate that their manager had input into the change process (50% versus 19%) ($\chi^2=38.61$; sig.=.00; df=1). These data would indicate that while the employees sampled did not believe that their immediate supervisor (manager) had input into change, their manager's "manager" may have had some input. This may suggest that a manager's "manager" may have been an executive and had input or, alternatively, that lower level managers wanted to believe that someone above them had input into the changes.

Only 20% of survey respondents indicated that they themselves had input into change (see Table 89). This is consistent with the interview findings which suggested that many respondents felt removed from the change process. No significant gender differences were found. Job type and departmental differences were, however, identified. Respondents from Department B were more likely than respondents from Department A to perceive that they had input into change (25% versus 17%) ($\chi^2=3.67$; sig.=.06; df=1) and the managers sampled were more likely than employees to indicate the same (35% versus 16%) ($\chi^2=18.56$; sig.=.00; df=1). Even though the literature stresses the critical importance of stakeholder input into the change process as a means towards overall change success (e.g., Rogers and Rothlisberger, 1952; Umstot, 1984; Porras and Hoffer, 1986; Morris, 1992; Duck, 1993; and Laabs, 1996), the overall input of respondents into

change appears to be minimal. Given the findings in Phase III of this research, the lack of perceived input would not be considered “supportive” of revolutionary change.

Survey respondents were asked to rate (on a 5-point Likert Scale) the extent to which they agreed that those in charge of change: (1) had ensured BC TEL was prepared to meet competitive challenges; (2) communicated where the company was going; (3) were easy to identify; (4) had increased decision making by lower level employees; and, (5) acted on employee suggestions. These data are shown in Table 90.

TABLE 90: Rating What Those in Charge of Change Have Accomplished

5-point Likert Scale Person(s) in charge of change at BC TEL:	Ovr	Job Type		Gender		Department	
		Mgr	Emp	Male	Fem	DP-A	DP-B
Ensured BC TEL was prepared to meet competitive challenges	3.39	3.38	3.42	3.32	3.47	3.31	3.53
Communicated where the company is going and why	3.24	3.37	3.21	3.08*	3.42	3.12	3.40
Can be easily identified	2.88	3.13	2.85	2.82	2.94	2.84	2.90
Increased decision making by lower level employees	2.57	2.85	2.50	2.47	2.69	2.47	2.74
Act on employee suggestions	2.56	2.70	2.54	2.43	2.71	2.42	2.78

* Differences more likely attributable to a respondent's department than gender

As shown in Table 90, survey respondents expressed moderate agreement with the idea that those in charge of revolutionary change at BC TEL had:

- ensured BC TEL was prepared to meet competitive challenges; and,
- communicated where the company was going and why.

With regard to ensuring that BC TEL was prepared to meet competitive challenges, significant departmental differences were identified but no job type or gender differences were found. Respondents in Department B were significantly more likely than those in

Department A to perceive that those in charge of change had ensured BC TEL was prepared to meet competitive challenges ($F=4.42$; $\text{sig}=.04$; $\text{df}=1,332$). This finding is consistent with the supportive behaviours identified earlier suggesting that respondents in Department B were more likely than respondents in Department A to report that BC TEL had supported change by undertaking actions to expand the business.

No significant job type differences were found with regard to whether those in charge of change had communicated where the company was going and why. Gender and departmental differences were, however, present. ANOVA testing as discussed in the previous chapter did not find an interaction effect ($F=.20$; $\text{sig}=.66$; $\text{df}=1,330$). ANCOVA revealed that gender was a significant covariate ($F=4.83$; $\text{sig}=.03$; $\text{df}=1,331$) suggesting that differences were related to departmental differences as opposed to gender. Respondents in Department B were significantly more likely than respondents in Department A to perceive the same ($F=6.08$; $\text{sig}=.01$; $\text{df}=1,331$). This finding is consistent with the supportive behaviours identified earlier suggesting that those in Department B were more likely than those in Department A to experience supportive behaviours related to communication of change.

As shown in Table 90, survey respondents expressed moderate disagreement with the idea that those in charge of revolutionary change at BC TEL:

- could be easily identified;
- had increased decision making by lower level employees; and,
- had acted on employee suggestions.

With regard to whether those in charge of revolutionary change could be easily identified, no significant gender or departmental differences were identified. Job type differences were, however, found. The managers sampled were more likely than the employees sampled to perceive that those in charge of change could be easily identified ($F=3.61$; $\text{sig}=.06$; $\text{df}=1,399$). These data would suggest that employees were less likely to be informed of who was in charge of change suggesting poor top-down communication. This finding provides further evidence of a perceptual gap between the top and bottom of the organization and confusion over who is in charge of change as suggested in the interviews.

With regard to whether those in charge of change had increased decision making by lower level employees, significant differences were identified in all three criteria tested (job type, gender, and department). Testing for interaction between gender and department was not found to be significant ($F=1.15$; $\text{sig}=.28$; $\text{df}=1,330$). The ANCOVA revealed that the covariate gender did not approach significance, ($F=1.18$; $\text{sig}=.28$; $\text{df}=1,331$) suggesting that differences are most likely due to gender. The managers sampled were more likely than the employees sampled ($F=8.66$; $\text{sig}=.00$; $\text{df}=1,398$). Department B were more likely than those in Department A ($F=5.38$; $\text{sig}=.02$; $\text{df}=1,333$) and women were more likely than men ($F=4.60$; $\text{sig}=.03$; $\text{df}=1,410$) to perceive that the person(s) in charge of change had increased decision making by lower level employees. These findings further advance the idea of a different implementation of change depending on where one is situated within the organization and what level one works at.

Alternatively it may be suggested that there is resistance within areas of the organization and within different job levels toward empowering employees.

Finally, with regard to whether those in charge of change had acted on employee suggestions, no significant job type differences were found but gender and departmental differences were identified. Interaction between gender and department was tested on the behaviour and was not found to be significant ($F=.22$; $\text{sig}=.64$; $\text{df}=1,331$). ANCOVA revealed that gender was not a significant covariate ($F=2.65$; $\text{sig}=.11$; $\text{df}=1,332$) suggesting that differences were related gender. These data would suggest that respondents in Department B were significantly more likely than respondents in Department A ($F=12.31$; $\text{sig}=.00$; $\text{df}=1,332$) and that women were more likely than men ($F=9.46$; $\text{sig}=.00$; $\text{df}=1,411$) to perceive that those in charge of change acted on employee suggestions. These data also further the suggestion of the idea of a different implementation of change depending on where one is situated within the organization and, in this case, one's gender.

The overall lack of input into the change process has been substantiated by the development of the measures of support and non-support of revolutionary change in Phase III of this research which identified inadequate communication and participation as non-supportive of revolutionary change. Respondents indicated that this was happening to a moderate extent. There is continuing evidence to suggest that departments have had different experiences with change thereby strengthening the suggestion from the

interviews that certain parts of the organization had not changed or were more resistant to change.

8.6 HOW IS CHANGE AT BC TEL BEST DESCRIBED?

One of the research objectives was to better understand the process of revolutionary change. In order to address this issue, respondents were asked to indicate their perception of the speed of change at BC TEL (ranging from slow to fast) (see Table 91).

TABLE 91: Speed of Change at BC TEL

		Job Type $\chi^2=5.65$ sig=.06; df=2		Gender $\chi^2=.76$ sig=.68; df=2		Department $\chi^2=1.06$ sig=.59; df=2	
SPEED OF CHANGE	Ovr	Mgr	Emp	Male	Fem	DP-A	DP-B
Fast	48.0%	57.4%	44.7%	47.0%	48.7%	48.2%	49.4%
Neither slow nor fast	25.1	17.8	27.6	24.4	26.4	27.4	22.8
Slow	26.9	24.8	27.6	28.6	24.9	24.4	27.8

The five categories used to differentiate the speed of change were redefined into three groups: (1) fast (includes fast and somewhat fast); (2) neutral (neither slow nor fast); and (3) slow (includes slow and somewhat slow). When asked about the speed of change, 48% of survey respondents classified it as fast, 25% as neither slow nor fast, and 27% as slow. These data would suggest that some parts of BC TEL are changing quickly while others are not (i.e., there may be something blocking change from occurring – protection from managers, resistance to change). It is also conceivable that individuals have different comfort levels with change and what is considered ‘fast’ for one person is not for another.

No significant gender or departmental differences were identified but job type differences were found. The managers sampled were more likely than the employees sampled to indicate the speed of change as fast (57% versus 45%) ($\chi^2=4.87$; sig=.03; df=1). The employees sampled were more likely than the managers sampled to describe the speed of change as neither slow nor fast (28% versus 18%) ($\chi^2=3.85$; sig=.05; df=1). It may be that managers encounter, or see, revolutionary change first and try to 'manage' it thereby reducing its impact on employees.

In order to gain a broader perspective of these results, correlation analysis was undertaken matching the perceived speed of change with the scores for the measures of support and non-support of revolutionary change from Phase III as shown in Appendix M. What was found, consistently, across the entire sample was a significantly positive correlation between the supportive behaviours and the speed of change and a significantly negative correlation between the non-supportive behaviours and the speed of change. In other words, as the perceived support for revolutionary change increased the perceived speed of revolutionary change increased. Similarly, when the perceived non-support for revolutionary change increased, the speed of revolutionary change decreased. This relationship is shown graphically in Figure 8 with the respective means of the measures plotted against the perceived speed of change.

FIGURE 8: Speed of Change BY Support (Non-Support) for Change

These findings suggest that an organization that behaves supportively towards revolutionary change is perceived to change faster (and in reality may change faster) than an organization that behaves in a non-supportive fashion. These findings imply that organizations who want (or need) to change quickly should engage frequently in behaviours that are supportive of revolutionary change and minimize the extent to which they behave non-supportively.

8.7 THE NEXT CHANGE

Based on the findings from the interviews, respondents were asked to rate the top three things they would like BC TEL to undertake the next time it goes through a similar change (see Table 92). The overall totals in Table 92 indicate the percentage of employees who chose a particular behaviour as any of their three choices.

TABLE 92: What BC TEL Could Do Differently Next Time

Behaviour	Ovr	Job Type		Gender		Department	
		Mgr	Emp	Male	Fem	DP-A	DP-B
Talk/listen more	66.9%	61.0%	69.0%	63.8%	69.3%	61.1%	74.4%
Monitor impact of change	51.0	53.6	50.2	50.0	52.0	46.3	50.0
Prepare sooner	36.8	27.6	39.9	33.5	39.6	33.7	47.6
Develop formal change process	29.4	26.7	30.4	34.4*	24.3	37.1	20.1
Help people deal with change	27.5	22.9	29.0	27.1	28.7	28.6	28.0
Not terminate people immediately	22.5	16.2	24.8	19.7	24.8	24.0	18.9
Give people a reason to change	18.6	25.7	16.2	26.1*	10.4	23.4	12.8
Change faster	15.9	31.4	10.6	16.1	14.9	9.7	18.9
Change slower	1.5	—	2.0	—	3.0	2.3	1.8

* Differences more likely attributable to a respondent's department than gender.

These data would suggest that issues surrounding communication appear to be the key component to the change process that respondents want BC TEL to work on (67%). Survey respondents also suggested that BC TEL needs to: monitor the impacts of change (51%), change sooner (37%), develop a formal change process (29%), help people deal with change (28%), not terminate people immediately (23%), give people a reason to change (19%), and change faster (16%). Job type, gender, and departmental differences were identified in these data.

The managers sampled were more likely than the employees sampled to want revolutionary change to occur faster (31% versus 11%) ($\chi^2=25.35$; sig.=.00; df=1) and give people a reason to change (26% versus 16%) ($\chi^2=4.69$; sig.=.03; df=1). The employees sampled were more likely than the executives sampled to want BC TEL to prepare sooner for change (40% versus 28%) ($\chi^2=5.09$; sig.=.02; df=1). The relationship between the speed of change and support would suggest that if managers want change to proceed faster that being supportive of revolutionary change would assist in this regard. The suggestion by employees that BC TEL prepare sooner for change may be a way for

this group to reduce the uncertainty and pressure associated with change as discussed in the interviews.

Chi-square testing of gender by department was found to be significant for both “give people a reason to change” ($\chi^2=9.71$; sig.=.00; df=1) and “develop formal processes of change” ($\chi^2=16.13$; sig.=.01; df=1). This would suggest that differences in these two behaviours are most likely not related to differences between men and women but to departmental affiliation. Respondents in Department B were more likely than respondents in Department A to indicate that BC TEL should talk or listen more to employees (74% versus 61%) ($\chi^2=6.78$; sig.=.01; df=1) and prepare sooner (48% versus 34%) ($\chi^2=6.74$; sig.=.01; df=1). Respondents in Department A were more likely than respondents in Department B to indicate that BC TEL should help people deal with change (37% versus 20%) ($\chi^2=11.93$; sig.=.00; df=1) and give people a reason to change (23% versus 13%) ($\chi^2=6.39$; sig.=.01; df=1).

These data support the idea, noted previously, that the revolutionary change process appears to vary with department. Respondents in Department B appear to want to be more proactive in the change process while respondents in Department A want to be better informed regarding change. These findings help to highlight that employees are seeking behaviours from the company that they have been suggested previously (i.e., Phase III) as being supportive of revolutionary change (e.g., communication, participation).

8.8 CONCLUSION

The data collected from the surveys has helped to enhance a number of key suggestions from Phases II and III of this research. The following observations can be made:

- Revolutionary change most likely began at BC TEL post-1990 with the majority of respondents indicating that it occurred between 1990 and 1993 which is in line with the Strategic Renewal initiative;
- One's perspective of the change process appears to be dependent on the department one is associated with (e.g., Department A or Department B);
- The force motivating change appear to have been the introduction of new competitors into the marketplace by the C.R.T.C.;
- Departments may have undergone revolutionary change due to different forces and for different reasons;
- Departments appear to have had different structures and processes to guide revolutionary change;
- Prior to the beginning of revolutionary change the majority of respondents described BC TEL's culture as one of stability. There did not appear to be a shared view of culture at BC TEL in 1997 and 1998. Rather the culture at BC TEL appears to depend on the area of the company one works in;
- There appears to have been a movement towards a competitive culture;
- The information source providing the most relevant information on revolutionary change depends on one's jobs type;
- Respondents do not agree on which individual or group within BC TEL provided the most relevant information on revolutionary change;
- There appears to be uncertainty whether or not there was a master plan to guide revolutionary change. If there was such a plan the data suggests that it was not universally shared;
- Revolutionary change was driven from the top of the organization;
- Executives appear to have had input into revolutionary change;
- There does not appear to be consensus regarding the input provided by G.T.E., external customers, and shareholders into revolutionary change;
- The input of managers and employees into revolutionary change appears to be minimal at best;
- Respondents perceive that the changes made have given BC TEL a competitive advantage in the marketplace;
- Some areas of BC TEL appear to have been protected from revolutionary change; and,
- Respondents from both the interview and survey samples believed that to improve the change process BC TEL needs to communicate more, monitor the impact of change, change sooner, develop formal change processes, and help people deal with change.

The research has shown that at BC TEL one's experience with revolutionary change appears to vary by job type and department. This would suggest, therefore, that there was most likely not just one set of plans and processes to guide revolutionary change at BC TEL. This would add further validation to the suggestion that the process of revolutionary change is ad hoc, flexible, and continually changing. In order to provide a more complete picture of the differences related to job type and department the significant differences identified in Chapter 7 (i.e., the occurrence of behaviours that were supportive and non-supportive of revolutionary change) and Chapter 8 (survey data collected to compliment the interview data) are presented in Table 93. Differences identified as specifically related to gender are also provided in this summary for comparative purposes.

Table 93 indicates that the prevalence of job type and departmental differences transcend those identified on the basis of gender. Each of the differences identified on the basis of gender were also found to be significant in the analysis of departmental differences with the exception of "Those in charge of change act on employee suggestions". Given this, and the confounds found in the analysis of the supportive and non-supportive behaviours as well as in the other survey data, caution must be used in interpreting differences between men and women.

TABLE 93: Summary of Differences From Survey Data

JOB TYPE	
MANAGERS	EMPLOYEES
<p>In their experience, managers were more likely to agree that BC TEL supported revolutionary change by:</p> <ul style="list-style-type: none"> ➤ allying with telecom and other firms ➤ pressuring the C.R.T.C. for fair competition ➤ undertaking Actions to Expand the Business 	<p>In their experience, employees were more likely to agree that BC TEL supported revolutionary change by:</p> <p>No behaviours significantly different</p>
<p>In their experience, managers were more likely to agree that BC TEL did not support revolutionary change when it:</p> <ul style="list-style-type: none"> ➤ allowed for conflicting dept missions ➤ allowed certain depts. to protect themselves from change 	<p>In their experience, employees were more likely to agree that BC TEL did not support revolutionary change when it:</p> <ul style="list-style-type: none"> ➤ did not ask employees if there was a better way to do things ➤ did not recognize where its greatest assets were ➤ did not allow employees to be flexible in the use of skill sets ➤ only provided verbal support for change ➤ limited employee empowerment ➤ provided inadequate Communication and Participation
<p>Managers were more likely to indicate the following with respect to revolutionary change at BC TEL:</p> <ul style="list-style-type: none"> ➤ Change began between 1990 and 1993 ➤ Culture when change began – stable ➤ Most relevant change information comes from face-to-face and voicemail ➤ Speed of change is fast ➤ Next time org should give people a reason to change and change faster ➤ All executives, my manager, and “me” had input into change ➤ Those in charge of change easily identified and increased decision making by lower level employees 	<p>Employees were more likely to indicate the following with respect to revolutionary change at BC TEL:</p> <ul style="list-style-type: none"> ➤ Change began from 1994 onward ➤ Culture when change began – profited oriented ➤ Most relevant change information comes from intranet ➤ Speed of change is neither slow nor fast ➤ Next time org should change sooner

TABLE 93: Summary of Differences From Survey Data (contd.)

DEPARTMENT	
DEPARTMENT A	DEPARTMENT B
In their experience, respondents from Department A were more likely to agree that BC TEL supported revolutionary change by:	In their experience, respondents from Department B were more likely to agree that BC TEL supported revolutionary change by:
No behaviours significantly different	<ul style="list-style-type: none"> ➤ creating a telesales centre ➤ communicating the need for change ➤ aggressively pursuing emerging business opps ➤ informing employees regarding change ➤ allying with telecom and other firms ➤ pressuring the C.R.T.C. for open competition ➤ Communicating Change ➤ undertaking Actions to Expand the Business
In their experience, respondents from Department A were more likely to agree that BC TEL did not support revolutionary change when it:	In their experience, respondents from Department B were more likely to agree that BC TEL did not support revolutionary change when it:
<ul style="list-style-type: none"> ➤ did not ask employees if there was a better way to do things ➤ did not recognize where its greatest assets were ➤ did not have a common goal throughout ➤ did not allow employees to be flexible in the use of skill sets ➤ limited employee empowerment ➤ only provided verbal support for change ➤ held back info on where the org was going ➤ provided Inadequate Communication and Participation 	No behaviours significantly different
Respondents from Department A were more likely to indicate the following with respect to revolutionary change at BC TEL:	Respondents from Department B were more likely to indicate the following with respect to revolutionary change at BC TEL:
<ul style="list-style-type: none"> ➤ Culture today described as profit oriented ➤ Major event occurring when change began – restructuring ➤ Next time org should develop formal change processes and give people a reason to change ➤ Force motivating change – control of revenues and costs ➤ GTE had input into change ➤ Change was driven from the top 	<ul style="list-style-type: none"> ➤ Culture today described as customer focused ➤ Major event when occurring change began – increased customer focus ➤ Next time org should talk/listen more and change sooner ➤ Force motivating change – customer needs ➤ External customers, shareholders, and “me” had input into change ➤ Org is at a competitive advantage due to change ➤ Those in charge of change ensured org was prepared to meet competitive challenges, communicated where the org was going and why, increased decision making by lower level employees, and act on employee suggestions

TABLE 93: Summary of Differences From Survey Data (contd.)

GENDER	
WOMEN	MEN
In their experience, women were more likely to agree that BC TEL supported revolutionary change by:	In their experience, men were more likely to agree that BC TEL supported revolutionary change by:
<ul style="list-style-type: none"> ➤ creating a telesales centre ➤ communicating the need for change ➤ aggressively pursuing emerging business opps ➤ undertaking Actions to Expand the Business 	No behaviours significantly different
In their experience, women were more likely to agree that BC TEL did not support revolutionary change when it:	In their experience, men were more likely to agree that BC TEL did not support revolutionary change when it:
No behaviours significantly different	<ul style="list-style-type: none"> ➤ only provided verbal support for change ➤ held back info. on where the org was going ➤ provided Inadequate Communication and Participation
Women were more likely to indicate the following with respect to revolutionary change at BC TEL:	Men were more likely to indicate the following with respect to revolutionary change at BC TEL:
<ul style="list-style-type: none"> ➤ Those in charge of change act on employee suggestions and increased decision making by lower level employees 	No behaviours significantly different

The findings summarized in Table 93 indicate that the managers and employees sampled had very different perceptions of revolutionary change and what the organization was doing that was supportive and not supportive of revolutionary change. The managers sampled viewed revolutionary change in a much more positive manner (e.g., organization was supportive of revolutionary change, different groups had input into change, there was increased decision making by lower level employees) while the employees sampled, on the other hand, perceived revolutionary change from a somewhat more negative standpoint. The predominance of job type differences helps to support the findings from interviews (Phase II) which suggested a perceptual gap between the top and bottom of the organization regarding various aspects of revolutionary change.

The findings summarized in Table 93 also indicate that respondents from Department A had a very different perspective of revolutionary change than those from Department B. Respondents in Department B perceived the organization as much more supportive and indicated that many groups within the organization had input into change while respondents from Department A were decidedly more negative regarding these activities (e.g., non-supportive behaviours were being undertaken). The departmental differences identified are most likely due to the functions of the departments as well as the belief sets of those at the top. This supposition is supported by the literature which has suggested that delineation on the basis of departmental activity can provide for very different perspectives on the impact of organizational activities at both the employee and executive level (e.g., Albers, 1974; Mintzberg, 1979).

Given the significant differences identified in both the behaviours that were supportive and non-supportive of revolutionary change and the other survey data, a case can be put forth that job type and departmental affiliation may impact how one experiences and perceives revolutionary change. This adds further evidence to suggest that previous research which has only viewed change from an upper management perspective may not be contributing an accurate and complete portrayal of organizational change.

CHAPTER NINE: CONCLUSIONS

Phase I of this research provided an opportunity to review, from historical documents, the transition of BC TEL from a monopoly to a competitive company and proposed a process model of revolutionary change based on this transition. This analysis represented what BC TEL indicated that it planned to do. Phase II reviewed the same process of revolutionary change through personal interviews with both executives and employees and proposed a model of revolutionary change. This analysis represented what BC TEL was perceived to have done incorporating both an executive and employee perspective. Phase III involved the development of behaviourally based measures of organizational support and non-support for revolutionary change. Finally, an examination of survey data based on the Phase II interviews was undertaken to help interpret the interview data, allow for greater generalizability, and help interpret the behaviourally based measures developed in Phase III. Each phase of this research could stand alone as a significant contribution to the field of organizational change.

This chapter begins with a discussion of why BC TEL represented a case of revolutionary change. Next, an overview of the findings from Phase I, Phase II, and Phase III is presented and then consolidated into a synthesized model of revolutionary change at BC TEL. This chapter concludes with a discussion of the limitations and implications of this research as well as suggestions for future research initiatives.

9.1 IS BC TEL A CASE OF REVOLUTIONARY CHANGE?

Revolutionary change can be defined as change that: a) forcefully interrupts the status quo, b) happens quickly and abruptly, c) is fundamental and all encompassing, and d)

brings about something that is diametrically different than what used to be (e.g., Greiner, 1972; Miller, 1982; Johnson, 1987; Gersick, 1991). As such, revolutionary change can be considered to be a non-incremental or radical form of change (i.e., not incremental). In the case of BC TEL's transition from a monopoly to a competitive company there is evidence from the historical analysis based on corporate documents (Chapter 5), the interviews conducted with executives and employees (Chapter 6), and from the follow-up survey (Chapter 8) to suggest that BC TEL represents a case of revolutionary change. Table 94 summarizes the findings from these research methods and assists in the rationale for deciding whether BC TEL represents a case of revolutionary change as discussed below.

The data would suggest that the change that occurred at BC TEL forcefully interrupted the status quo (first aspect of the definition above). The company had operated in a monopolistic environment for over 100 years. Although they had the opportunity to prepare for competition as early as 1982, BC TEL decided to fight the C.R.T.C. to protect their monopoly. The organization identified the need to shift from its monopolistic mindset as it faced the loss of revenues due to competitors for the first time. The shift in status quo is seen in the fact that there has been a shift away from a relatively stable organizational culture toward a competitively focused culture that is based on the customer. In other words, the process of change appears to have shifted the culture in a fundamental manner.

TABLE 94: Summary of Findings By Research Method

RESEARCH TOPIC	RESEARCH METHODOLOGY			
	Historical Analysis	Interviews	Survey	Conclusion
History of Change	<ul style="list-style-type: none"> • Fought change at beginning • First significant movement toward change in 1991 • C.R.T.C. motivated change 	<ul style="list-style-type: none"> • Execs perceived change began in early 1980's; emps in early 1990's • Change started due to creation of B.T.E. and competition • C.R.T.C. motivated change 	<ul style="list-style-type: none"> • Change likely began in early 1990's • Restructuring and competition started change • New competitors motivated change 	<ul style="list-style-type: none"> • Change likely began in 1990's • Restructuring and competition started change • C.R.T.C. motivated change
Culture	<ul style="list-style-type: none"> • Change of focus from operations to customers 	<ul style="list-style-type: none"> • No consensus re: culture today and two years ago 	<ul style="list-style-type: none"> • Stable culture when change began • No consensus re: culture today 	<ul style="list-style-type: none"> • Culture has changed – moved from stable to no. of different views
Commun	<ul style="list-style-type: none"> • Communication structure not clearly delineated 	<ul style="list-style-type: none"> • Varied means used to commun. change info. • Varied groups and people communicated change 	<ul style="list-style-type: none"> • No consensus on how org. best commun. change information • No one person or group provided the most relevant change information 	<ul style="list-style-type: none"> • Communication is unstructured • Org. commun. change in various forms • Org. commun. change through different people
Process of Change	<ul style="list-style-type: none"> • Global planning • Depts. had to meet targets • Hybrid plan to deal with ongoing change • Initiation and Planning was flexible, not static • Executives were hired from outside the org. • Downsizing occurred as part of change 	<ul style="list-style-type: none"> • Change was driven from the top • Uncertain whether there was a master plan; if a plan, always changing • Org at competitive advantage due to change • Managers & customers had input into change; G.T.E. did not 	<ul style="list-style-type: none"> • Change was driven from the top • Uncertain whether there was a master plan • Org at competitive advantage due to change • Execs had input into change; other managers and employees did not • Org needs to commun. more re: change, monitor impact of change • The impact of change depends on one's dept. 	<ul style="list-style-type: none"> • Driven from the top • Unclear whether master plan • Org at competitive advantage due to change • Execs had input • Unclear if there was input from other groups and people • The impact of change depends on one's dept.

The data would also suggest that change happened quickly and abruptly (the second component of the definition of revolutionary change). Revolutionary change at BC TEL most likely began in 1991 and took between 2 and 5 years to occur. This timeframe is in line with various authors which have stated that this is common for revolutionary change (e.g., Miller, 1982; Romanelli and Tushman, 1994; Stace, 1996). The data would also suggest that revolutionary change took place throughout the organization at different times helping to reinforce the need for the range associated with the timeframe.

The third aspect of the definition requires that revolutionary change should be fundamental in nature. The data would suggest that revolutionary change was fundamental and all encompassing. It was found that all nearly areas of BC TEL had been impacted by the revolutionary change to varying degrees and levels of intensity. The finding that different parts of the organization changed at different times led to the suggestion that perhaps revolutionary change occurred as sequential punctuated equilibrium that impacted all areas of the organization fundamentally at different times.

The data would also suggest that revolutionary change brought about something different than the status quo. This meets the fourth requirement as set out in the definition of revolutionary change. Change has led to constantly changing, flexible planning structures which now guide the organization. BC TEL appears to now be acting quickly and often to survive in a competitive environment and has set precedents of downsizing and hiring executives from outside the organization. These aspects of change did not appear to be common in the organization's past.

Having suggested that BC TEL represents a case of revolutionary change as it appears to have met the criteria specified in the literature, there are other findings which further this proposition. Many authors contend that revolutionary change most commonly occurs when an organization needs to radically 'fit' to a changing environment caused by, among other factors, legislative changes (e.g., Nadler and Tushman, 1990; 1995; Dunphy and Stace, 1993). The executives and employees sampled appear to agree that BC TEL shifted due to legislative changes prompted by the C.R.T.C. Moreover, organizational change at BC TEL appears to have been driven by external forces (e.g., competition, the C.R.T.C.). The change at BC TEL to combat these environmental forces appears to have been revolutionary since, instead of changing in an incremental fashion as it had been suggested to have done in the past (described as slow and methodical before this change by respondents), the process of revolutionary change utilized appears to have included a series of ad hoc changes flexible enough to be altered on an ongoing basis. These changes suggest a fundamental difference in the way BC TEL "changed".

At BC TEL the process of revolutionary change appears to have been driven almost exclusively from the top of the organization. This is consistent with the suggestion that the input of managers into revolutionary change, if it occurred, was primarily informal. Using the Dunphy and Stace (1993) change matrix (i.e., contingency model identifying the type of leadership required for change based on the scale of change by the style of change management), it appears that BC TEL utilized a "dictatorial transformation" style of change management which, these researchers posit, is most applicable in situations where revolutionary change is needed.

From the interviews and follow-up survey a number of pieces of data support the idea that BC TEL represents a case of revolutionary change. In particular, the findings appear to suggest that the majority of respondents perceived that: (1) the speed of change was relatively fast; (2) the culture had moved from one of stability to one no consensus; (3) legislative forces have moved the telephone industry from a purely monopolistic to a competitive environment; (4) change took place over period of between 2 and 5 years; and, (5) change was driven from the top of the organization. In addition a number of findings from the historical documents also help to support the assumption that this is a revolutionary change including: (1) appointing a new C.E.O; (2) hiring of executives from outside the organization; (3) creating a Corporate Communications department; (4) downsizing the workforce by over 15%; and, (5) undertaking employee focused research. Together, these findings provide evidence to suggest that BC TEL represents a valid case of an organization undergoing a revolutionary change.

9.2 WHAT HAS BEEN SUGGESTED IN THIS RESEARCH

The synthesized model of revolutionary change to be proposed in this chapter is a consolidation of the results and findings of Phase I, Phase II, and Phase III of this research. A brief overview of the key findings from each of these phases is first presented.

9.2.1 PHASE I – PROCESS MODEL OF REVOLUTIONARY CHANGE

In Phase I of this research, the analysis of corporate documents and research, a process model of revolutionary change was proposed based on what BC TEL indicated they planned to do, not necessarily what they actually did. This model consisted of four main stages (Diagnosis, Planning, Initiation, and Evaluation) and is shown in Figure 9.

FIGURE 9: Phase I – Process Model of Revolutionary Change

From the documents reviewed (e.g., annual reports, employee reports, strategic planning documents) it was suggested that BC TEL had a history of confrontation with the C.R.T.C. as it protected its monopoly. When deregulation of the telecommunications industry occurred, external forces (e.g., the C.R.T.C., competitors) appear to have pressured BC TEL into changing the way it did business in order to compete. These forces appear to have prompted a re-evaluation to occur within the organization regarding how it would compete in order to survive in a competitive industry.

The introduction of competition appeared to be the catalyst for BC TEL to undertake a *Diagnosis* of the way it did business. When this was complete, BC TEL appeared to undertake a flexible strategic *Planning* process at the senior levels of the organization. At the *Planning* stage, provisions appear to have been made to return to the *Diagnosis* stage when necessary. It is suggested that this strategy was intended to be *Initiated* at the departmental level in a flexible manner such that corporate goals could be reacted to, and met, quickly. Provisions seemed to have been made for the implementation of the

strategy to be *Evaluated* using both financial and non-financial measures. Such information appeared to be *Fed-back* to senior management where changes, if deemed necessary, would be made to the strategy and the goals set previously.

The process model of revolutionary change developed was suggested as being similar to previous process models of change developed after 1983 as shown in Figure 2 (Hinings and Greenwood, 1983; Bullock and Batten, 1985; and Connor and Lake, 1994). The major difference between these models and the proposed model was the flexible and dynamic nature of the *Planning* and *Initiation* phases in the proposed model. Flexibility appeared to be a critical component of the proposed model as it allowed BC TEL to adapt quickly to ever changing environmental conditions and threats. Flexibility was proposed as being to be unique to the process model of revolutionary change in that none of the models evaluated from 1954 through 1994 appeared to have incorporated this level of agility.

The proposed model is based on the notion that revolutionary change is unpredictable by nature. Revolutionary change seems to require a willingness to be able to readjust abruptly as new information surfaces. It is proposed that flexibility may be one of the key components that need to be addressed in order for organizations to deal quickly with dramatic changes in the external environment, and adapt accordingly. Flexibility in the process of change was suggested by the need identified by BC TEL to develop and evaluate strategic alternatives on a continual basis. The goal specified by BC TEL was to be prepared to respond quickly to environmental changes as they occurred. In order to do

this the organization determined that it needed to continually evaluate new ways to deliver products and services. Each department was asked to develop their own plans which were integrated into the overall structure.

In the case of BC TEL this flexibility appears to be linked to two key components of revolutionary change, namely, the speed and the magnitude of change. As BC TEL indicated, they needed to readjust inside the organization as quickly as the outside environment was changing (BC TEL, 1992). When undertaking discontinuous change (Nadler and Tushman, 1995), organizations appear to require mechanisms to help correct positions and strategies 'on the fly'.

From the historical documents the process of revolutionary change appeared to be teleological in terms of the strategy and goals being set by the top of the organization (i.e., senior management) in relation to what was occurring in the environment. The process of revolutionary change, however, also appeared to be dialectic as the organization had to continually struggle both inside and outside as competition unfolded (e.g., external threats – competitors, changing industry regulations). The process of revolutionary change developed on what the organization planned to do, as suggested by corporate documents, appeared to include both teleological and dialectic forms of change.

9.2.2 PHASE II – MODEL OF REVOLUTIONARY CHANGE

In Phase II of this research, interviews were undertaken with 53 members of BC TEL. Those interviewed included 25 executives, 25 employees, and 3 members of the Board of Directors. Issues involving the history of change at BC TEL, organizational

communication, organizational culture, resistance to change, and the process of revolutionary change were discussed. These issues have been found to be critical in analyzing organizational change in-depth (e.g., Thomas, 1996). The information gathered from these interviews was used to develop questions in a survey completed by 422 employees and managers at BC TEL. This additional testing helped to clarify the interview findings. A model of revolutionary change at BC TEL was derived based on the Phase II data. The main components of the model were affirmed by the survey data. The proposed model represents what employees and executives perceived happened at BC TEL and is shown in Figure 10.

FIGURE 10: Phase II – A Model of Revolutionary Change

From the interviews it was suggested that revolutionary change began with events outside BC TEL. The influence of the C.R.T.C., and subsequently competitors, on BC TEL

affected revolutionary change within the company. Revolutionary change was perceived to be very top-down oriented with strategic decisions made by senior executives with little perceived influence from either managers or employees. The influence of G.T.E., external customers, and shareholders in the revolutionary change process was unclear as the survey identified nearly 50% of respondents as perceiving little or no direct input from these groups.

The process of revolutionary change appeared to be influenced by a dialectic interaction between BC TEL and the external environment which prompted teleological change within the company. Teleological change is based on goal setting. The data indicated that BC TEL was continually setting and reevaluating goals based on becoming more competitive.

The influence of both dialectic and teleological forces provided for a very flexible change program that was perceived as being changed constantly as situations in the external environment developed and unfolded. As Jenner (1998) postulates, how quickly an organization adapts to the external environment depends on its external focus. The process of revolutionary change appeared to involve the continual setting and reevaluation of goals by senior executives. It was suggested that the process of revolutionary change was a continual series of flexible, ad hoc changes based, primarily, on an interaction with outside forces.

As a result of the confusion caused by such ad hoc changes, an internal dialectic appeared to form between executives and employees. This, in turn, appeared to cause a perceptual 'gap' to develop between the two groups. The analysis of revolutionary change identified major differences between executives and employees regarding the process of revolutionary change, communication of change, cultural changes in the organization, and resistance to change. The analysis also uncovered differences within the executive group. It was suggested that a perceptual gap existed between the executives and employees in terms of the planning and initiation stages of revolutionary change.

The model of revolutionary change proposed by this research incorporates both dialectic and teleological theories of change. It is suggested that revolutionary change may be prompted when a conflict occurs between two entities, namely the environment and the organization (dialectic change), to which the organization responds by changing itself internally through the setting of flexible goals (teleological change). It is proposed that these two types of change, occurring simultaneously, stimulate revolutionary change.

This conceptualization of revolutionary change is similar, yet distinct, from that of Van de Ven and Poole (1995). The proposed model is similar in that it utilizes a combination of two well-established theories of change (dialectic and teleological) to explain revolutionary change. This research supports Van de Ven and Poole's (1995) contention that revolutionary change should not be conceptualized as a separate form of change (e.g., evolutionary, life cycle, dialectic, or teleological). It appears, however, that

revolutionary change is not necessarily conceptualized as Van de Ven and Poole posit (i.e., a combination of evolutionary and teleological change).

Van de Ven and Poole (1995) identified the proposed combination of teleological and dialectic theories of change as an illustration of "Group Conflict" wherein the authors cited the work of Coser (1956) as representative of such a situation. Coser, who was interested in social conflict, defined social (group) conflict as, "a struggle over values and claims to scarce status, power, and resources in which the aims of the opponents are to neutralize, injure, or eliminate their rivals" (Coser, 1956: 8). This definition appears to approximate revolutionary change from an organizational perspective and would be supported by authors who view organizations as living organisms (e.g., Nisbet, 1970; Argyris and Schön, 1978; Peters and Waterman, 1982; DeCelles, 1995).

It was suggested from the analysis of cultural change that different departments at BC TEL may have had different views of organizational culture (e.g., Department A versus Department B). Based on this analysis, and the descriptions of revolutionary change from both the interviews and surveys, it appears that the changes may have affected different parts of the organization at various times suggesting successive waves of punctuated equilibrium (e.g., Tushman and Romanelli, 1985; Gersick, 1991). As shown in Figure 11, one part of the organization may be more stable while the other parts may be involved in revolutionary change.

FIGURE 11: Sequential Punctuated Equilibrium

The idea of successive waves of punctuated equilibrium is further supported by the fact that both the survey and interview respondents identified multiple starting years for the beginning of revolutionary change (i.e., there was little consistency). Thus, it appears that revolutionary change at BC TEL may be best represented as periods of turmoil prompted by a single force (i.e., introduction of competition). Recent research on punctuated equilibrium theory has identified that a single environmental shift can generate multiple revolutionary changes (Sastry, 1997) and may also have occurred in the case of BC TEL.

Tushman and Romanelli (1985) posit that in no instance should equilibrium and fundamental change be operating in an organization at the same time. Given the differences, however, between Department A and Department B, this research would suggest that it may be possible to find both operating at the same time and it is most likely caused by deep structures within these departments or due to resistance to change at the executive level in some parts of the organization (Gersick, 1991). Further evidence of functional diversity in the change process has been discussed by Reger *et al.* (1994)

thus suggesting that revolutionary change may be occurring at different times within the organization.

There is also evidence to suggest that BC TEL went through a form of punctuated change prior to 1990/1991 (e.g., Area General Manager structure and the creation of B.T.E.). This change, however, did not receive as much attention as Strategic Renewal possibly due to the fact that its visible affect on the organization was minimal (B.T.E. only affected approximately 150 individuals at BC TEL). It appears that prior to revolutionary change the organization was relatively stable and did not change much. This is not surprising given the industry conditions (that of a monopoly). Changes did occur prior to this but they appear to have been incremental and undertaken so as not to destabilize the system.

It may be premature to suggest that what occurred at BC TEL is in line with punctuated equilibrium theory as put forth by Tushman and Romanelli (1985), Gould (1989) and Gersick (1991). Previous testing of punctuated equilibrium has primarily taken place in the computer industry (Romanelli and Tushman, 1994). Thomas (1996) argues that, given the dissimilarities between purely private sector organizations and pseudo-regulated organizations, the process of organizational change may be very different due to variances in, among other criteria, legislation governing such organizations. It may be argued, therefore, that punctuated equilibrium does not apply in monopolistic, or government regulated, types of industries. As BC TEL continues to operate for a longer period of time in a competitive marketplace future research may be able to determine if

what was observed in this research falls within such a description or whether a different typology is more applicable.

Revolutionary change at BC TEL appears to fall within the description of “discontinuous” change as put forth by Nadler and Tushman (1990, 1995) and Corporate Transformation as suggested by Dunphy and Stace (1993). What is unclear is whether the changes fall within the reorientation (anticipatory change) or re-creation (reactive change) typologies. This research has suggested that revolutionary change may have been a combination of dialectic and teleological change that occurred simultaneously. Teleological change was undertaken as conditions with the external environment dictated. Thus, in Nadler and Tushman’s typology this would constitute “re-creation”. A closer examination of revolutionary change at BC TEL did not appear to identify ‘frame-breaking’ change but rather ‘frame-bending’ change which would fall into the “reorientation” component of the typology. Thus, this research would suggest that Nadler and Tushman’s typology may be too rigid suggesting that discontinuous change may not be as easy to categorize as simply ‘anticipatory’ versus ‘reactive’. Rather, it could involve both types of change occurring simultaneously in different parts of the organization.

The confirmatory data would suggest that revolutionary change at BC TEL took place over a period of between 2 and 5 years. This conclusion is based on the following: (1) there was a lack of specificity regarding the exact year revolutionary change began; and (2) the majority of respondents felt the change occurred in the early 1990’s (they agreed

on the timeframe). Miller (1982) discusses the concept of adaptive lags and “lagged revolution” in unpredictable environments suggesting that revolutionary change most likely does not happen instantaneously. This is in line with the research of Romanelli and Tushman (1994) and Stace (1996) which indicated that revolutionary change generally took 2 years but was also observed to take up to 5 years.

9.2.3 PHASE III – MEASURES OF ORGANIZATIONAL SUPPORT AND NON-SUPPORT OF REVOLUTIONARY CHANGE

The development of the measures of organizational support and non-support for revolutionary change has filled a significant void in the change management literature. Support and non-support for revolutionary change has been defined in terms of a number of specific behaviours that can directly impact an organization. Each of the measures developed was suggested as being linked to well established organizational outcomes (organizational commitment, job satisfaction, managerial support) and employee outcomes (stress, burnout, and perceived organizational support).

The development of a measure of support for revolutionary change has led to 9 definable behaviours which appear to represent this construct. It is suggested that an organization that supports revolutionary change: “communicates the need for change”, “informs employees regarding changes”, “aggressively pursues emerging business opportunities”, “develops an understanding that the competition can be a customer”, “creates a telesales centre” (i.e., “talks with its customers to ensure they are aware of what is available from the company”), “pays more attention to the bottom line”, “allies itself with other types of companies”, “provides managers with separation packages”, and “pressures regulators for

fair competition” (i.e., “lobbies to ensure that it is able to compete on an equal basis with competitors”). Three distinct themes were put forth to describe the supportive behaviours.

Supportive organizations:

- Communicate information regarding change;
- Undertake actions to expand the organization’s business; and,
- Develop financially based strategies for change.

The development of a measure of non-support for revolutionary change has led to 12 definable behaviours which appear to represent this construct. It is suggested that an organization that does not support revolutionary change: “does not ask employees if there is a better way to do things”, “is slow to react in some competitive environments”, “allows for conflicting departmental missions”, “does not eliminate the bureaucracy”, “allows certain departments to protect themselves from change”, “does not make managers accountable for stifling change”, “does not recognize where its greatest assets are”, “does not have a common goal shared throughout the company”, “does not allow employees to be flexible in the use of their skill sets”, “limits employee empowerment”, “only provides verbal support for change”, and “holds back information on where the company is going”.

Two themes were put forth to describe the non-supportive behaviours. Non-supportive organizations have:

- Inadequate communication or participation in change; and,
- Exhibited behaviours representing resistance or favouritism in change.

When supportive themes have been suggested in past research they have generally been viewed independently from the change situation and, due to the lack of methodological

rigor (i.e., not based on primary research), have not been linked to organizational and employee outcomes. Both measures of support for revolutionary change developed in this research appear to provide the link between the process of revolutionary organizational change and the people affected by it (i.e., employees). Those who feel supported through revolutionary change appear to be more likely to indicate having higher organizational commitment, higher managerial support, higher job satisfaction, higher perceived organizational support, lower burnout, and lower stress. People who do not feel supported through revolutionary change appear to be more likely to indicate lower organizational commitment, lower managerial support, lower job satisfaction, lower perceived organizational support, higher burnout, and higher stress.

Given the instability caused by revolutionary change, the link between outcomes and support appears to be crucial. The resistance to change literature has shown that people need to know what is going on and to have some measure of stability (Sonnenfeld, 1985; Porras and Hoffer, 1986; Morris, 1992). It appears that through proper support of revolutionary change both organizational and employee outcomes can be positively affected thus providing an opportunity for more successful revolutionary change.

What has been suggested in this research appears to provide the link between the setting of goals at the executive level of the organization (i.e., what was intended) and employees (i.e., what occurred). This phase of the research suggests that organizational support through participation, empowerment, communication, and minimizing

organizational resistance to change can help to narrow the perceptual gap between employees and executives (see Figure 12).

FIGURE 12: Relationship Between Support and Non-Support of Revolutionary

Non-Support of Revolutionary Change
(Slower Speed of Change)

When the perceptual gap between executives and employees is larger there appears to be greater perceived non-support of revolutionary change, the speed of change is perceived to be slower, and organizational and employee outcomes are more negative. When the perceptual gap between executives and employees appears to be smaller there is greater perceived support of revolutionary change, the speed of change is perceived to be faster, and organizational and employee outcomes are more positive. As support is decreased the perceived gap is increased and vice-versa.

9.3 A SYNTHESIZED MODEL OF REVOLUTIONARY ORGANIZATIONAL CHANGE

One of the main goals of this research was to better understand revolutionary change at the organizational level and begin the development of a model of revolutionary change that bridges employee and organizational perspectives. Through Phase I of the research a clearer understanding of how revolutionary change was intended to occur at BC TEL was

established. Through Phase II the process of revolutionary change that was perceived to occur at BC TEL was established. Through Phase III an understanding of how to best support, and not support, revolutionary change was established. The triangulation, or combining, of these findings into a synthesized model of revolutionary change is shown in Figure 13.

FIGURE 13: A Synthesized Model of Revolutionary Change

The synthesized model of revolutionary change integrates the findings from each of the three research Phases in this study. The process model of revolutionary change from Phase I is subsumed within the flexible process of revolutionary change identified at the executive level (teleological). It is unclear whether this process model of revolutionary change should be expressed as what was planned to be done (i.e., as a process model of revolutionary change from Phase I) or left ad hoc as representative of what actually happened (from Phase II). The synthesized model integrates the perceptual 'gap'

between executives and employees based on the differences proposed in the interviews (and follow-up survey).

It is proposed that the perceptual gap between executives and employees can be mitigated by support for revolutionary change as developed in Phase III. From the survey research and the Phase II interviews it was suggested that respondents perceived that BC TEL needed to do a better job of communicating, monitoring change, allowing for participation in change, and helping people through the change process. From the development of the measures of support in Phase III, which were undertaken independently from the Phase II interviews, it was suggested that these issues were viewed by respondents as key components of an organization that was supportive of revolutionary change. Thus, being able to provide these types of support may mitigate the differences suggested between executives and employees (i.e., the top and bottom of the organization) identified in Phase II.

Each Phase of this research has brought a unique perspective upon which to synthesize a model of revolutionary organizational change. Both the Phase I and Phase II research identified the importance, and impact, of external forces on revolutionary change. The integration of dialectic and teleological change theories into the model of revolutionary change appears to be of critical importance to the advancement of the change literature and the expansion of revolutionary change as it integrates both employee and organizational perspectives. The combination of dialectic and teleological theories of

change was proposed in both the Phase I and Phase II research providing for greater validity for the synthesized model.

Revolutionary change appears to be an extremely flexible process especially in the *Planning* and *Initiation* stages. As Miller (1982) suggests, high performers tend to make quick, decisive changes to avoid spending too long in a hybrid structure. The flexible, or ad hoc, change process was proposed in both the Phase I and Phase II research providing for greater validity of the synthesized model. As suggested by Mitroff *et al.* (1994), being a major competitor requires continuous redesign and the flexibility to adapt.

The data would suggest that revolutionary change may not incorporate a fixed, or master, change plan. Many authors have suggested that the future success of organizations will depend on their ability to adapt to change quickly (Hammer and Champy, 1993; Lowenthal, 1994; Nadler and Shaw, 1990, 1995). While the *Diagnosis* and *Evaluation* stages of the process model of revolutionary change appear to be more rigid (i.e., there are certain measures used to test the success of revolutionary change), the *Planning* and *Initiation* stages appear to be flexible enough to adapt quickly to ad hoc changes.

This research suggests that in order to facilitate the flexibility necessary for revolutionary change, a master plan may become less relevant given the multitude of changes that need to be made in short order to combat the dialectic change with the environment. The ability to put a master plan in place appears to be severely limited, and made less applicable, by the rapidly changing environment. As Beer *et al.*, (1990) indicate, it is

critical to adjust strategies in response to problems found either inside or outside the organization quickly and effectively. The constraints of a formalized plan may not allow for such dexterity.

Past research, and in particular that put forth in the area of reengineering, has shown a lack of focus on the human aspects of change (e.g., Tomasko, 1993; Lowenthal, 1994; Pfeffer, 1994). This research has specifically documented behaviours that may impact revolutionary change including organizational and individual outcomes. The synthesized model provides a means toward better understanding, and integrating, the process of revolutionary change and organizational support for revolutionary change. The importance of organizational support in revolutionary change cannot be overstated. This measure, and its components, has been proposed as being a potentially critical interface between the revolutionary changes occurring in the organization and the outcomes experienced by both employees and the organization.

This research also suggests that in order for the organization to accommodate the flexible nature of the revolutionary change process, it must attempt to offset the instability experienced by employees through support for revolutionary change. Specifically, the organization needs to increase the extent to which it undertakes behaviours that are supportive of revolutionary change and minimize the extent to which it undertakes behaviours that are not supportive of revolutionary change. This research has documented the impact of support (and non-support) on job satisfaction, organizational commitment, perceived organizational support, burnout, stress, and managerial support.

Previous research has failed to develop a synthesized model of revolutionary change that is based on empirically sound research and integrates both organizational and employee perspectives and. This research has filled a significant void in the change literature through the development of such a comprehensive model that integrates a behaviourally based measure of organizational support for revolutionary change and is based on a combination of documentary evidence, first hand accounts, and quantitative research collected from both executives and employees.

9.4 LIMITATIONS OF THE RESEARCH

The main limitation of this research concerns its generalizability as only a single entity has been studied. As Stace (1996) states, organizational change is difficult to separate from the context of the business it is in. The generalizability of this research may be limited to BC TEL or those organizations that operate within the telecommunications industries. BC TEL, however, is considered a leader in its industry and is heavily sought after for benchmarking by not only competitors but also firms looking to compare to the 'best in class'. Thus, although the revolutionary change process may have been unique, many organizations would 'jump' at the opportunity to learn how BC TEL changed itself and use the organization as a benchmark for revolutionary change. This being said, studying organizational change, *ex post facto* at a single entity level, assists in providing for unbiased evaluation as the situation has transpired and the researcher is telling what has been, not what may be (Emory and Cooper, 1991).

A second generalizability concern from this study involves the number of people interviewed. A total of 53 individuals were interviewed regarding revolutionary change

at BC TEL. Researcher confidence in the views of executives in Phase II is extremely high given that a large proportion of the senior executives at BC TEL were interviewed. Although the proportion of employees interviewed was small relative to the overall number within BC TEL, efforts were made to increase the generalizability of the interview results through the input of 422 respondents in the confirmatory survey. As well, the use of triangulation provides for greater confidence in the results despite the size of the sample (Jick, 1979). In general, what can be deduced from the interviews is that executive views are often not the same as those of employees.

The limitations of the act-frequency approach utilized in Phase III have been discussed earlier and need not be elaborated further. Given the strict methodology followed, and the precautions taken, every effort has been made to minimize such limitations. As Glauser and Strauss (1967) indicate, domain saturation, as utilized in Stage I of the A.F.A., provides greater confidence that the measures developed are grounded in a theoretically sound methodology.

9.5 RESEARCH BENEFITS AND IMPLICATIONS

Through this research BC TEL may benefit by gaining a clearer understanding of how they undertook revolutionary change (post mortem analysis). For purposes of organizational learning, and planning future change initiatives, it is important to document how the change transpired and to learn from insights gained from an independent evaluation. Phases I and II of this research provide an overview of what was intended to happen and what was perceived to happen. Through Phase III of this research, BC TEL may also gain a clearer understanding of the behaviours judged to be

supportive and non-supportive of revolutionary change. Identifying these behaviours may allow BC TEL and other organizations to address future needs of employees throughout the revolutionary change process as opposed to doing so haphazardly. Such a measure can be used to help companies support revolutionary change from the top down, not just implement from the top-down. As well, these measures can also assist with affecting organizational and employee outcomes thereby attempting to maximize the probability of successful revolutionary change.

With a rapidly changing economic, competitive, and legislative landscape, many more organizations may be forced into revolutionary change in the coming years. There is much to be gained from this research for organizations not only in North America but also those in developing countries which will soon be faced with a similar scenario as BC TEL (e.g., hydroelectric companies, crown corporations, universities). As well, those organizations whose competitive environments are becoming even more competitive (i.e., moving from a competitive to an ultra competitive environment) may benefit from research undertaken on revolutionary change and support of revolutionary change (e.g., financial services sector).

Modeling revolutionary change has filled a significant gap in the change management literature. A view of the entire revolutionary change process, including the integration of an employee perspective, combined with prototypical acts representing support and non-support of revolutionary change, has provided primary insight into the revolutionary change process. As Thomas (1996: 10) states, what is needed to advance the change

literature is an integration of “insights derived from managers in the context of existing theoretical models and research findings”. This research, through the use of the triangulation methodology, has added such a level of integration while at the same time evolving existing theoretical models and typologies of change.

The case study approach to organizational change research has been suggested as providing a more detailed description of concepts that are difficult to measure (e.g., Greenwood and Hinings, 1996). The findings in this research may have been different if the study had stopped after the historical analysis of documents which is as far as some past research has gone. The findings from the qualitative and quantitative phases of this research assist in bridging the critical aspects of organizational change, as identified in the literature, and allow researchers to begin work on ‘updated’ process change theories that more adequately typify organizations and are not simply based on documents or the opinions of a few senior executives.

From the applied perspective, the measure of support for revolutionary change and the proposed model of revolutionary change have contributed to the area of change management by helping provide a better understanding of revolutionary change. Through such an understanding the development of more effective organizational change processes, and enhanced support activities may, in turn, assist in achieving longer-term objectives. This research also addresses a significant gap in the literature by focusing attention on the “human element” of change through empirical research that is guided by a perspective that incorporates the views of both senior management and employees.

This research is unique in this regard as it helps us to better understand, and enhance, the chances of success for revolutionary organizational change initiatives.

9.6 FUTURE RESEARCH

This research has uncovered a number of areas where future efforts aimed at better understanding organizational change, and specifically revolutionary change, should be focused.

More research needs to be focused on revolutionary change and the dyadic forms that it can take. Van de Ven and Poole (1995) created a typology based on a non-empirical research approach. This research has suggested a different typology based on a case study approach. It is possible that other forms of revolutionary change may exist. This research has opened the door to the possibility that revolutionary change may be considered as a combination of other generally accepted theories of change. It is critical that revolutionary change is synthesized and suitably defined so that organizations and researchers can begin to place as much emphasis on it as other forms of change have received. An important move in that direction would be the use of common terminology to avoid confusion over how revolutionary change is best defined. Right now terms such as radical change, discontinuous change, revolutionary change, and corporate transformation are used interchangeably in the literature to describe the same phenomena. Further research in this area should settle on a smaller set of consistent terms.

This research has suggested that departments may undertake revolutionary change at different points in time and that the experiences and impact of revolutionary change can

vary substantially in different areas of the company. The notion of successive waves of punctuated equilibrium was proposed based on these departmental differences. Further research should look at the impact that departments can have on revolutionary change and the possibility of sequential punctuated equilibrium to determine if this was unique to BC TEL or if it is true elsewhere.

Differences in how executives and employees view change are also worthy of further exploration. It is proposed that support for revolutionary change helps to mitigate such differences. Further research is required to expand this proposition. For example, is support of revolutionary change, or not undertaking non-supportive behaviours, the key to getting employees to 'buy into' change? Confirmatory research with other organizations regarding support and non-support of revolutionary change would help to generalize the constructs developed.

Researchers must attempt to delve deeper into organizational change and not simply scratch the surface as has been done in the past. This research has shown that how an organization intends to change may be very different from what actually transpires. Merely reviewing corporate documents or only discussing change with senior managers may not provide a complete perspective of change. Previous research has tended to only review organizational change at this level. As Soper *et al.* (1995: 415) state "science requires that theory be supported by empirical facts". Researchers have tended to distance themselves from academic rigor in the areas of change management. As organizations continue to seek a better understanding of change, and academics continue

to seek the expansion of change theory, future researchers must evaluate all aspects of change, from as many angles as possible (e.g., employees and executives) or risk sacrificing critical information, knowledge, and explanation.

When developing the measures of organizational support for revolutionary change there was some evidence that men and women differed on what they considered to be non-supportive of revolutionary change. Further research needs to be conducted on the differences between men and women as it relates to revolutionary organizational change and in particular non-supportive behaviours. Gender differences have, thus far, not been studied in the change management literature. Such information may help in explaining aspects of resistance to change.

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APPENDIX A - INTERVIEW QUESTIONNAIRE

**PROPOSED INTERVIEW QUESTIONS
ORGANIZATIONAL CHANGE AT BC TEL (MONOPOLY TO COMPETITION)**

Anticipated Length of Interviews: 1½ - 2 hours

A. BACKGROUND INFORMATION:

1. How long have you worked for BC TEL?
2. What are your key responsibilities?
3. What departments have you worked with or been assigned to within BC TEL?

B. CHANGE (HISTORICAL PERSPECTIVE):

1. When would you say that changes began occurring in the way BC TEL ran its core business units? What types of changes occurred at this time?
2. I have heard that the goal of change at BC TEL was to increase competitiveness. Would you agree or disagree with this? Is this goal being achieved? Why / Why Not?
3. Was (or is) there anything else that motivated change besides competitiveness?
4. What events inspired the changes at BC TEL?
 - Would these changes have occurred without the CRTC ruling?
 - How would you characterize change at BC TEL before the CRTC ruling?

C. PROCESS OF CHANGE: (where possible, respondents will be asked for a corporate and then a departmental perspective on these questions)

1. Who decided on changes at the corporate level? (your department level?)
2. Was there a distinguishable series of steps used to guide the change process at the corporate level? [e.g., the first thing we did was decide where we wanted to be, then we put a team in place to guide the process etc.] (your department level?)
 - Did these steps change at any time (or, how were they re-evaluated and modified)?
3. Were the success objectives of corporate change measured (how?)
 - Were the success objectives of departmental change measured (how?)
4. Have the changes translated into competitive advantage in the marketplace? What have you done to instill competitive skills and attitudes in employees?
5. Did managers have input into the overall change process? (in your dept.?)
 - What methods were used to feedback information to managers?
6. Did customers have input into the overall change?
 - What methods were used to feedback information to customers?
7. Did GTE have any influence on how change was managed at BC TEL?
 - Did GTE have any influence on your department's change decisions?

8. Were any areas of BC TEL considered 'sacred' or untouchable with respect to change?
 - Were any areas of your department considered 'sacred' or untouchable with respect to change?
9. Have you changed your own behaviour to adapt to the changes at BC TEL? (how?)

D. CULTURE (ENTREPRENEURIAL ATTITUDE):

1. How would you describe the organizational culture at BC TEL today? If you think back a year ago, would you say the culture is about the same or different? Why? How about two years ago? Why?
2. Was there resistance to change from senior management? If YES . . .
 - What form(s) of resistance occurred?
 - Has it been overcome? YES ..how? NO ..why not? what could be done now to overcome it?
3. Was there resistance to change from the Board of Directors? If YES . . .
 - What form(s) of resistance occurred?
 - Has it been overcome? YES ..how? NO ..why not? what could be done now to overcome it?
4. Have you decreased the levels of bureaucracy? (in what ways?)

E. COMMUNICATIONS:

1. Who is (was) in charge of communicating corporate change information at BC TEL? (departmental change information?)
2. What were (are) the main methods used to communicate corporate information? (departmental information?)
3. Was the effectiveness of corporate change communication measured? (how?)
 - Was the effectiveness of departmental change communication measured? (how?)
4. Do BC TEL employees have access to everything they need to know about change to do their jobs?
 - Do employees in your department have access to everything they need to know about change to do their jobs?

F. CONCLUSIONS AND WRAP-UP:

1. What would you say are the tough realities of change?
2. What sport do you like to participate in or watch on TV?
 - If we placed the change process at BC TEL in the context of *INSERT FAVOURITE SPORTING ACTIVITY*, where would you say we are in the game? What has BC TEL had to struggle with to this point? Why?
3. What ONE piece of advice would you give to a peer regarding change?

Are there any final comments you would like to make regarding change at BC TEL?
Is there anyone else you would suggest I talk to regarding the changes at BC TEL?

APPENDIX B - STAGE II QUESTIONNAIRE

Survey of BC TEL Support for Change Initiatives

Dr. Linda Duxbury
Associate Professor
School of Business
Carleton University
Ottawa, Ontario

Leslie Szamosi
Ph.D. (Candidate)
School of Business
Carleton University
Ottawa, Ontario

**Thank-you for taking the time to fill out this questionnaire.
Your response is greatly appreciated.**

SECTION A: DEMOGRAPHICS

We need some demographic information about you to help us interpret this questionnaire. To answer the following questions, please **CIRCLE** the letter of the answer which best describes you and/or **FILL IN** the information requested.

1. What department do you work in?

A. HRCS	F. LAW AND REGULATORY AFFAIRS
B. CORPORATE SERVICES	G. CORPORATE COMMUNICATIONS
C. NETWORK SERVICES	H. LONG DISTANCE SERVICES
D. CORPORATE SALES	I. OTHER:
E. LOCAL SERVICES	

2. Please **CIRCLE** the letter which best fits the type of work **YOU DO**:

A. MANAGERIAL	E. SERVICE REPRESENTATIVE
B. CLERICAL	F. TECHNICIAN
C. SALES	G. DRAFTING
D. ENGINEER	H. OTHER:

3. How many different managers have you reported to in the last 2 years?
_____ MANAGERS

4. What is your gender?

A. MALE
B. FEMALE

5. Are you married and/or living with a significant other?

A. YES
B. NO

6. Do you have children living at home?

A. YES
B. NO

7. What is your age?

A. Under 20 years	F. 41 - 45 years
B. 20 - 25 years	G. 46 - 50 years
C. 26 - 30 years	H. 51 - 55 years
D. 31 - 35 years	I. 56 - 60 years
E. 36 - 40 years	J. Over 60 years

8. Please indicate your years of service for BC TEL?

A. Under 1 year	E. 16 - 20 years
B. 1 - 5 years	F. 21 - 25 years
C. 6 - 10 years	G. 26 - 30 years
D. 11 - 15 years	H. Over 30 years

SECTION B: SUPPORT OF BC TEL IN CHANGE INITIATIVES

The actions and behaviours of BC TEL with regard to the change initiatives being implemented at BC TEL can make it easier or more difficult for you to accomplish your work responsibilities and cope with non-work issues. The following is a list of supportive and non-supportive actions identified by BC TEL employees in preliminary interviews.

How BC TEL can support change

9. Please indicate the extent to which you agree with each of the following statements
(CIRCLE the number appropriate for each statement)

BC TEL supports change within the organization by:		Strongly Disagree		Neutral			Strongly Agree	
		1	2	3	4	5	6	7
1.	Showing a willingness to hire from the outside	1	2	3	4	5	6	7
2.	Listening to recommendations to become more competitive	1	2	3	4	5	6	7
3.	Relaxing expectations around hours of work	1	2	3	4	5	6	7
4.	Adopting work and family policies that are in line with other companies	1	2	3	4	5	6	7
5.	By empowering employees	1	2	3	4	5	6	7
6.	Informing employees regarding change through bulletins/teleconferences /StraightTalk etc.	1	2	3	4	5	6	7
7.	Providing career transition services	1	2	3	4	5	6	7
8.	Implementing procedures to help it become a learning organization	1	2	3	4	5	6	7
9.	Providing managers with separation packages	1	2	3	4	5	6	7
10.	Supporting new ideas brought forth by employees	1	2	3	4	5	6	7
11.	Providing financial support for competitive risk taking	1	2	3	4	5	6	7
12.	Increasing internal training opportunities	1	2	3	4	5	6	7

BC TEL supports change within the organization by:		Strongly Disagree			Neutral		Strongly Agree	
		1	2	3	4	5	6	7
13.	Conducting more external customer research	1	2	3	4	5	6	7
14.	Providing external training programs	1	2	3	4	5	6	7
15.	Conducting stress awareness campaigns	1	2	3	4	5	6	7
16.	Communicating the effects of change	1	2	3	4	5	6	7
17.	Setting clear mandates and missions	1	2	3	4	5	6	7
18.	Running advertisements showing BC TEL as different than the competition	1	2	3	4	5	6	7
19.	Reducing bureaucracy	1	2	3	4	5	6	7
20.	Divesting businesses that are not cost effective	1	2	3	4	5	6	7
21.	Running a high volume of advertising, to show company is still in business	1	2	3	4	5	6	7
22.	Pressuring the CRTC for fair competition	1	2	3	4	5	6	7
23.	Allying itself with companies such as MCI	1	2	3	4	5	6	7
24.	Relocating the right people to subsidiaries	1	2	3	4	5	6	7
25.	Providing managers with business leadership training	1	2	3	4	5	6	7
26.	Instituting customer focus teams	1	2	3	4	5	6	7
27.	Providing new technologies and computer tools to get work done	1	2	3	4	5	6	7
28.	Developing an understanding that the competition is now a customer due to change	1	2	3	4	5	6	7
29.	Creating a telemarketing centre	1	2	3	4	5	6	7
30.	Letting employees know how many customers have been lost to the competition	1	2	3	4	5	6	7

BC TEL supports change within the organization by:		Strongly Disagree		Neutral		Strongly Agree		
		1	2	3	4	5	6	7
31.	Eliminating products that are no longer viable	1	2	3	4	5	6	7
32.	Involving the TWU in the issues surrounding change	1	2	3	4	5	6	7
33.	Aggressively pursuing the cable business and other emerging sectors	1	2	3	4	5	6	7
34.	Paying more attention to the bottom line	1	2	3	4	5	6	7
35.	Providing customers with what they want	1	2	3	4	5	6	7
36.	Providing updates of what the competition is doing	1	2	3	4	5	6	7
37.	Communicating the need for change	1	2	3	4	5	6	7

Non-supportive behaviours of BC TEL

10. Please indicate the extent to which you agree with each of the following statements
(CIRCLE the number appropriate for each statement)

BC TEL does not support change within the organization when it:		Strongly Disagree		Neutral		Strongly Agree	
1.	Allows certain departments to protect themselves from change	1	2	3	4	5	6 7
2.	Does not encourage a team effort	1	2	3	4	5	6 7
3.	Moves good people to other departments	1	2	3	4	5	6 7
4.	Does not recognize where its greatest assets are	1	2	3	4	5	6 7
5.	Defends lines of business from the competition rather than attacking the competition 'head-on'	1	2	3	4	5	6 7
6.	Continues to exert implicit pressure to be at work during certain hours	1	2	3	4	5	6 7
7.	Adopts workloads that do not allow for flexible hours	1	2	3	4	5	6 7
8.	Does not allow for balancing work and family	1	2	3	4	5	6 7
9.	Does not fully explore the consequences of change	1	2	3	4	5	6 7
10.	Does not ask employees if there is a better way to do things	1	2	3	4	5	6 7
11.	Allows some departments to have full control over the operations of others	1	2	3	4	5	6 7
12.	Bases change decisions on personality instead of proper business	1	2	3	4	5	6 7
13.	Delays implementing changes after their announced time	1	2	3	4	5	6 7

BC TEL does not support change within the organization when it:		Strongly Disagree			Neutral		Strongly Agree	
		1	2	3	4	5	6	7
14.	Does not change the areas that employees think should change	1	2	3	4	5	6	7
15.	Fragments itself into profit centres	1	2	3	4	5	6	7
16.	Does not lobby the federal government to ensure regulations apply to all competitors	1	2	3	4	5	6	7
17.	Focuses only on profits, not people	1	2	3	4	5	6	7
18.	Is slow to react in some competitive environments	1	2	3	4	5	6	7
19.	Does not prepare employees soon enough for change	1	2	3	4	5	6	7
20.	Limits employee empowerment	1	2	3	4	5	6	7
21.	Does not share the successes of change with employees	1	2	3	4	5	6	7
22.	Does not have a common goal shared throughout the company	1	2	3	4	5	6	7
23.	Allows for conflicting departmental missions	1	2	3	4	5	6	7
24.	Does not make managers accountable for stifling change	1	2	3	4	5	6	7
25.	Is unwilling to hire from outside the company	1	2	3	4	5	6	7
26.	Sells assets just to please shareholders	1	2	3	4	5	6	7
27.	Limits the participation of employees in the change process	1	2	3	4	5	6	7
28.	Holds back information on where things are going	1	2	3	4	5	6	7
29.	Does not work closely enough with the union	1	2	3	4	5	6	7
30.	Does not eliminate the bureaucracy	1	2	3	4	5	6	7

BC TEL does not support change within the organization when it:

		Strongly Disagree			Neutral			Strongly Agree		
31.	Stifles opportunities for managers to be creative by not empowering them	1	2	3	4	5	6	7		
32.	Only provides verbal support for change	1	2	3	4	5	6	7		
33.	Further downsizes areas that have already been downsized	1	2	3	4	5	6	7		
34.	Does not allow employees to be flexible in the use of their skill sets	1	2	3	4	5	6	7		

Who within BC TEL has been (or is) responsible for the change process? (PLEASE CIRCLE ALL THAT APPLY)

A. Brian Canfield	J. Fares Salloum
B. All managers are ultimately responsible	K. Ken Crump
C. All executives	L. Paul Smith
D. Directors	M. Ian Mansfield
E. GTE	N. Roy Osing
F. Shareholders	O. Dorothy Byrne
G. All employees	P. CRTC
H. Don Calder	Q. All of the above
I. Gayle Stewart	R. Other:

Have you any comments you would like to make regarding the change process at BC TEL?

Please return the survey to us via your outgoing mail in the enclosed, addressed envelope

**Please be assured that your responses will be held in confidence.
If you have any questions, please do not hesitate to call.**

Thank-you for completing this questionnaire.

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APPENDIX C - STAGE III QUESTIONNAIRE

Survey of BC TEL: Support for Change Initiatives

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**Thank-you for taking the time to fill out this questionnaire.
Your response is greatly appreciated.**

Please return the survey to us via your outgoing mail in the enclosed, addressed envelope

**Please be assured that your responses will be held in confidence.
If you have any questions, please do not hesitate to call or email any of the above.**

SECTION A: DEMOGRAPHICS

We need some information about you to help us interpret this questionnaire. To answer the following questions, please **CIRCLE** the letter of the answer which best describes you and/or **FILL IN** the information requested.

1. What department do you work in?

A. H.R.C.S.	E. OPERATIONS
B. CORPORATE SERVICES / TREASURY	F. LAW AND REGULATORY AFFAIRS
C. MARKETING	G. CORPORATE COMMUNICATIONS
D. SALES & CUSTOMER SERVICE	H. OTHER: _____
2. Please **CIRCLE** the letter which best fits the type of work **YOU DO**:

A. MANAGERIAL	F. TECHNICIAN
B. CLERICAL	G. DRAFTING
C. SALES	H. OPERATOR
D. ENGINEER	I. OTHER: _____
E. SERVICE REPRESENTATIVE	
3. How many different managers have you reported to in the last 2 years? _____ Manager(s)
4. How many different positions have you held in the last 2 years? _____ Position(s)
- 5a. How long have you held your present job? _____ Months
- 5b. What is your employment status?

A. FULL-TIME POSITION	
B. PART-TIME POSITION	
6. What is your gender?

A. MALE	
B. FEMALE	
7. What is your age?

A. Under 20 years	C. 30 - 39 years	E. 50 - 59 years
B. 21 - 29 years	D. 40 - 49 years	F. Over 60 years
8. Please indicate your years of service for BC TEL?

A. Under 1 year	C. 6 - 10 years	E. 21 - 30 years
B. 1 - 5 years	D. 11 - 20 years	F. Over 30 years
9. During the last 3 months how many days have you:

Been unable to carry out your usual activities because of physical health problems?	_____ Days
Been unable to carry out your usual activities because of personal or family related problems?	_____ Days
Taken a day off because you were emotionally, physically, or mentally fatigued?	_____ Days

SECTION B: YOUR JOB

The following questions ask about your job and experiences with BC TEL. Please **CIRCLE** the most appropriate answer for each of the following questions.

10. In the last month how often have you:

	Never		Sometimes		Always
1 Been upset because of something that happened unexpectedly?	1	2	3	4	5
2 Felt that you were unable to control the important things in your life?	1	2	3	4	5
3 Felt nervous or "stressed"?	1	2	3	4	5
4 Felt confident about your ability to handle your personal problems?	1	2	3	4	5
5 Felt that things were going your way?	1	2	3	4	5
6 Found that you could not cope with all the things that you had to do?	1	2	3	4	5
7 Been able to control irritations in your life?	1	2	3	4	5
8 Felt that you were on top of things?	1	2	3	4	5
9 Been angered because of things that happened that were outside of your control?	1	2	3	4	5
10 Felt that difficulties were piling up so high that you could not overcome them?	1	2	3	4	5
11 Felt "burned out" from your job?	1	2	3	4	5
12 Felt fatigued when you got up in the morning and had to face another day on the job?	1	2	3	4	5

11. Please indicate how satisfied you are with:

	Very Dissatisfied		Neutral		Very Satisfied
1 Your job in general	1	2	3	4	5
2 The number of hours you work	1	2	3	4	5
3 The schedule of your working hours	1	2	3	4	5
4 The sorts of things you do on the job	1	2	3	4	5
5 Your current workload	1	2	3	4	5

12. Please indicate the extent to which you agree / disagree with each of the following statements:

BC TEL management:		Strongly Disagree		Neutral		Strongly Agree	
1	Shows very little concern for me	1	2	3	4	5	
2	Cares about my general satisfaction at work	1	2	3	4	5	
3	Really cares about my well-being	1	2	3	4	5	
4	Strongly considers my goals and values	1	2	3	4	5	
5	Cares about my opinions	1	2	3	4	5	
6	Would not notice even if I did the best job possible	1	2	3	4	5	
7	Takes pride in my accomplishments at work	1	2	3	4	5	
8	Is willing to extend itself in order to help me perform my job to the best of my ability	1	2	3	4	5	
9	Is available to help me when I have a problem	1	2	3	4	5	

13. Please indicate the extent to which you agree with each of the following statements:

		Strongly Disagree		Neutral		Strongly Agree	
1	I am willing to put in a great deal of effort beyond that normally expected in order to help BC TEL be successful	1	2	3	4	5	
2	I talk up BC TEL to my friends as a great organization to work for	1	2	3	4	5	
3	I would accept almost any type of job assignment in order to keep working for BC TEL	1	2	3	4	5	
4	I find that my values and BC TEL's values are very similar	1	2	3	4	5	
5	I am proud to tell others I am a part of BC TEL	1	2	3	4	5	
6	BC TEL really inspires the very best in me in the way of job performance	1	2	3	4	5	
7	I am really glad that I chose BC TEL to work for over other organizations	1	2	3	4	5	
8	I really care about the fate of BC TEL	1	2	3	4	5	
9	I will probably look for a new job in the next year	1	2	3	4	5	
10	I often think about quitting	1	2	3	4	5	

14. Please indicate the extent to which you agree with each of the following statements:

My manager:		Strongly Disagree		Neutral		Strongly Agree	
		1	2	3	4	5	
1	Removes roadblocks and helps me to do my job better	1	2	3	4	5	
2	Utilizes my skills and abilities well	1	2	3	4	5	
3	Consistently maintains high standards of performance	1	2	3	4	5	
4	Plans work in advance whenever possible	1	2	3	4	5	
5	Makes sure I clearly understand what tasks have to be done	1	2	3	4	5	
6	Shares the company's strategic goals with me	1	2	3	4	5	
7	Provides direction and then lets me work independently	1	2	3	4	5	
8	Offers me support in private but then disowns my ideas in a public forum	1	2	3	4	5	
9	Treats me with respect and dignity	1	2	3	4	5	
10	Focuses on hours at work rather than output	1	2	3	4	5	
11	Makes it easy for me to rearrange my job schedule	1	2	3	4	5	
12	Makes me feel guilty about sick days, missing company activities, time off for personal reasons	1	2	3	4	5	
13	Treats me as if my job is lower in status than it really is	1	2	3	4	5	
14	Tells people what they want to hear then behaves differently	1	2	3	4	5	
15	Delegates authority needed for me to carry out the responsibilities assigned to me	1	2	3	4	5	
16	Acts as a role model	1	2	3	4	5	
17	Makes sure my opinion is heard at meetings	1	2	3	4	5	
18	Is supportive of the decisions I make	1	2	3	4	5	
19	Encourages me to develop myself by building my skills, knowledge experience	1	2	3	4	5	
20	Expresses confidence in my ability to do a difficult job	1	2	3	4	5	
21	Supports me to those higher up in the organization	1	2	3	4	5	
22	Gives me challenging jobs	1	2	3	4	5	
23	Provides informal information on what the company is doing	1	2	3	4	5	
24	Gives recognition when I do my job well	1	2	3	4	5	
25	Gives me feedback when I need it	1	2	3	4	5	
26	Provides constructive performance feedback	1	2	3	4	5	
27	Has face to face discussions with me when needed	1	2	3	4	5	
28	Shares information with me	1	2	3	4	5	
29	Asks my opinions about things	1	2	3	4	5	

15. Thinking about change at BC TEL, please indicate the extent to which you agree / disagree with each of the following statements:

In my experience, BC TEL supported change within the organization by:		Strongly Disagree		Neutral		Strongly Agree	
		1	2	3	4	5	
1	Pressuring the CRTC for fair competition	1	2	3	4	5	
2	Creating a telesales centre	1	2	3	4	5	
3	Informing employees regarding change through bulletins / teleconferences / StraightTalk etc.	1	2	3	4	5	
4	Communicating the need for change	1	2	3	4	5	
5	Paying more attention to the bottom line	1	2	3	4	5	
6	Providing managers with separation packages	1	2	3	4	5	
7	Aggressively pursuing emerging business opportunities	1	2	3	4	5	
8	Developing an understanding that due to change in the telecom industry the competition can be a customer	1	2	3	4	5	
9	Allying itself with both telecommunication and other types of companies (e.g., Van City)	1	2	3	4	5	
10	Running a high volume of advertising to show that the company is still in business*	1	2	3	4	5	

* Not used in this analysis. Included for further interest in this topic.

In my experience, BC TEL did not support change within the organization when it:		Strongly Disagree		Neutral		Strongly Agree	
		1	2	3	4	5	
1	Did not eliminate the bureaucracy	1	2	3	4	5	
2	Allowed for conflicting departmental missions	1	2	3	4	5	
3	Allowed certain departments to protect themselves from change	1	2	3	4	5	
4	Did not make managers accountable for stifling change	1	2	3	4	5	
5	Was slow to react in some competitive environments	1	2	3	4	5	
6	Did not ask employees if there was a better way to do things	1	2	3	4	5	
7	Did not recognize where its greatest assets were	1	2	3	4	5	
8	Did not have a common goal shared throughout the company	1	2	3	4	5	
9	Did not allow employees to be flexible in the use of their skill sets	1	2	3	4	5	
10	Only provided verbal support for change	1	2	3	4	5	
11	Held back information on where the company was going	1	2	3	4	5	
12	Limited employee empowerment	1	2	3	4	5	

SECTION C: CHANGE AT BC TEL

BC TEL used to be the only company providing long distance and local telephone service in British Columbia. Now it is not. We are interested in finding out how BC TEL has changed to accommodate this new reality. Please CIRCLE or WRITE IN the response which best describes what happened from your perspective.

16a. In what year did BC TEL begin changing to adapt to this new reality? _____ Year

16b. What was the major event that made you choose this year as the beginning point for change?
(Circle only the most appropriate)

A. Creation of BC TEL Mobility	F. Increased focus on open internal communications
B. Greater focus on bottom line	G. Increased focus on customer service
C. Creation of B.T.E.	H. Beginning of restructuring / reorganization
D. Telecom industry open to competition	I. Other: _____
E. Availability of new telephone technology	

16c. What force motivated change in the year you chose? (Circle only the most appropriate)

A. New competitors in the marketplace	E. New business opportunities
B. Need to control revenues and costs	F. Changing customer needs
C. C.R.T.C.	G. Changing employee needs
D. Leaders wanted change	H. Other: _____

16d. Culture within an organization refers to the unwritten rules under which it operates. Which one of the following would best describe the culture at BC TEL before the change you identified in question 16a occurred?

A. Evolving / in-flux / fast paced	E. Competitive / progressive / responsive
B. Smooth / predictable / comfortable	F. Profit driven / bottom line oriented
C. Unreal expectations / rushed	G. Trusting / empowering / employee centred
D. Chaos / paranoia / fear / insecurity	H. Customer driven / service oriented

16e. Which one of the following would best describe the culture at BC TEL today?

A. Evolving / in-flux / fast paced	E. Competitive / progressive / responsive
B. Smooth / predictable / comfortable	F. Profit driven / bottom line oriented
C. Unreal expectations / rushed	G. Trusting / empowering / employee centred
D. Chaos / paranoia / fear / insecurity	H. Customer driven / service oriented

17. Do you believe there was a master plan used to guide how BC TEL would change?

- A. Yes
B. No

18. The following people had input into the change process: (Circle all that apply)

A. Me	E. Shareholder
B. My Manager	F. Customers
C. All Executives	G. Other: _____
D. G.T.E.	H. Other: _____

19. The changes happening at BC TEL can best be described as occurring: (Circle only one)

A. As a result of the passage of time	D. Due to conflicts with other companies
B. Because companies need to change to survive (i.e., change is a part of life)	E. Due to shifts in the telecom environment (e.g., C.R.T.C.)
C. Due to ongoing strategic planning	

20. Which of the following best describes the speed of change at BC TEL: (Circle only one)

A. Slow	D. Somewhat Fast
B. Somewhat Slow	E. Fast
C. Neither slow nor fast	

21a. Which information source provided you with the most relevant information regarding the changes at BC TEL? (Circle only one)

A. Straight Talk	F. The "Grapevine"
B. Voicemail	G. Face to face meetings
C. Memos / bulletins	H. The T.W.U. Transmitter
D. Video-conference (employee broadcasts)	I. Other: _____
E. Intranet / OiStar	

21b. Which individual or group provided you with the most relevant information regarding the changes at BC TEL? (Circle only one)

A. My manager	E. Media (e.g., Vancouver Sun, B.C.T.V.)
B. My co-workers	F. The T.W.U.
C. Senior executives	G. Other: _____
D. Corporate Communications Department	

22. Thinking about what you do at work this year as compared to last year, what percent of:

- a. Your job (i.e., the kinds of things you do) has changed in the last year? _____ %
- b. Who you deal with at work has changed in the last year? _____ %
- c. The way you do things (i.e., work processes) has changed in the last year? _____ %

23. Do you believe that change was driven from the top of the organization?
- A. Yes
B. No
24. Do you believe that the changes made have given BC TEL a competitive advantage?
- A. Yes
B. No
25. Has BC TEL helped you cope with change?
- A. Yes
B. No

26. Please indicate the extent to which you agree with each of the following statements

The person(s) in charge of change at BC TEL:		Strongly Disagree		Neutral		Strongly Agree	
		1	2	3	4	5	
1	Can be easily identified	1	2	3	4	5	
2	Act on employee suggestions	1	2	3	4	5	
3	Have communicated where the company is going and why	1	2	3	4	5	
4	Have increased decision making by lower level employees	1	2	3	4	5	
5	Have ensured BC TEL is prepared to meet competitive challenges	1	2	3	4	5	

27. Below is a list of actions BC TEL could carry out the next time it undertakes a similar change initiative. Please indicate the top three things you would like to see them do by ranking them (i.e., 1st, 2nd, 3rd).

	Rank
A. Talk / listen more to employees	_____
B. Develop a more formal change process	_____
C. Monitor the impact of change	_____
D. Not terminate people immediately	_____
E. Change faster	_____
F. Prepare sooner	_____
G. Help us to deal with change	_____
H. Change slower	_____
I. Give us a reason to change	_____
J. Other: _____	_____
K. Other: _____	_____
L. Other: _____	_____

Have you any comments you would like to make regarding the change process at BC TEL?
(Please feel free to attach any other comments you may have.)

Thank you for completing this questionnaire.

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APPENDIX D - OUTCOME MEASURES

(R) Reverse Coded

Overall Stress
(Cohen, Kamarck, and Mermelstein, 1983)

5 point scale: 1 Never . . . 5 Always

In the last month how often have you:

Been upset because of something that happened unexpectedly?

Felt that you were unable to control the important things in your life?

Felt nervous and "stressed"?

Dealt successfully with irritating life hassles? (R)

Felt that you were effectively coping with important changes that were occurring in your life? (R)

Felt confident about your ability to handle your personal problems? (R)

Felt that things were going your way? (R)

Found that you could not cope with all the things that you had to do?

Been able to control irritations in your life? (R)

Felt that you were on top of things? (R)

Been angered because of things that happened that were outside of your control?

Found yourself thinking about things you have to accomplish?

Been able to control the way you spend your time? (R)

Felt difficulties were piling up so high that you could not overcome them?

Burnout
(Maslach, 1981)

5 point scale: 1 Never . . . 5 Always

In the last month how often have you:

Felt "burned out" from your job?

Felt fatigued when you got up in the morning and had to face another day on the job?

Job Satisfaction
(Quinn and Shepard, 1974)

5 point scale: 1 Very Dissatisfied . . . 5 Very Satisfied

Please indicate how satisfied you are with:

Your job in general

Your pay

The number of hours you work

The schedule of your working hours

The sorts of things you do on the job

Perceived Organizational Support (POS)
(Eisenberger, Huntington, Hutchison, and Sowa, 1986)

5-point scale: Strongly Disagree . . . Strongly Agree

- BC TEL management shows very little concern for me (R)
- BC TEL management cares about my general satisfaction at work
- BC TEL management really cares about my well-being
- BC TEL management strongly considers my goals and values
- BC TEL management cares about my opinions
- Even if I did the best job possible, BC TEL management would fail to notice (R)
- BC TEL management takes pride in my accomplishments at work
- BC TEL management is willing to extend itself in order to help me perform my job to the best of my ability
- Help is available from BC TEL management when I have a problem

Organizational Commitment Questionnaire (OCQ)
(Mowday, Porter, and Steers, 1982)

5-point scale: Strongly Disagree . . . Strongly Agree

1. I am willing to put in a great deal of effort beyond that normally expected in order to help BC TEL be successful
2. I talk up BC TEL to my friends as a great organization to work for
3. I would accept almost any type of job assignment in order to keep working for BC TEL
4. I find that my values and BC TEL's values are very similar
5. I am proud to tell others I am a part of BC TEL
6. BC TEL really inspires the very best in me in the way of job performance
7. I am really glad that I chose BC TEL to work for over other organizations
8. I really care about the fate of BC TEL
9. For me this is the best of all possible organizations to work for
10. I often think about quitting (R)

APPENDIX E - MAJOR C.R.T.C. RULINGS ON COMPETITION

The information presented comes from the C.R.T.C. and the BC TEL Facts Book (1997).

Decision 79-11: Interconnection of CNCP with Bell Canada

In 1979 this decision allowed CNCP to interconnect their network with Bell Canada. This allowed CNCP to provide private line services but not long distance. In 1981, Decision 81-24 applied the findings of Decision 79-11 to BC TEL (1981).

Decision 82-14: Attachment of Subscriber-Provided Terminal Equipment

Customers were allowed to own their terminal equipment (equipment that terminated two or more lines) and connect to the BC TEL network.

Decision 84-10: Allowance for Cellular Licensees to Interconnect

In 1984 the C.R.T.C. permitted companies with cellular licenses to interconnect with Bell and BC TEL.

Decision 87-1: Resale of Primary Exchange Voice Services

This decision allowed resellers to provide PBX trunk services (switches), business and residential individual lines, and Centrex. This leads to competition in units with multiple dwellings (e.g., apartment buildings).

Decision 92-12: Long Distance Competition

This decision is perhaps the most infamous decision made by the C.R.T.C. This decision permitted competition in public long distance services across Canada. New service providers had to make 'contributions' to the phone companies to help offset the cost of local service.

Decision 94-11: Local Competition

This decision opened competition in the local phone market. The actual implementation of this decision was delayed until January 1, 1998. At that time Stentor argued that long distance rates cross-subsidized local rates. As part of this decision, a rebalancing of rates occurred whereby steady increases in local rates was allowed to bring prices more in line with costs.

Decision 95-19: Competitors Provided With Regulatory Forbearance

Non-dominant Canadian carriers were relieved of the obligations of file tariff rate adjustments and wait for C.R.T.C. approval. The dominant carriers (Stentor) had to continue to file rate changes with the C.R.T.C. and wait for approval.

APPENDIX F - SUMMARY OF BC TEL ANNUAL REPORTS

Year	Title of Report	# Emp	Focus	Key Ideas / Messages
1976	None	13,749	Operations	<ul style="list-style-type: none"> • G. MacFarlane takes over • C.R.T.C. formed
1977	None	13,274	Operations	<ul style="list-style-type: none"> • Labour problems • Restructuring: customer service and network operations
1978	None	13,925	Operations	<ul style="list-style-type: none"> • Referred to company as monopoly
1979	None	14,705	Operations	<ul style="list-style-type: none"> • Heavy focus on operations
1980	None	15,120	Operations	<ul style="list-style-type: none"> • Movement towards building the business and technology
1981	None	14,406	Operations	<ul style="list-style-type: none"> • New Human Resource initiatives following bad strike • Cooperation with TWU
1982	None	17,842	Operations	<ul style="list-style-type: none"> • Move to Area General Manager structure • Creation of BTE
1983	None	16,795	Operations	<ul style="list-style-type: none"> • Protecting monopoly
1984	None	16,576	Operations	<ul style="list-style-type: none"> • Protecting monopoly
1985	None	15,863	Operations / Future	<ul style="list-style-type: none"> • Coming out of recession • Interconnection in phone systems • Competition & company's views • Creation of V-P Government Relations • Operations & BC TEL Group
1986	None	15,585	Operations	<ul style="list-style-type: none"> • Quality circles • Asset development • Advanced Technology • Operations, diversified, & R&D
1987	None	15,151	Employee	<ul style="list-style-type: none"> • Rebuild 'family' atmosphere • Network investment • Focus on competitive & related activities • Collective agreement • Effect of market crash

1988	None	15,157	Product	<ul style="list-style-type: none"> • Product & service strategy put in place • Operations, diversified, & R&D • Create business communications division • Rates of return
1989	None	14,027	Product	<ul style="list-style-type: none"> • B. Canfield takes over as President • "Quality is a way of life" • Network operations • New product introduction • Operations, diversified, & R&D • Be on leading edge of technology
1990	None	14,997	Market Presence	<ul style="list-style-type: none"> • Emphasis on network strengths • Investments being made • New vision & strategy • Forming strategic alliances • Opposition to CRTC filing • Growth in competitive & regulated bus. • Showcase of major business units (network, products, mfg, consulting, R&D)
1991	Year of Change and Achievement	15,015	Customer focus / Change	<ul style="list-style-type: none"> • Focus on restructuring into departments • Threats of competition • Strategic objectives • Consultation between management & employees • Alliances
1992	The Speed of Change	14,524	Employee / Change	<ul style="list-style-type: none"> • Need to match external speed of change • Productivity gains • New revenue sources • Alliances • Regulatory environment • Report on 1st full year of strategic renewal

1993	This is BC TELECOM	13,478	Change / Customer Service	<ul style="list-style-type: none"> • Focused on tomorrow • Productivity/costs • Information highway • Innovation & development • Focus on products & services • Competitive wins • Leadership (inside company)
1994	You are here	13,700	Change	<ul style="list-style-type: none"> • Possibilities of communication • New era – regulatory reform good • Want to influence change • Talks about operations • Culture shift to retail orientation • New structure for 1995– lines of business • 3 views from exec-v-p's
1995	Re@lity	13,851	Change	<ul style="list-style-type: none"> • Journey of change • Two mountain analogy • Be best in every competitive market • Broadcast license • Regulatory uncertainty • 3 views from exec-v.p.'s
1996	Say hello	12,356	Technology	<ul style="list-style-type: none"> • Successes • Sign union contract • Breaking new ground • Support to get approval for license • Talk about product launches • 3 views from exec-v-p's
1997	Every day	12,246	Customer	<ul style="list-style-type: none"> • B. Calder takes over as President • Talk about local competition • BC TEL as a brand • Knowing customers • Broadcast license • New era of communications

**APPENDIX G - CROSS-TABULATION: YEAR CHANGE BEGAN WITH THE
PROCESS OF CHANGE – SEGMENTED BY EMPLOYEE AND EXECUTIVE**

Employee Segmentation

	No Plan /Lucky	Yes: Strategic Renewal Program	No: Vague Plan
1981			4.2%
1982	4.2%		4.2%
1983	4.2%		4.2%
1984			4.2%
1985		4.2%	
1986	4.2%		4.2%
1987			8.3%
1988			4.2%
1989			4.2%
1990			4.2%
1991		8.3%	8.3%
1992		4.2%	
1993		4.2%	4.2%
1994	4.2%		
1995			4.2%
1996			4.2%
% sample	16.8%	20.9%	62.8%

Executive Segmentation

	No Plan /Lucky	Yes: Strategic Renewal Program	No: Vague Plan
1979		4.2%	
1981		8.3%	
1982	4.2%	12.5%	
1983	4.2%	12.5%	4.2%
1985			4.2%
1986	4.2%		
1987	4.2%		8.3%
1991		20.8%	
1992			4.2%
1993		4.2%	
% sample	16.8%	62.5%	20.9%

APPENDIX H - STEP II ACT-FREQUENCY APPROACH STATISTICS

Supportive Behaviours	Mean	Std. Deviation
Pressuring the C.R.T.C. for fair competition	5.57	1.26
Creating a telemarketing centre	5.45	1.30
Informing employees regarding change through bulletins/teleconferences/StraighTalk etc.	5.34	1.27
Communicating need for change	5.31	1.37
Paying more attention to the bottom line	5.18	1.42
Providing managers with separation package	5.12	1.25
Aggressively pursuing the cable business and other emerging sectors	5.11	1.53
Developing an understanding that the competition is now a customer due to change	5.07	1.26
Allying itself with other companies such as MCI	4.96	1.10
Running a high volume of advertising, to show company is still in business	4.88	1.36
Providing updates of what the competition is doing	4.82	1.47
Running advertisements showing BC TEL as different than the competition	4.80	1.52
Letting employees know how many customers have been lost to the competition	4.78	1.57
Conducting more external customer research	4.72	1.23
Providing customers what they want	4.70	1.45
Listening to recommendations to become more competitive	4.69	1.40
Showing a willingness to hire from outside	4.66	1.52
Eliminating products that are no longer viable	4.63	1.40
Providing new technologies and computer tools to get work done	4.59	1.72
Providing career transition services	4.57	1.51
Involving TWU in issues surrounding change	4.55	1.42
By empowering employees	4.55	1.55
Divesting businesses that are not cost effective	4.49	1.24
Instituting customer focus teams	4.48	1.27
Adopting work and family policies that are in line with other companies	4.47	1.42
Communicating effects of change	4.40	1.59
Implementing procedures to help it become a learning organization	4.40	1.57
Supporting new ideas brought forth by employees	4.34	1.44
Conducting stress awareness campaigns	4.29	1.46
Setting clear mandates and missions	4.27	1.50
Providing external training programs.	4.19	1.37
Relocating the right people to subsidiaries	4.18	1.31
Provide managers with business leadership training	4.18	1.47
Providing financial support for competitive risk taking	4.10	1.17
Increasing internal training opportunities	4.03	1.73
Relaxing expectations around hours of work	3.98	1.70
Reducing bureaucracy	3.52	1.69

Non-Supportive Behaviours	Mean	Std. Deviation
Does not eliminate bureaucracy	5.39	1.35
Allows for conflicting departmental missions	5.34	1.43
Allows certain departments to protect themselves from change	5.26	1.48
Does not make managers accountable for stifling change	5.25	1.48
Is slow to react in some competitive environments	5.18	1.50
Does not ask employees if there is a better way to do things	5.17	1.77
Does not recognize where its greatest assets are	5.10	1.57
Does not have a common goal shared throughout the company	5.07	1.66
Does not allow employees to be flexible in the use of their skill sets	5.04	1.54
Only provides verbal support for change	5.03	1.55
Holds back information on where things are going	5.02	1.63
Limits employee empowerment	5.02	1.55
Stifles opportunities for managers to be creative by not empowering them	4.98	1.55
Focuses only on profits, not people	4.95	1.68
Does not fully explore the consequences of change	4.94	1.67
Does not share the successes of change with employees	4.94	1.78
Further downsizes areas that have already been downsized	4.90	1.49
Does not prepare employees soon enough for change	4.90	1.55
Limits the participation of employees in the change process	4.90	1.50
Does not change the areas that employees think should change	4.82	1.42
Does not encourage a team effort	4.81	1.80
Bases change decisions on personality instead of proper business	4.80	1.64
Adopts workloads that do not allow for flexible hours	4.79	1.71
Allows some departments to have full control over the operations of others	4.79	1.51
Fragments itself into profit centres	4.71	1.54
Continues to exert implicit pressure to be at work during certain hours	4.68	1.63
Does not allow for balancing work and family	4.64	1.78
Delays implementing changes after their announced time	4.59	1.61
Defends lines of business from the competition rather than attacking the competition 'head-on'	4.57	1.53
Does not work closely enough with the union	4.45	1.57
Does not lobby the federal government to ensure regulations apply to all competitors	4.35	1.93
Sells assets just to please shareholders	4.25	1.50
Moves good people to other departments	4.08	1.55
Is unwilling to hire from outside the company	4.07	1.63

**APPENDIX I - IMPORTANCE OF SUPPORTIVE BEHAVIOURS BY VARIOUS
CRITERIA**

Gender – Importance of Supportive Behaviours

Behaviour	M	F	T-Value	Sig.	df
Pressuring the C.R.T.C. for fair competition	5.41	5.70	1.61	.109	185
Providing managers with separation packages	5.36	4.91	2.45	.015	183
Creating a telesales centre	5.31	5.56	1.31	.191	185
Communicating the need for change	5.30	5.32	.07	.943	185
Informing employees regarding change through bulletins / teleconferences	5.28	5.38	.52	.604	185
Paying more attention to the bottom line	5.21	5.14	.34	.737	185
Allying itself with both telecommunication and other types of companies	5.05	4.88	1.03	.306	183
Developing an understanding that due to change in the telecom industry the competition can be a customer	5.02	5.10	.41	.683	183
Aggressively pursuing emerging business opportunities	4.64	5.50	3.97	.000	185

Job Type – Importance of Supportive Behaviours

Behaviour	Mgr	Non-Mgr	T-Value	Sig.	df
Pressuring the C.R.T.C. for fair competition	5.58	5.59	.08	.935	183
Informing employees regarding change through bulletins / teleconferences	5.55	5.18	1.96	.051	183
Creating a telesales centre	5.54	5.42	.61	.541	183
Paying more attention to the bottom line	5.41	5.02	1.87	.063	183
Providing managers with separation packages	5.28	5.01	1.44	.151	181
Communicating the need for change	5.23	5.38	.76	.449	183
Allying itself with telecommunication & other types of companies	5.11	4.86	1.57	.119	181
Developing an understanding that due to change in the telecom industry the competition can be a customer	5.10	5.07	.18	.858	181
Aggressively pursuing emerging business opportunities	5.08	5.17	.43	.671	183

Age – Importance of Supportive Behaviours

Behaviour	< 30	31-40	41-50	51+	F-value	Sig.	df*
Creating a telesales centre	5.48	5.21	5.51	5.80	1.30	.277	3, 180
Aggressively pursuing emerging business opportunities	5.44	5.00	5.07	5.20	.57	.636	3, 180
Pressuring the C.R.T.C. for fair competition	5.41	5.58	5.53	5.80	.44	.724	3, 180
Informing employees regarding change through bulletins / teleconferences	5.30	5.28	5.35	5.52	.21	.887	3, 180
Paying more attention to the bottom line	4.85	5.14	5.27	5.44	.87	.456	3, 180
Communicating the need for change	4.85	5.46	5.37	5.40	1.28	.281	3, 180
Allying itself with both telecom. and other types of companies	4.67	5.07	4.85	5.56	3.88	.010	3, 178
Developing an understanding that due to change in the telecom industry the competition can be a customer	4.63	4.96	5.20	5.44	2.24	.085	3, 178
Providing managers with separation packages	4.35	5.04	5.32	5.64	5.89	.001	3, 178

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

Department Type – Importance of Supportive Behaviours

Behaviour	Staff	Line	T-Value	Sig.	df
Pressuring the C.R.T.C. for fair competition	5.67	5.53	.61	.543	174
Communicating the need for change	5.64	5.19	1.85	.066	174
Creating a telesales centre	5.62	5.43	.85	.398	174
Informing employees regarding change through bulletins / teleconferences	5.52	5.29	1.03	.303	174
Aggressively pursuing emerging business opportunities	5.50	4.96	2.03	.044	174
Paying more attention to the bottom line	5.33	5.15	.74	.458	174
Developing an understanding that due to change in the telecom industry the competition can be a customer	5.32	4.96	1.58	.116	172
Providing managers with separation packages	5.29	5.08	.95	.346	173
Allying itself with both telecommunication and other types of companies	5.00	4.97	.15	.879	172

Years of Service – Importance of Supportive Behaviours

Behaviour	< 5	6-10	11-20	21-30	30+	F-value	Sig.	df*
Creating a telesales centre	5.58	5.86	5.31	5.41	5.17	.85	.497	4, 180
Pressuring the C.R.T.C. for fair competition	5.45	5.81	5.44	5.67	6.00	.67	.611	4, 180
Aggressively pursuing emerging business opportunities	5.42	5.52	4.92	5.05	5.17	.99	.412	4, 180
Informing employees regarding change through bulletins / teleconf.	5.15	5.90	5.31	5.33	4.50	1.90	.113	4, 180
Communicating the need for change	4.94	5.48	5.41	5.38	5.33	.78	.540	4, 180
Developing an understanding that due to change in the telecom indus. the compet. can be a customer	4.73	5.00	5.10	5.21	5.33	.90	.466	4, 178
Paying more att. to the bottom line	4.67	5.43	5.27	5.29	5.83	1.75	.141	4, 180
Allying itself with both telecom. and other types of companies	4.58	5.05	4.93	5.12	5.67	2.04	.090	4, 178
Providing mgrs. with separation packages	4.19	5.05	5.19	5.55	5.33	7.30	.000	4, 178

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

**APPENDIX J - IMPORTANCE OF NON-SUPPORTIVE BEHAVIOURS BY
VARIOUS CRITERIA**

Gender – Importance of Non-Supportive Behaviours

Behaviour	M	F	T-value	Sig.	df
Does not make managers accountable for stifling change	5.51	5.04	2.17	.031	183
Allows for conflicting departmental missions	5.44	5.26	.84	.400	184
Does not eliminate the bureaucracy	5.44	5.36	.40	.692	184
Allows certain depts. to protect themselves from change	5.40	5.13	1.23	.219	183
Does not recognize where its greatest assets were	5.32	4.90	1.82	.070	183
Does not ask emps if there was a better way to do things	5.31	5.04	1.03	.302	183
Is slow to react in some competitive environments	5.27	5.09	.82	.414	184
Does not have a common goal throughout the company	5.17	4.99	.72	.472	182
Only provides verbal support for change	5.16	4.91	1.11	.268	184
Does not allow emps to be flexible in use of skill sets	5.07	5.01	.27	.791	184
Limits employee empowerment	5.01	5.01	.01	.994	184
Holds back info. on where the company was going	4.95	5.09	.57	.573	183

Job Type – Importance of Non-Supportive Behaviours

Behaviour	Mgr	Non-Mgr	T-value	Sig.	df
Does not make managers accountable for stifling change	5.56	5.07	2.28	.024	181
Does not eliminate the bureaucracy	5.54	5.31	1.15	.250	182
Allows for conflicting departmental missions	5.53	5.21	1.51	.133	183
Allows certain depts to protect themselves from change	5.44	5.14	1.32	.189	181
Does not have a common goal throughout the company	5.32	4.88	1.78	.076	180
Is slow to react in some competitive environments	5.28	5.11	.73	.467	182
Only provides verbal support for change	5.27	4.87	1.73	.086	182
Does not allow emps to be flexible in use of skill sets	5.13	4.97	.67	.504	182
Does not ask emps if there was a better way to do things	5.05	5.28	.86	.390	181
Holds back info. on where the company was going	5.04	5.00	.16	.876	181
Does not recognize where its greatest assets were	5.03	5.13	.46	.643	181
Limits employee empowerment	5.03	5.04	.06	.956	182

Age – Importance of Non-Supportive Behaviours

Behaviours	< 30	31-40	41-50	51+	F-value	Sig.	df*
Allows certain departments to protect themselves from change	5.48	5.55	5.13	4.76	2.02	.113	3,178
Does not eliminate the bureaucracy	5.41	5.61	5.25	5.28	.79	.499	3,179
Is slow to react in some compet. environ.	5.37	5.34	5.23	4.48	2.23	.086	3,179
Does not allow emps to be flexible in use of skill sets	5.33	5.25	5.11	4.04	4.40	.005	3,179
Holds back info. on where the co. going	5.26	5.27	4.92	4.48	1.63	.183	3,179
Does not recognize where greatest assets were	5.04	5.36	5.16	4.48	1.85	.139	3,178
Limits employee empowerment	5.00	5.18	5.04	4.68	.59	.623	3,179
Only provides verbal support for change	4.96	5.27	5.13	4.28	2.56	.057	3,179
Does not have common goal throughout org	4.93	5.41	5.07	4.48	1.92	.129	3,178
Does not make managers accountable for stifling change	4.93	5.46	5.29	5.08	.94	.424	3,179
Does not ask emps if there was a better way to do things	4.88	5.46	5.32	4.40	2.53	.059	3,178
Allows for conflicting dept missions	4.78	5.39	5.51	5.36	1.76	.157	3,179

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

Department Type – Importance of Non-Supportive Behaviours

Behaviour	Staff	Line	T-value	Sig.	df
Does not make managers accountable for stifling change	5.79	5.11	2.63	.009	172
Allows for conflicting departmental missions	5.64	5.29	1.42	.158	173
Does not ask employees if there was a better way to do things	5.52	5.08	1.41	.160	173
Does not eliminate the bureaucracy	5.48	5.36	.48	.633	173
Allows certain depts to protect themselves from change	5.40	5.24	.61	.544	172
Does not allow employees to be flexible in use of skill sets	5.36	4.94	1.51	.133	173
Holds back info. on where the company was going	5.31	4.95	1.26	.210	172
Only provides verbal support for change	5.14	5.01	.48	.629	173
Does not have a common goal throughout the company	5.07	5.14	.25	.806	172
Does not recognize where its greatest assets were	5.02	5.13	.37	.711	172
Is slow to react in some competitive environments	5.02	5.32	1.14	.255	173
Limits employee empowerment	4.93	5.08	.57	.572	173

Years of Service – Importance of Non-Supportive Behaviours

Behaviour	< 5	6-10	11-20	21-30	30+	F-val.	Sig.	df*
Holds back info. on where the org. going	5.42	5.48	5.09	4.68	4.83	1.70	.153	4,179
Does not eliminate the bureaucracy	5.42	5.67	5.45	5.36	4.83	.51	.732	4,179
Does not allow emps to be flexible in use of skill sets	5.42	5.33	5.03	4.82	4.83	1.08	.369	4,179
Is slow to react in some compet env.	5.30	5.14	5.19	5.17	5.17	.06	.994	4,179
Limits employee empowerment	5.27	5.10	4.90	5.02	5.33	.37	.828	4,179
Does not ask emps if there was a better way to do things	5.22	5.33	5.47	5.00	4.33	.93	.446	4,178
Allows certain departments to protect themselves from change	5.18	5.05	5.16	5.50	5.00	.66	.620	4,178
Does not have a common goal throughout the company	5.18	4.67	5.16	5.12	5.17	.40	.812	4,178
Only provides verbal support for change	5.18	5.24	5.03	4.91	5.50	.40	.810	4,179
Does not recognize where its greatest assets were	4.97	5.14	5.14	5.18	5.17	.11	.980	4,178
Allows for conflicting depart missions	4.94	5.24	5.29	5.59	5.83	1.38	.245	4,179
Does not make mgrs accountable for stifling change	4.94	5.52	5.34	5.23	5.83	.82	.511	4,179

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

**APPENDIX K - OCCURRENCE OF SUPPORTIVE BEHAVIOURS BY
VARIOUS CRITERIA**

Gender – Occurrence of Supportive Behaviours

Behaviour	M	F	T-value	Sig.	df
Paying more attention to the bottom line	3.93	3.69	2.65	.008	411
Communicating the need for change	3.80	4.06	3.12	.002	411
Developing an understanding that due to change in the telecom industry the competition can be a customer	3.80	3.90	1.33	.185	407
Providing managers with separation packages	3.77	3.62	1.64	.102	408
Allying itself with both telecommunication and other types of companies (e.g., Van City)	3.75	3.85	1.30	.194	405
Aggressively pursuing emerging business opportunities	3.74	3.97	2.81	.005	409
Informing employees regarding change through bulletins / teleconferences / StraighTalk etc.	3.72	4.10	4.49	.000	411
Creating a telesales centre	3.67	4.01	4.14	.000	406
Pressuring the C.R.T.C. for fair competition	3.47	3.37	.89	.373	410
Factor					
Factor 1: Communication of Change	3.73	4.05	4.60	.000	412
Factor 2: Actions to Expand Business	3.77	3.91	2.24	.025	410
Factor 3: Financial Strategies for Change	3.85	3.66	2.57	.011	412

Job Type – Occurrence of Supportive Behaviours

Behaviour	Mgr	Non-Mgr	T-value	Sig.	df
Informing employees regarding change through bulletins / teleconferences / StraighTalk etc.	4.00	3.86	1.40	.163	399
Communicating the need for change	3.98	3.90	.90	.368	399
Developing an understanding that due to change in the telecom industry the competition can be a customer	3.96	3.81	1.74	.083	395
Allying itself with both telecommunication and other types of companies (e.g., Van City)	3.94	3.74	2.38	.018	393
Aggressively pursuing emerging business opportunities	3.92	3.82	1.07	.285	398
Paying more attention to the bottom line	3.90	3.80	.98	.328	399
Creating a telesales centre	3.89	3.80	1.01	.313	395
Providing managers with separation packages	3.79	3.66	1.25	.211	397
Pressuring the C.R.T.C. for fair competition	3.68	3.33	2.85	.005	398
Factor					
Factor 1: Communication of Change	3.97	3.85	1.47	.142	400
Factor 2: Actions to Expand Business	3.94	3.79	2.01	.045	398
Factor 3: Financial Strategies for Change	3.84	3.74	1.57	.249	400

Age – Occurrence of Supportive Behaviours

Behaviour	< 29	30-39	40-49	50+	F-value	Sig.	df*
Creating a telesales centre	4.07	3.78	3.84	3.81	.89	.445	3,402
Informing employees regarding change through bulletins / teleconf / StraighTalk	4.07	3.86	3.81	4.05	2.16	.093	3,407
Communicating the need for change	3.97	3.92	3.87	4.01	.63	.595	3,407
Aggressively pursuing emerging business ops	3.83	3.85	3.79	3.97	1.09	.355	3,405
Allying itself with both telecommunication and other types of companies (e.g., Van City)	3.83	3.73	3.79	3.86	.51	.679	3,401
Developing an understanding that due to change in the telecom industry the competition can be a customer	3.76	3.76	3.84	3.95	1.19	.314	3,403
Paying more attention to the bottom line	3.59	3.69	3.87	3.90	1.76	.155	3,407
Pressuring the C.R.T.C. for fair competition	3.55	3.51	3.33	3.50	.96	.410	3,406
Providing managers with separation packages	3.48	3.58	3.74	3.79	1.66	.174	3,404
Factor							
Factor 1: Communication of Change	4.03	3.85	3.84	3.95	1.00	.393	3,411
Factor 2: Actions to Expand Business	3.80	3.78	3.81	3.94	1.20	.308	3,406
Factor 3: Financial Strategies for Change	3.53	3.64	3.81	3.84	2.22	.085	3,408

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

Years of Service Means and Differences—Support of Change

Behaviour	< 5	6-10	11-20	21-30	30+	F-value	Sig.	df*
Creating a telesales centre	4.09	3.69	3.91	3.82	3.63	2.19	.070	4,403
Commun the need for change	3.98	3.82	3.91	3.98	3.90	.51	.730	4,408
Informing employees regarding change through bulletins / teleconferences / StraighTalk etc.	3.93	3.86	3.96	3.90	3.84	.22	.926	4,408
Aggressively pursuing emerging business opportunities	3.86	3.76	3.92	3.84	3.90	.43	.787	4,406
Allying itself with both telecommunication and other types of companies (e.g., Van City)	3.75	3.64	3.90	3.85	3.65	1.79	.132	4,402
Developing an understanding that due to change in the telecom industry compet can be a customer	3.66	3.64	3.98	3.92	3.77	3.14	.015	4,404
Paying more attn to bottom line	3.48	3.66	3.95	3.90	3.77	3.04	.017	4,408
Providing managers with separation packages	3.43	3.50	3.68	3.84	3.93	3.43	.009	4,405
Pressure C.R.T.C. for open compet	3.32	3.24	3.65	3.41	3.32	1.77	.133	4,407
Factor								
Factor 1: Commun of Change	4.00	3.80	3.93	3.89	3.79	.80	.525	4,413
Factor 2: Actions to Expand Bus	3.76	3.68	3.94	3.87	3.77	1.97	.096	4,407
Factor 3: Financie Strat for Change	3.45	3.59	3.81	3.86	3.85	3.67	.006	4,409

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

Department A versus Department B – Occurrence of Supportive Behaviours

Behaviour	DP-A	DP-B	T-value	Sig.	df
Creating a telesales centre	3.58	4.11	5.87	.000	329
Informing employees regarding change through bulletins / teleconferences / Straight Talk etc.	3.75	4.06	3.45	.001	333
Aggressively pursuing emerging business opportunities	3.65	4.05	4.47	.000	331
Communicating the need for change	3.80	4.04	2.77	.006	333
Developing an understanding that due to change in the telecom industry the competition can be a customer	3.81	3.96	1.73	.085	331
Allying itself with both telecommunication and other types of companies (e.g., Van City)	3.70	3.91	2.59	.010	329
Paying more attention to the bottom line	3.92	3.76	1.57	.117	332
Providing managers with separation packages	3.76	3.68	.81	.418	300
Pressuring the C.R.T.C. for fair competition	3.32	3.56	2.05	.041	331
Factor					
Factor 1: Communication of Change	3.71	4.07	4.92	.000	333
Factor 2: Actions to Expand Business	3.72	3.98	3.64	.000	332
Factor 3: Financial Strategies for Change	3.84	3.72	1.47	.142	333

**APPENDIX L - OCCURRENCE OF NON-SUPPORTIVE BEHAVIOURS BY
VARIOUS CRITERIA**

Gender – Occurrence of Non-Supportive Behaviours

Behaviour	M	F	T-Value	Sig.	df
Was slow to react in some competitive environments	3.63	3.41	2.17	.031	404
Did not ask emps if there was a better way to do things	3.63	3.47	1.57	.118	404
Allowed for conflicting departmental missions	3.58	3.39	2.10	.037	404
Did not eliminate the bureaucracy	3.52	3.42	1.04	.297	404
Allowed certain depts to protect themselves from change	3.44	3.33	1.09	.276	403
Did not recognize where its greatest assets were	3.38	3.20	1.71	.088	402
Did not have a common goal shared throughout org.	3.36	3.17	1.77	.077	403
Did not make managers accountable for stifling change	3.31	3.35	.37	.709	402
Limited employee empowerment	3.22	3.02	1.91	.057	403
Did not allow employees to be flexible in the use of their skill sets	3.17	3.11	.54	.589	402
Only provided verbal support for change	3.09	2.87	2.09	.038	400
Held back information on where the company was going	2.99	2.78	1.94	.053	404
Factor					
Factor 1: Inadequate Communications & Participation	3.26	3.10	1.97	.049	405
Factor 2: Bureaucratic Resistance and Favouritism	3.46	3.37	1.16	.248	405

Job Type – Occurrence of Non-Supportive Behaviours

Behaviour	Mgr	Non-Mgr	T-Value	Sig.	df
Allowed for conflicting departmental missions	3.79	3.40	3.59	.000	393
Allowed certain depts to protect themselves from change	3.57	3.32	2.19	.029	392
Did not eliminate the bureaucracy	3.54	3.44	.88	.379	393
Was slow to react in some competitive environments	3.48	3.56	.67	.503	393
Did not make managers accountable for stifling change	3.33	3.34	.10	.919	391
Did not have a common goal shared throughout company	3.29	3.26	.28	.783	392
Did not ask emps if there was a better way to do things	3.23	3.66	3.69	.000	393
Did not recognize where its greatest assets were	3.00	3.39	3.27	.001	391
Did not allow employees to be flexible in the use of their skill sets	2.91	3.20	2.47	.014	391
Only provided verbal support for change	2.78	3.06	2.27	.024	389
Limited employee empowerment	2.78	3.24	3.89	.000	392
Held back information on where the company was going	2.72	2.95	1.77	.078	393
Factor					
Factor 1: Inadequate Communication & Participation	2.96	3.26	3.12	.002	394
Factor 2: Bureaucratic Resistance and Favouritism	3.55	3.38	1.89	.060	394

Age – Occurrence of Non-Supportive Behaviours

Behaviour	< 29	30-39	40-49	50+	F-val	Sig.	df*
Was slow to react in some compet envs	3.74	3.55	3.51	3.46	.53	.662	3,400
Did not eliminate the bureaucracy	3.71	3.49	3.51	3.30	1.73	.160	3,400
Allowed certain depts to protect themselves from change	3.57	3.42	3.38	3.33	.48	.694	3,399
Did not ask employees if there was a better way to do things	3.57	3.34	3.70	3.48	2.78	.041	3,400
Allowed for conflicting departmental missions	3.39	3.61	3.48	3.41	.86	.463	3,400
Did not make mgr account for stifling change	3.37	3.44	3.31	3.25	.69	.562	3,398
Did not have a common goal shared throughout the company	3.18	3.17	3.38	3.20	1.15	.328	3,399
Did not recognize where its greatest assets were	3.11	3.15	3.39	3.32	1.40	.244	3,398
Did not allow emps to be flexible in use of their skill sets	3.07	3.09	3.23	3.02	1.06	.366	3,398
Limited employee empowerment	3.04	3.03	3.18	3.11	.50	.714	3,399
Only provided verbal support for change	2.93	2.87	3.19	2.77	4.23	.006	3,396
Held back info on where the org was going	2.75	2.84	2.96	2.84	.52	.671	3,400
Factor							
Factor 1: Inadequate Commun & Participation	3.09	3.07	3.29	3.12	1.85	.137	3,401
Factor 2: Bureaucratic Resist & Favortism	3.52	3.50	3.41	3.32	1.02	.384	3,401

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

Years of Service – Occurrence of Non-Supportive Behaviours

Behaviour	< 5	6-10	11-20	21-30	30+	F-val	Sig.	df*
Was slow to react some compet envs	3.80	3.51	3.54	3.41	3.72	1.52	.194	4,401
Did not eliminate the bureaucracy	3.55	3.61	3.45	3.43	3.28	.78	.583	4,401
Allowed for conflicting dept missions	3.45	3.57	3.58	3.43	3.38	.58	.676	4,401
Allowed certain departments to protect themselves from change	3.43	3.49	3.39	3.34	3.31	.31	.870	4,400
Did not ask emps if there was a better way to do things	3.43	3.59	3.55	3.54	3.69	.29	.882	4,401
Did not make managers accountable for stifling change	3.35	3.57	3.41	3.20	3.28	2.07	.085	4,399
Did not recognize where its greatest assets were	3.30	3.36	3.30	3.24	3.48	.41	.800	4,401
Limited employee empowerment	3.25	3.25	3.01	3.11	3.10	.70	.591	4,400
Did not have a common goal throughout the company	3.11	3.37	3.22	3.29	3.34	.51	.729	4,400
Did not allow emps to be flexible in use of skill sets	3.02	3.29	3.14	3.13	2.93	.81	.517	4,399
Only provided verbal support for change	3.00	3.07	2.93	3.00	2.96	.20	.939	4,397
Held back info. on where org. going	2.73	2.99	2.87	2.89	3.00	.44	.781	4,401
Factor								
Factor 1: Inadequate Commun & Part	3.12	3.27	3.16	3.17	3.23	.30	.800	4,402
Factor 2: Bureau Resist & Favour	3.45	3.55	3.46	3.35	3.31	1.03	.390	4,402

* 1st number is df between groups (r-1). 2nd number df within groups (c-1).

Department A versus Department B – Occurrence of Non-Supportive Behaviours

Behaviour	DP-A	DP-B	T-value	Sig.	df
Was slow to react in some competitive environments	3.55	3.57	.12	.909	327
Allowed for conflicting departmental missions	3.49	3.47	.21	.833	327
Did not ask employees if there was a better way to do things	3.66	3.42	2.08	.039	328
Did not eliminate the bureaucracy	3.48	3.42	.50	.617	327
Allowed certain depts to protect themselves from change	3.45	3.26	1.73	.084	327
Did not make managers accountable for stifling change	3.33	3.26	.67	.502	327
Did not recognize where its greatest assets were	3.39	3.09	2.60	.010	326
Did not have a common goal shared throughout org.	3.42	3.04	3.41	.001	327
Did not allow employees to be flexible in the use of their skill sets	3.24	2.95	2.60	.010	326
Limited employee empowerment	3.24	2.93	2.64	.009	327
Only provided verbal support for change	3.19	2.72	4.30	.000	324
Held back information on where the company was going	3.02	2.66	2.96	.003	328
Factor					
Factor 1: Inadequate Communication & Participation	3.35	2.99	3.61	.000	329
Factor 2: Bureaucratic Resistance and Favouritism	3.44	3.31	.98	.329	327

APPENDIX M- CORRELATION OF SUPPORT BY SPEED OF CHANGE

Correlation of Support for Change BY Speed of Change

OVERALL SAMPLE	SPEED OF CHANGE
Support for Change	.276**
➤ Factor 1: Communication of Change	.242**
➤ Factor 2: Actions to Expand Business	.290**
➤ Factor 3: Financial Strategies for Change	.160**
Non-support for Change	-.247**
➤ Factor 1: Inadequate Communication and Participation	-.211**
➤ Factor 2: Bureaucratic Resistance and Favourtism	-.192**

** Correlation significant at alpha .01 level.

MANAGERS	SPEED OF CHANGE
Support for Change	.280**
➤ Factor 1: Communication of Change	.342**
➤ Factor 2: Actions to Expand Business	.249*
➤ Factor 3: Financial Strategies for Change	.102
Non-support for Change	.268**
➤ Factor 1: Inadequate Communication and Participation	-.218*
➤ Factor 2: Bureaucratic Resistance and Favourtism	-.231*

** Correlation significant at alpha .01 level.

* Correlation significant at alpha .05 level.

EMPLOYEES	SPEED OF CHANGE
Support for Change	.280**
➤ Factor 1: Communication of Change	.226**
➤ Factor 2: Actions to Expand Business	.296**
➤ Factor 3: Financial Strategies for Change	.183**
Non-Support for Change	.237**
➤ Factor 1: Inadequate Communication and Participation	-.201**
➤ Factor 2: Bureaucratic Resistance and Favourtism	-.180**

** Correlation significant at alpha .01 level.