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George Butler

Utah State University, [gwbutter@cc.usu.edu](mailto:gwbutter@cc.usu.edu)

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# **An Investigation into the Meaning of Human-Centered Discontinuous Change Strategies to Individuals: Selection and Impact**

Gregory W. Butler, Business Information System and Education Department, Utah State University,  
gwbutler@cc.usu.edu

## **Abstract**

Organizations today can expect change to be an on-going part of daily life. Successful change programs require that the human element, in addition to process and technical concerns, be addressed. This qualitative research in progress is investigating employees' perceptions of the utility and the meaning of change management methods used within the organization. The final objective is to tell the story of the change process from the perspective of those involved.

## **Introduction**

### ***Statement of the Problem***

Change is an enduring part of a successful organization today. Both external and internal forces, such as changes in the demographics of the workforce, higher quality expectations, mergers, and new technology, are making organizational changes necessary (APQC, 1999). As a result, the corporate reengineering and restructuring that we have seen over the last decade showing no signs of "going away" (Lee, 1996).

Though necessary, these change efforts are often not successful and, as observed by John Kotter, "the carnage has been appalling, with wasted resources and burned - out, scared or frustrated employees" (Lee, 1996). The introduction of information technology, by itself, is not the cure. Rick Maurer found that over 50% of change programs fail because resistance is not dealt with effectively (Mariotti, 1996). New information technology systems meet increasing organizational resistance the "...more foreign the system is to current practices." (Laughlin, 1999, p. 34). Further, manufacturers have found that the introduction of technology alone-- even if widely accepted-- is not adequate for them to stay competitive, they need to better leverage their people (Longeneck, Standfield, and Dwyer, 1999).

Dai Williams, in his report on the British Psychology Society January 1999 meeting on Transitional Psychology states

Coping with stress and change have always been fundamental issues for human survival and evolution. Psychological and cultural coping mechanisms have evolved for both tasks. However, most organizational change theories and practices focus on motivation, performance and organizational agendas for change. Less attention has been given to psycho-social contexts for

individuals. Change strategies can either impede or enhance the natural psychological process of transition that enables individuals to adapt to change and transform their lives. (p. 609)

This situation is further aggravated when, as suggested by Payne and Minneman (1999), management may not fathom the true personal impacts of IT enabled change since they are interrelated, occur simultaneously, and may not be obvious "on the immediate surface".

### ***Purpose of the Study and Research Questions***

The purpose of this study research in progress is to explore, through a qualitative case study, the meaning of various organizational change strategies to organization members in one or more organizational subunits.

During this study, we will attempt to answer the following questions:

1. How did managers approach the task of minimizing the impact of change on members of the organization?
2. Why did management select a specific methodology or strategy?
3. How did organizational members perceive these efforts?
4. Why did organizational members feel a method was effective?
5. What were the major processes through which the organizational changes actually occurred at the individual level?
6. How do cultural issues influence the selection and implementation of a change strategy?

### ***Role and Usage of the Literature***

Literature, as used in qualitative research, can be used both to frame a study before it starts and to support inductively generated themes or categories that emerge from the research. In this study, literature is referenced in three places, all of which are acceptable within the qualitative paradigm (Creswell, 1994).

References to the literature were used in the introduction to help frame the problem, documenting the importance of the study.

Literature will be used, where appropriate, during the study to elaborate on, support, or better understand study findings. References will therefore be found throughout the document.

Literature is used in the following separate section to provide a framework for understanding the study in context of past research and current thought on the topic.

## Review of the Literature

The review of literature in this section provides background for the study in two sections. First, it is presented to provide a background for understanding the causes of human impediments to radical change and to assist the investigator in efforts to recognize them. We then present a list of common methods used to mitigate these impediments, which is intended to provide the investigator with a structure within which to place findings and to provide an initial "place to start" when seeking to identify the methods in use at the research site.

A review of the literature, as it relates to the human element in discontinuous organizational change, indicates that there are two underlying themes. The first theme is that trust is required for change efforts to be effective. The second theme is that individuals suffer anxiety about change in general and anxiety specific to organizations and technology; both of which need to be addressed to increase the likelihood of a successful change effort and minimize performance impacts.

### *Relationship Between Trust and Change Effort Success*

Trust is a key component of a successful organizational change effort. Change is viewed by many members of the organization as presenting personal risk and trust supports an individual's decision to embark on a risky venture. Distrust, on the converse breeds an aversion to risk (Baba, 1999).

Trust, as described by Baba (1999) has two major forms. The first is general, in that it relates to an individual's expectancies as they relate to nature and social order. The second form of trust is as it relates to a specific context and is more closely associated with organizations and change efforts. This context sensitive form of trust has two components:

1. Technical competence. This component relates to a belief that another party has the ability and will to perform acts that result in a positive outcome.
2. Fiduciary responsibility. This component relates to the belief that another party will not be opportunistic, but act in a manner that is beneficial.

Distrust between groups (e.g. workgroups, managers and organizational members) can have a negative effect on a change effort or the deployment of new information technology. Distrust, such as the perception that the other party may use information for their advantage, misuse the information through incompetence, or that information may show the incompetence of the originator, leads to boundaries being erected between these groups to prevent the uncontrolled disclosure of potentially harmful information. Oft times distrust is based on memories of past negative exchanges between the groups.

Information technology has at times been deployed with the assumption that it would facilitate cooperation across these barriers by itself. The information system cannot ensure that data is accurate or valid and, therefore, will not prevent data being withheld, altered, or misrepresented. Further, since the threatened group may find that the system makes control of data more difficult (moving into an abstract form, control reverting to an outside entity, ready electronic access by undesirable entities), the information system itself may be perceived as a threat and put at risk. (Baba, 1999).

Employees who do not fully trust their managers will, under normal conditions, follow their instructions, but not fully cooperate. Less cooperation can be expected if managers are perceived as likely to be opportunistic and not likely to watch out for the good of employees (such as a belief that management may use a new information system to spy on the employees) (Baba, 1999).

### *General Change Related Anxiety*

Individuals can feel anxiety when faced with a change in their work environment. Anxiety is likely to be present under any change conditions, but with the introduction of new information technology, several factors are aggravated and new factors are introduced. Anxiety, in addition to negative effects on performance, can also lead to resistance to change. "Resistance to change...can range from moral outrage, which can translate into such extreme actions as vandalism and sabotage, to quiet cynicism and withdrawal...." (Huy, 1999, paragraph 10).

Anxiety and attendant emotions originate from three sources: uncertainty about how one will perform in the new environment, identification with the current organizational culture, and changes in the work environment unique to the increased use of computers.

Individuals, when faced with radical change, may be unsure of how they will perform in the new environment. Individual concerns, common to all discontinuous change efforts are

1. Ability to adapt. Individual may have concerns about their ability to cope with the ambiguities, such as no clear understanding of specific responsibilities and processes, present in a changing or new environment (Huy, 1999). Workers may be fearful of their ability to keep up their work performance in the new environment, concerned that they may appear inept or resistant to the change if they don't "catch on right away," or they may simply feel overwhelmed with the scope of the changes or a sense of hopelessness when faced with the inability to solve problems in the changed workplace (Payne & Minneman, 1999).

2. Finding a Place. Individuals may be not be able to discern if the changes are a threat or an opportunity as a result of not knowing how they "fit" into the new environment. (Huy, 1999)
3. Direct threat. Radical changes may be viewed as direct threats to the well being of the organization and to individuals. The replacement of existing processes can cause anxiety when, in the view of organization members, tried and true processes-- that have been the keys to success-- are replaced by untried ideas. Further, the proposed changes may be construed as being critical of the people who designed the current processes (Smith, 1998) (and may well still work in the organization or be held in esteem by current employees).

The members of an organization often identify with the organization's culture. When an organization undergoes radical change its basic processes, perspectives, and core identity may be altered. Further, individuals' core identity may, particularly in older, established organizations, be associated with specific tenants of their work. (Huy, 1999). Payne and Minneman (1999) introduce the term Transhok (for Transition Shock) to refer to the situation wherein "...many people link their self-esteem to their work and a habitual work routine, whenever rapid change is introduced, many people experience a form of shock." (p. 33) Changes to an organizations fundamental culture have a profound effect on organizational members identity and trigger anxiety or overt defensive behaviors. (Huy, 1999).

The introduction of information technology and an increase in the use of computers present some unique factors and can have a profound effect on the workplace and organizational members.

As noted above, a common major concern of organizational members facing change is the potential for decreased performance. This concern might be valid as performance may indeed drop-off until individuals progress adequately along the learning curve. (Payne & Minneman, 1999) The actual drop-off in performance may actually increase anxiety, which may lead to decreased motivation on change related tasks and an associated further decrease in performance.

Increased use of information technologies tends to decrease face-to-face interactions, which has potentially negative impacts on individuals and cooperative relationships.

The decrease in face-to-face interactions can lead to a sense of isolation, confusion, and distrust. This phenomenon may well have physiological underpinnings in that the levels of the hormones believed to promote trust and bonding (oxytocin and vasopressin) are lower

when people work in isolation. (Payne & Minneman, 1999)

The decrease in face-to-face interactions can lead to decreased cooperation within the organization. Baba (1999) notes that long term, positive relationships can tend to decrease social distance, which increases the information each group has regarding inter-group expectations, the actors, and the rules governing the relationship. Increased social distance, resulting from the decrease in face-to-face interactions, reduces the amount of information available.

The introduction of computers can have additional impacts on employee mental abilities and emotional well-being. The monotony of many IT related tasks could lead to increased employee fatigue and "decreased brain stamina". The constant "left brain-right brain shifting" common to the extensive use of IT can lead to "mood swings, depression, exhaustion, and attention deficits" (Payne & Minneman, 1999, p. 32).

Information technology systems are often "sold" as a means to decrease the effort required to accomplish a given task. Often, work hours and effort may increase with the installation of a new system. (Payne & Minneman, 1999) Further, a radical change effort may well make the "back office" staff feel swamped because of the effort required, but there may well be an overwhelming "snowball effect" on those who perform day-to-day customer service or production functions, where the workload inherent with making changes is combined with those efforts necessary to present a "business as usual" face to the customer (Smith, 1998).

### ***Common Mitigation Strategies and Methods***

The literature is replete with methods for minimizing the negative impact of the human element on discontinuous change efforts. (Unfortunately, the literature often reads like a grocery list and provides little in the way of examples that will help a practitioner apply the methods). These methods tend to fall into two categories: 1) preparing organization members for change prior to the beginning or early into the change effort and 2) managing the situation once the change process is underway. The strategies discussed below comply with Mariotti's (1996) account of some insights provided by Rick Mauer:

Maurer makes it clear that resistance is normal, and when we react too strongly (trying to "overcome" it) we only stiffen it and increase the likelihood of problems in introducing the change. Change succeeds when we remain clearly focused and calm and take the time to understand the reasons behind the resistance.

If we respect those who resist, and consider the merits of their position, we can gain considerable knowledge. That knowledge may enable us to "embrace" the positions of the resisters, thus gaining far greater insight on how to enlist their help in eliminating resistance in a positive manner. (p. 30)

Laughlin (1999) puts this tactic in a slightly different vein "...you must treat each point of resistance as a sales objection-- you must first understand the objection and then address it" (p. 34).

#### Change preparation.

Virginia Vanderslice (Building a high performance ownership culture, 1999) describes a two-phase approach to prepare the organization and its members for the change before the change effort actually is "kicked-off". The first phase is "readiness", wherein the organization works to build employee trust and to get their "buy-in" of the need for change and the path. During this period the stimulus for change is clearly identified, the current state of the organization is assessed, the change vision is developed and communicated, and the implementation plan is created. The second phase is "capability building" and is concerned with developing the technical, managerial, and participation practices and skills necessary in the new organization.

The organization must identify and understand the implications of the change effort and communicate them effectively with all involved (Smith, 1998). An effort should be made to ensure that members understand both the intrinsic benefits (e.g. increased productivity) and extrinsic benefits (e.g. measurements and related incentives) of the changes and any associated information technology. (Campbell, 1998).

Baba (1999) notes "Informal means of relationship management, created spontaneously by work groups as a way to achieve their objectives and protect themselves from harm, form a deeply rooted and tenacious social infrastructure that is not easily brushed aside by technology alone." (p. 344) some suggestions include 1) Performing a "cultural risk assessment" so that current social relations and "networks of trust" can be identified and preserved (and required one is established). 2) More powerful entities increase their level of risk in relationships with less powerful groups to reduce distrust (e.g. provide access to company information or provide job security in the face of required changes) (Baba, 1999).

Often resistance to using computers, which can result in new IT tools going unused or data not being entered or kept up to date, is based on a lack of computer know-how (Campbell, 1998). Anxiety tends to be reduced as individuals both with experience on computers and with on-going usage (Necessary & Parish, 1996). Training is also a tool for lessening the resistance to technology (Anderson & Lewis, 1999).

As the change process unfolds, elements that are implemented piecemeal may snowball and overwhelm

those who actually perform the organizational mission. Smith (1998) suggests, "change wave maps" as a means to document the timing of changes as they flow through an organization.

Feelings of anxiety regarding how one will perform or is performing in the new environment can be reduced and performance improved if the organization makes an effort to develop a shared understanding of the business, specific business goals, and how they relate to individual performance and goals. Linking company performance, employee actions, and rewards in employees' minds allows them to understand how they are doing. (Vanderslice, 1999). Employees should be provided training to help them understand the business and why change must occur, provide them the skills necessary to implement the changes and perform within the new changed environment. Employees should be kept apprised of company performance and where the organization is along the change path. People can be made comfortable with change if they are properly informed, adequately trained, and organizational structure, career paths, and compensation systems are aligned with the changes. (APQC, 1999).

The effectiveness of the reengineered process can be ensured only when the employees who execute the process-- the process experts-- are part of the development effort (APQC, 1999). Use of the process experts in conducting the process reengineering can also be a means to reduce anxiety over the effectiveness of the new processes.

Huy (1999) also suggests that, where possible, change should be presented as "an addition or expansion" of the current reality and culture, making it appear less radical. He notes that the passing of old organizational values, when held personally by individuals, can be made less stressful if adequate time for grieving is provided and individuals are assisted in defining their new roles within the new reality. Huy observes that when an individual or group identity is lost and the new identity is not yet "in place" there is a risk that negative behaviors, such as the splitting defense (projecting negative traits on individuals outside the "circle" or "defensive avoidance" (distorting or selectively filtering what they hear to avoid stress), may be manifested.

#### During change effort

Schaul (1998, p. 5) finds that "factual information, clearly and simply presented, squelch most rumors [a source of anxiety] before they could do much damage."

Monotony can be reduced and jobs made more interesting if organizations counter the tendency to impose stringent rules and methodologies, providing workers an opportunity to feel a sense of control and personal responsibility (Payne and Minneman, 1999).

APQC (1999) suggests an environment where the workforce is empowered to make process changes, is accountable, and is rewarded appropriately.

Specific effort should be expended to ensure that supervisors and managers are not imposing unauthorized controls-- Payne and Minneman (1999) refer to this as supervisors jealously guarding their "PCA", (Power, Control, and Authority). Managers are encouraged to change the way they "do business" by spending more time on the "floor" and showing genuine, increased interest in what the employees are doing and where they need and want help, rather than simply tasking employees from afar. Human resources systems (e.g. appraisals and compensation) should be adjusted to support the desired management behaviors. It may be necessary to encourage managers who cannot or will not embrace and support the changes to leave the organization (APQC, 1999).

As was discussed above, change can trigger strong emotional responses, such as fear, anxiety, and anger. For the change program to be effective and accomplished with the minimum negative impact, these emotions need to be addressed. Huy (1999) suggests "institutionalizing" activities and processes within the organization that attend to employees needs as the changes are implemented.

Organizations that fail to recognize emotions as legitimate, writing them off as "irrational" behavior, are in danger of driving them "underground." Once no longer visible they cannot be addressed and might manifest themselves as behaviors that impede the change process-- though the actor may state support for the effort. This tendency to restrict emotional display and play (a mechanism for emotional release) is particularly common to "older" corporate cultures, where they are viewed as incompetence and cynicism. These restrictions limit individuals' ability to cope with the stresses and learning during discontinuous change and may lead to "emotional acting, risk aversion, cynicism, and covert resistance [e.g. withholding of tacit knowledge] to the proposed change" (p. 17). Other manifestations include emotional exhaustion and decreased sensitivity to experimentation or ideas (Huy, 1999).

Emotional issues can be brought to the surface if detected by management or if coaxed out using various support mechanisms.

Change agents and other organizational members, such as supervisors, can be trained to "pick up on" emotions and understand the perspective of others. Leadership's empathy can be a tool not only to bring issues to the surface where they can be addressed, but also can form the basis for affect-based trust and lead to improved performance and cooperation. In addition to management "noticing" stressed, support mechanisms can be put in place to compensate for environmental changes and promote dialog.

Some suggestions for support mechanisms include additional deliberate, informal communications structures, self help groups, and single-double loop learning interventions to improve dialog, "sense-making" and "coming to grips" with the new environment (Huy, 1999).

Creating teams alleviate isolation and insecurity. (Payne and Minneman, 1999).

Playfulness and joking can be encouraged as means of providing a comfortable environment where individuals can surface repressed feelings and discuss "taboo issues." By providing a more "fun" environment, it is also possible to take advantage of the positive correlation between elation and receptive behavior (Huy, 1999).

Create an environment where concerns associated with the implementation of new technology can be openly discussed and mistakes can be embraced as positive learning experiences. (Payne and Minneman, 1999).

## **Procedure**

### ***Assumptions and Rationale for Qualitative Design and Design Type***

This study uses a qualitative approach which will support an in-depth, inductive examination of the change process and its meaning to the participants.

Patton (1990) notes that qualitative methods support learning what people think and feel. They are most suitable when the focus of the research is on the process (how) and interactions rather than the outcomes of a particular event or phenomenon. In this specific context, Patton (1990, p. 95) notes that process evaluations, conducted using the qualitative paradigm, are "particularly useful for dissemination and replication of model interventions where a program ...is considered to be a model worth of replication at other sites.

Qualitative research, specifically case studies, is particularly well suited to the analysis of real world problems where context is important. In this same vein, case studies are "well-suited to capturing the knowledge of practitioners..." (Benbasat, Goldstein, & Mead (1987, p. 370), much of which is was learned through trial and error. Case studies generally use multiple methods to collect data and allow us to answer "how" and "why" in the natural, un-manipulated context and modify study boundaries and variables as required to capture a more complete picture of the phenomenon or process under study (Benbasat, Goldstein, & Mead (1987).

### ***Site Selection***

The research questions investigate how organizations effectively manage the human element while undergoing radical transforms. These transforms tend to affect not only individual jobs and processes, but also the organizational culture. Since this study focuses on capturing the meaning of what organizations "do right" at the personal level, it is important that

1. A discontinuous change process takes place. The work done by several employees is transformed in some significant way-- both from a task perspective and a personal interaction (e.g. communications) perspective.

2. The organization selected has a predisposition to success and a concern for the people involved in the transform.
3. The transform be on going, where richer meaning and context can be captured as the change process unfolds. This is commensurate with two themes basic to qualitative research:
  - a. Personal contact and insight. The researcher is given the opportunity to get close to both the actors and the situation, where he can personally experience the phenomenon.
  - b. Naturalistic inquiry. The researcher studies the real-world situation as it "naturally unfolds" (Patton, 1990, p. 40).

### ***Researcher Role***

As currently planned, the study will be a case study, wherein the role of the researcher is prescribed by the general qualitative paradigm.

Benbasat, Goldstein, & Mead (1987) note that three categories of studies appear to be classified as case studies. In two of these categories, which are currently excluded from this research effort, the researcher is an actor in the change process. (These are "applications descriptions" where the author describes his experiences as a participant in a change process and "action research" where the author conducts the research while effecting a change). In the third category, simply referred to as "case study research" the investigator is an observer, not an actor. This third category is the approach that we expected to use.

### ***Data Collection***

Three methods of data collection will be used in this study. These methods are investigator observation of the selected group(s), informant interview, and document examination.

Group observation provides an opportunity for the researcher to capture the broad context of the activity under study and to discern patterns worthy of further investigation. Among the contextual factors that the investigator will likely wish to observe and document is the setting, participants, and actions. Unfocused, "broad sweep" observation is used to get a sense of the broad picture by observing "everything". Observation should then focus onto emergent patterns, paradoxes, and problems. (Glesne, 1998) Field notes will be taken during group observation.

Interviews of informants (process participants) provide an opportunity to gain a personal perspective of the topic under study. As noted by Glasne (1998, p. 68):

Researchers ask questions in the context of purposes generally known fully only to themselves.

Respondents, the possessors of information, answer questions in the context of dispositions (motives,

values, concerns, needs) that researchers need to unravel in order to make sense out of the words that their questions generate.

Interviews allow the investigator to go beyond what can be observed and oft time yield unexpected, information that may alter the course of the study (Glasne, 1998).

Document examination can provide additional rich data, but documents must be examined in the light of why they were created, who created them, and how have they been used (Bogdan & Biklen, 1998). Relevant documents, if available, will be examined to provide context and, where possible, insights into the thoughts and feelings of those who produced them.

### ***Data Analysis***

The specific process of data analysis will evolve to comply with the specific details of the study and the data gathered as it unfolds. The methods used will then be documented in detail in the final report. Though it is not possible to have a detailed a priori analysis plan, several general concepts will very likely apply and are discussed below.

Data analysis is a continuous process and, because of the inductive nature of the study, cannot be held off until after data collection is complete.

Data analysis has two components which must be carefully separated. The first component is the descriptive component, wherein the "what's" of the study are captured. (What are the primary activities at the site? What is the site setting? What methods are in use?) The second component is the interpretive component wherein the "whys" are answered, with the purpose of explaining the observations. Included are such tasks as determining patterns in the data and identifying the significance of particular observations and findings (Patton, 1990).

The first step in the analysis process is the use of a two-part system for taking field notes during observations and interviews. One component is dedicated to descriptive data; the researchers attempt to make an objective record of observations. The second component is dedicated to reflection, where "speculation, feelings, problems, ideas, hunches, impressions, and prejudices" (Bogdan & Biklin, 1998, p 123) are recorded during the observation and as the notes are reviewed. These notes and any audio recordings are transcribed verbatim for further analysis.

The second step in the analysis process is the daily analysis of the notes to determine if there are any new emergent patterns that may be worth exploring. Additional interim analysis may be indicated based on patterns and relationships between and within documentation, interviews, and observations. Further, coding efforts may, if indicated by the data, be accomplished throughout the study.

Final analysis, before and during the creation of the final report, consists of final coding and matrix analysis as required. Analysis in this, and previous, stages focuses on

two approaches to inductive analysis which Patton (1990) refers to as "indigenous concepts" and "sensitizing concepts". The indigenous concept analysis focuses the effort on the "use of the categories developed and articulated by the people studied to organize presentation of particular themes" (Patton, 1990, p. 390). Sensitizing concepts are used to organize any patterns or themes that were locally articulated. The literature review is a resource to support this effort.

### **Verification/Trustworthiness**

As with analysis, the specific implementation of trustworthiness strategies is dependent up the data and the study environment. Even then, certain concepts will most certainly apply.

Triangulation, a common qualitative tool, will be used to minimize bias and ensure completeness of the data. Triangulation in this study is the effort of "comparing and cross-checking the consistency of information derived at different times and by different means...." (Patton, 1990, p. 467). In essence, this means comparing across data collection sessions, across interviews with different people or interviews with the same individuals at different times, and comparing results from different individual perspectives.

Klein and Myers (1999) developed a comprehensive list of principles for the conduct of interpretive field studies and this entire study effort will be evaluated using their criteria. The criteria they propose includes a check to ensure that the context is established, the study integrates into a unified whole, multiple perspectives are considered when reviewing the data, and that the investigator's tendency to inject bias into the study are accounted for.

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